HERST & ASSOCIATES, INC.®

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Personal Attention

RECEIVED
MAY 15 2006
SUPERFUND DIVISION

Ms. Cheryle Micinski
EPA Region VII - Superfund
901 5th Street
Kansas City, Kansas 66101

May 11, 2006

Dear Ms. Micinski:

Permit Information, Bridgeton Landfill and closed Demolition Landfill, Bridgeton, Missouri

Pursuant to a request from Dan Wall, EPA Project Manager for West Lake Landfill Operable Unit 2, enclosed is Permit information associated with the Bridgeton Landfill and the closed Demolition Landfill. The enclosure includes information available to Herst & Associates, Inc.

We will scan the Permit information and forward a diskette in the near future.

If you have any questions, please contact the undersigned.

Sincerely,

Herst & Associates, Inc.

Ward Herst
Managing Director

Cc: Dan Wall – EPA (w/o enclosure)
Victoria Warren – AWIN
Rick Walker – AWIN
Allen Steinkamp - AWIN
Mike Hockley – Spencer, Fane, Britt, & Browne

40241275

SUPERFUND RECORDS

4630 South Highway 94 – North Outer Road
St. Charles, Missouri 63304

Telephone (636) 939-9111
Fax (636) 939-9757

Permit Information

Bridgeton Landfill and
Closed Demolition Landfill

Bridgeton, Missouri

May 2006

HERST & ASSOCIATES, INC.®

4630 South Highway 94
North Outer Road
St. Charles, Missouri 63304
Telephone: (636) 939-9111
Facsimile: (636) 939-9757

Missouri Department of Natural Resources
Facility Operating Permit
Permit No. 118912

STATE OF MISSOURI Bob Holden, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
www.dnr.state.mo.us

March 1, 2004

CERTIFIED MAIL # 7002 0860 0007 6967 9692
RETURN RECEIPT REQUESTED

Rodney T. Bloese, R.G., L.P.G.
Bridgeton Sanitary Landfill, L.L.C.
Allied Waste Industries, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Bloese:

The Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) has reviewed groundwater monitoring data through the sampling event of November 2003, and the following documents:

1. The statistical evaluation letter dated February 4, 2004, and received on February 5, 2004, is from Steve Jelt, R.G., Senior Hydrogeologist, Herst & Associates, Inc., and Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.

2. The attachment to the letter of item 1 above, which is entitled, Ground Water Statistical Analysis Report, November 2003 Sampling Event, Bridgeton Sanitary Landfill, L.L.C., Bridgeton, Missouri, dated February 2004 and received February 5, 2004, prepared by Herst & Associates, Inc., on behalf of Bridgeton Sanitary Landfill, L.L.C.

The department's SWMP issued a November 22, 1999, conditioned statistical analysis plan (SAP) approval letter for the "Statistical Analysis Plan, Bridgeton Sanitary Landfill, L.L.C., Missouri," by Herst & Associates, Inc., for the Bridgeton Sanitary Landfill, dated November 1999 and received November 17, 1999:

Bridgeton Sanitary Landfill, L.L.C. is performing intra-well prediction interval comparisons for an inward gradient site where the upgradient monitoring wells are the compliance wells.

Bridgeton Sanitary Landfill, L.L.C. has stated - per our November 22, 1999, SAP approval letter, condition number 2, change to their SAP – that, ". . . a list will be made of any organic parameters with a detectable concentration." The department's SWMP addresses any detected organic parameter as a statistically significant increase (SSI).

As per our last groundwater letter to Bridgeton Sanitary Landfill, we stated that detection monitoring may continue for upgradient monitoring well 114-AS. No further investigations are required concerning Chlorobenzene and 1,4-dichlorobenzene detections at upgradient monitoring well 114-AS. No other organic detects have been determined from any other monitoring wells for the November 2003 sampling event.

Thank you for your attention to statistical analysis reporting. Should you require further assistance or have questions pertaining to this document, please contact Mr. John R. Cramer of the Permits Unit at (573) 751-5401 or P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcs

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
St. Louis Regional Office

STATE OF MISSOURI Bob Holden, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

www.dnr.state.mo.us

APR 04 2003

CERTIFIED MAIL # 7099 3220 0009 3709 4741
RETURN RECEIPT REQUESTED

Rodney T. Bloese, R.G., L.P.G.
Bridgeton Sanitary Landfill, L.L.C.
Allied Waste Industries, Inc.
12976 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis Responses for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Bloese:

The Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) has reviewed the following document:

> The letter identified as an alternate source demonstration with two sets of attachments (Attachment A, Time Series Plots, and Attachment B, Box and Whisker Plots) dated March 18, 2003, and received on March 19, 2003, is from Mr. Steve Jett, Senior Hydrogeologist, Herst & Associates, Inc., and Ward Herst, R.G., Managing Director, Herst & Associates, Inc.

For additional clarification, the only parameter/monitoring well combinations requiring alternate source demonstrations are the parameter/monitoring well combinations that have confirmed organic parameter detects. Organic parameter detects, first-time and confirmation samples, are statistically significant increases (SSIs). If the department's SWMP does not approve a SSI alternate source demonstration, then the department's SWMP will describe in writing the requirements for a groundwater assessment monitoring plan which may lead to the demonstration of an alternate source through execution of this plan.

We have agreed to additional groundwater monitoring of monitoring well 114-AS as part of assessment monitoring of chlorobenzene. We have also agreed to the additional gas monitoring around and from the headspace of 114-AS. We acknowledge the lack of any methane gas detection from around or in the headspace of 114-AS from your November 2002 sampling event report. All these assessment monitoring field data collecting techniques and possibly ones not yet considered may lead to identification of a non-landfill source or corrective action. The first-time detection of 1,4-dichlorobenzene at the low concentration of 5.5 micro-grams per liter (ug/L) in monitoring well 114-AS for the November 2002 sampling event has already been noted in our March 14, 2003 letter.

Areas of concern (AOCs) are from inorganic parameters statistical exceedances in upgradient of landfill monitoring wells. As a result of our reporting no significant trends in our December 6, 2002 letter on the May 2002 sampling event, based on Sen's Slope Analysis for trend in DUMPStat, we made the following statement:

> *Bridgeton Sanitary Landfill, L.L.C. must continue to monitor the significant upward trend on confirmed AOCs. If a significant upward trend(s) develops over time for any future confirmed AOC parameter with at least ten (10) rounds (with outlier rounds removed) of background data, then a written work plan for evaluating the cause of this trend(s) will be submitted to the department's SWMP.*

Because of our reporting of no significant trends through May 2002, we were not expecting to see any reporting from you on the trends the Mann- Kendall trend tests from your Sanitas showed. In our recently sent March 14, 2003 letter we altered the above wording as follows to show that regardless of who's software found significant upward trends, we were not going to make a written evaluation of significant upward trends mandatory unless the department's SWMP requested it:

> *Bridgeton Sanitary Landfill, L.L.C. must continue to monitor the significant upward trend on confirmed AOCs. If a significant upward trend(s) develops over time for any future confirmed AOC parameter with at least ten (10) rounds (with outlier rounds removed) of background data, then a written work plan for evaluating the cause of this trend(s) may be required by the department's SWMP.*

Please, note from the previous that "*evaluation of the causes of inorganic parameters continued AOCs and significant upward trends*" is not the same as an "*alternate source demonstrations for organic parameter detects confirmed SSIs.*" Therefore in our recently sent March 14, 2003 letter we added the following statement:

> *A demonstration work plan and/or groundwater quality assessment monitoring program plan may not be required for any inorganic parameter/well combination unless there is a confirmed organic parameter detect for any monitoring well above the practical quantitation limit (PQL).*

Per this letter we now change the possibly misleading wording of this statement to the following, and apologize for any inconvenience:

> *A demonstration work plan as part of an alternate source demonstration and/or groundwater quality assessment monitoring program plan may be required for any inorganic parameter/well combination confirmed AOC if there is a confirmed organic parameter detect from the same monitoring well above the practical quantitation limit (PQL).*

Looking at our DUMPStat time series plots in Attachment I to this letter, which would display a heading on each plot of "*significant upward trend*" if Sen's Slope Analysis had determined one, we certainly agree with the plausibility of your explanations for the confirmed AOCs of the following:

1. Magnesium at monitoring wells 105-SS and 106-SD.
2. Manganese at monitoring well 115-SS.
3. Sodium at monitoring 115-SS.

As can be seen from the time series plots, the last few data values of each plot show increases that, as discussed in a March 25, 2003, 10:11 A.M. conversation with Steve Jett of Herst & Associates, Inc., caused triggering of a weak significant upward trend with Mann-Kendall testing in Sanitas. Overall without these last few data values in each time series plot a significant upward trend is not recognizable. Even with the plausibility of your explanations for AOCs in sections 1.0 through 3.0 of the above referenced letter (and as listed above), continued detection monitoring of these identified parameter/monitoring well combinations is necessary as stated previously.

As stated previously in our March 14, 2003 letter, Bridgeton Sanitary Landfill, L.L.C. is performing intra-well prediction interval comparisons for an inward gradient site where the upgradient monitoring wells are the compliance wells.

We recommend strongly for the intra-well prediction interval analysis being utilized at this site, that all data causing trending be excluded for subsequent comparisons. If the particular inorganic parameter data has been trending historically for any well/parameter combination, then the intra-well prediction interval method may be used with caution until the upper prediction limit (UPL) is exceeded. When the UPL becomes exceeded with historically trending data, then every effort should be made before the next statistical comparison to exclude the background data causing the trending.

Thank you for your attention to statistical analysis reporting. Should you require further assistance or have questions pertaining to this document, please contact Mr. John R. Cramer, of the Permits Unit at (573) 751-5401, or P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcd

Enclosure

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Mr. Steve Jett, Senior Hydrogeologist, Herst & Associates, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
Joe Gillman, R.G., Chief, Environmental Assistance Unit, Geological Survey and Resource Assessment Division
Mr. Phil Schroeder, Chief, Permit Section, Water Pollution Control Program
St. Louis Regional Office

STATE OF MISSOURI
Bob Holden, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES

April 24, 2002

CERTIFIED MAIL # 7099 3220 0009 3708 7200
RETRUN RECEIPT REQUESTED

Rodney T. Bloese, R.G., L.P.G.
Bridgeton Sanitary Landfill, L.L.C.
Allied Waste Industries, Inc.
13570 St Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Alternate Source Demonstration for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Bloese:

The Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) has previously reviewed, in our February 6, 2002 letter, groundwater monitoring data through the sampling event of November 2001 and has reviewed the following document:

> A letter report entitled, "Alternative Source Demonstration, Bridgeton Sanitary Landfill, Bridgeton, Missouri," dated March 11, 2002, and received March 12, 2002, prepared by Herst & Associates, Inc., on behalf of Bridgeton Sanitary Landfill.

As previously stated, any detected organic parameter is not required to show statistical exceedance or trend in order to require resampling verification and demonstration. Also this statistical analytical data for a confirmed organic detect is not an acceptable demonstration.

Because, as you indicated, chlorobenzene was shown to be detected in the November 2001 data at its PQL of 5 ug/L in monitoring well 114-AS, please verify with the laboratory whether or not this value should have been flagged as a non-detect. Please provide us with the results of this laboratory verification. If this value was actually a detection value for chlorobenzene, please provide resampling detection verification with the May 2002 sampling event.

Upgradient migration is possible for any confirmed contaminant via aquifer contaminant transport and the existing equations that govern this behavior. Acceptable alternate source demonstration for any confirmed organic detect will involve finding and providing data showing/describing an alternate source.

Your identification of monitoring well 114-AS as "PZ-114-AS" is inconsistent with electronically submitted/referenced data. All of your future correspondence must use the electronically submitted (and previously listed in our February 6, 2002, letter) monitoring well identifications. Also the piezometer notation, "PZ" is abandoned because of the present "monitored-for-chemical-data" status of these wells.

Again as previously stated in our February 6, 2002, letter the following procedures must be followed for any area of concern (AOC) found in the groundwater:

> *Bridgeton Sanitary Landfill, L.L.C. must continue to monitor the significant upward trend on confirmed AOCs. If a significant upward trend(s) develops over time for any future confirmed AOC parameter with at least ten (10) rounds (with outlier rounds removed) of background data, then a written work plan for evaluating the cause of this trend(s) will be submitted to the department's SWMP.*

Thank you for your attention to statistical analysis reporting. Should you require further assistance or have questions pertaining to this document, please contact Mr. John R. Cramer, of the Permits Unit at (573) 751-5401 or at P.O. Box 176, Jefferson City, Missouri 65102.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
Joe Gillman, R.G., Chief, Environmental Assistance Unit, Geological Survey and Resource Assessment Division
Mr. Phil Schroeder, Chief, Permit Section, Water Pollution Control Program
St. Louis Regional Office

STATE OF MISSOURI
Bob Holden, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

February 6, 2002

CERTIFIED MAIL # 7099 3220 0009 3708 6760
RETRUN RECEIPT REQUESTED

Rodney T. Bloese, R.G., L.P.G.
Bridgeton Sanitary Landfill, L.L.C.
Allied Waste Industries, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Bloese:

The Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) has reviewed groundwater monitoring data through the sampling event of November 2001.

As previously agreed to with the department's SWMP and the Geological Survey and Resource Assessment Division the groundwater monitoring program consists of the following monitoring wells as designated:

1) 100-SS - 10 Feet below the water table in the Middle to Upper St. Louis Formation.
2) 100-SD - Deep in the basal Salem Formation.
3) 201A-SS - 10 Feet below the water table in the middle St. Louis Formation.
4) 104-SS - 10 Feet below the water table in the Lower St. Louis Formation.
5) 104-SD - Deep in the lower Salem Formation.
6) 105-SS - 10 Feet below the water table in the lower/basal St. Louis Formation.
7) 106-SS - 10 Feet below the water table in the upper Salem Formation.
8) 106-SD - Deep in the lower Salem Formation.
9) 205-SS - 10 Feet below the water table in the middle St. Louis Formation.
10) 109-SS - 10 Feet below the water table in the middle to upper Salem Formation.
11) 110-SS - 10 Feet below the water table in the lower St. Louis Formation.
12) 111-SD - 10 Feet below the water table in the lower/basal [?upper?] Salem Formation.
13) 114-AS - 10 feet below the water table in the alluvium.
14) 115-SS - 10 Feet below the water table in the middle St. Louis Formation.

Bridgeton Sanitary Landfill, L.L.C. is performing intra-well prediction interval comparisons for an inward gradient site where the upgradient monitoring wells are the compliance wells.

Bridgeton Sanitary Landfill, L.L.C. has stated - per our November 22, 1999, statistical analysis plan (SAP) approval letter, condition number 2, change to their SAP – that, ". . . a list will be made of any organic parameters with a detectable concentration." The department's SWMP addresses any detected organic parameter as a statistically significant increase (SSI).

Chlorobenzene in monitoring well 114-AS was a detected SSI in the May 2001 sampling/statistical analysis round and now has been confirmed as a detected organic parameter by the November 2001 sampling round in monitoring well 114-AS. Historical organic parameter detections are presented in Attachment I to this letter.

Within ninety (90) days of confirming any SSIs at the Bridgeton Sanitary Landfill, L.L.C., please provide a demonstration showing that a source other than the sanitary landfill caused the SSIs, or that the SSIs resulted from an error in sampling, analysis, statistical evaluation, or natural variation. If this demonstration cannot be made to the department's satisfaction, then please submit a groundwater quality assessment monitoring program plan.

For any new (non-confirmed as indicated above) SSI, Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912 may use the May 2001 sampling event data as the resampling data per 10 CSR 80-3.010(11)(C) 6 A through C.

The following are the areas of concern (AOCs) for monitoring wells; and associated trend analysis results per the department's SWMP November 22, 1999, conditioned SAP approval of the "Statistical Analysis Plan, Bridgeton Sanitary Landfill, L.L.C., Missouri," by Herst & Associates, Inc., for the Bridgeton Sanitary Landfill, dated November 1999 and received November 17, 1999:

Well/Parameter	Intra-Well Prediction Interval	Significant Trend
100-SS/Magnesium	Parametric	No
106-SD/Magnesium	Parametric	No
201A-SS/Magnesium	Parametric	No
111-SD/Phosphorus	Parametric	No
115-SS/Sodium	Parametric	No
115-SS/Sulfate	Parametric	No
115-SS/Total Organic Carbon	Parametric	No
201A-SS/Total Organic Carbon	Parametric	No
*205-SS/Sodium	Parametric	No

Please note for future analytical results, that when we show a certain number of "*" before a well/parameter combination in the table above, then this will show the number of times the AOC is confirmed/verified by resampling statistics.

Bridgeton Sanitary Landfill, L.L.C. must continue to monitor the significant upward trend on confirmed AOCs. If a significant upward trend(s) develops over time for any future confirmed AOC parameter with at least ten (10) rounds (with outlier rounds removed) of background data, then a written work plan for evaluating the cause of this trend(s) will be submitted to the department's SWMP.

Thank you for your attention to statistical analysis reporting. Should you require further assistance or have questions pertaining to this document, please contact Mr. John R. Cramer, of the Permits Unit at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

Enclosure

RJS:jcb

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
Joe Gillman, R.G., Chief, Environmental Assistance Unit, Geological Survey and Resource Assessment Division
Mr. Phil Schroeder, Chief, Permit Section, Water Pollution Control Program
St. Louis Regional Office

STATE OF MISSOURI
Bob Holden, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

December 21, 2001

CERTIFIED MAIL # 7099 3220 0009 3708 6616
RETRUN RECEIPT REQUESTED

Matt Kingsley, P.E., General Manager
Laidlaw Waste Systems
Bridgeton Sanitary Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

The Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) has reviewed groundwater monitoring data through the sampling event of May 2001.

As previously agreed to with the department's SWMP and the Geological Survey & Resource Assessment Division the groundwater monitoring program consists of the following monitoring wells as designated:

1) 100-SS - 10 Feet below the water table in the Middle to Upper St. Louis Formation.
2) 100-SD - Deep in the basal Salem Formation.
3) 201A-SS - 10 Feet below the water table in the middle St. Louis Formation.
4) 104-SS - 10 Feet below the water table in the Lower St. Louis Formation.
5) 104-SD - Deep in the lower Salem Formation.
6) 105-SS - 10 Feet below the water table in the lower/basal St. Louis Formation.
7) 106-SS - 10 Feet below the water table in the upper Salem Formation.
8) 106-SD - Deep in the lower Salem Formation.
9) 205-SS - 10 Feet below the water table in the middle St. Louis Formation.
10) 109-SS - 10 Feet below the water table in the middle to upper Salem Formation.
11) 110-SS - 10 Feet below the water table in the lower St. Louis Formation.
12) 111-SD - 10 Feet below the water table in the lower/basal [?upper?] Salem Formation.
13) 114-AS - 10 feet below the water table in the alluvium.
14) 115-SS - 10 Feet below the water table in the middle St. Louis Formation.

Please note that as in the electronically submitted groundwater data that we are using, the leading "PZ-" in front of each monitoring well designation has been dropped. This was also done because the above list of fourteen (14) monitoring wells are no longer just piezometers.

Bridgeton Sanitary Landfill, L.L.C. is performing intra-well prediction interval comparisons for an inward gradient site where the upgradient monitoring wells are the compliance wells.

Bridgeton Sanitary Landfill, L.L.C. has stated - per our November 22, 1999, statistical analysis plan (SAP) approval letter, condition number 2, change to their SAP – that, ". . . a list will be made of any organic parameters with a detectable concentration." The department's SWMP addresses any detected organic parameter as a statistically significant increase (SSI), and for the May 2001 sampling/statistical analysis round chlorobenzene was detected in monitoring well 114-AS.

For any new (non-confirmed as indicated above) SSI, Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912 may use the November 2001 sampling event data as the resampling data per 10 CSR 80-3.010(11)(C) 6 A through C.

Within ninety (90) days of confirming any SSIs at the Bridgeton Sanitary Landfill, L.L.C., please provide a demonstration showing that a source other than the sanitary landfill caused the SSIs, or that the SSIs resulted from an error in sampling, analysis, statistical evaluation, or natural variation. If this demonstration cannot be made to the department's satisfaction, then please submit a groundwater quality assessment monitoring program plan.

The following are the areas of concern (AOCs) for monitoring wells; and associated trend analysis results per the department's SWMP November 22, 1999, conditioned SAP approval of the "Statistical Analysis Plan, Bridgeton Sanitary Landfill, L.L.C., Missouri," by Herst & Associates, Inc., for the Bridgeton Sanitary Landfill, dated November 1999 and received November 17, 1999:

Well/Parameter	Intra-Well Prediction Interval	Significant Trend
111-SD/Barium	Parametric	No
114-AS/Barium	Parametric	No
115-SS/Barium	Parametric	No
105-SS/Calcium	Parametric	No
105-SS/Chloride	Parametric	Yes
104-SD/ Fluoride	Parametric	No
105-SS/Magnesium	Parametric	No

Well/Parameter	Intra-Well Prediction Interval	Significant Trend
115-SS/Phosphorus	Parametric	No
205-SS/Phosphorus	Parametric	No
205-SS/Sodium	Parametric	No

Please note for future analytical results, that when we show a certain number of "*" before a well/parameter combination in the table above, then this will show the number of times the AOC is confirmed/verified by resampling statistics.

Bridgeton Sanitary Landfill, L.L.C. must continue to monitor the significant upward trend on confirmed AOCs. If a significant upward trend(s) develops over time for any future confirmed AOC parameter with at least ten (10) rounds (with outlier rounds removed) of background data, then an written work plan for evaluating the cause of this trend(s) will be submitted to the department's SWMP.

Thank you for your attention to statistical analysis reporting. Should you require further assistance or have questions pertaining to this document, please contact Mr. John R. Cramer, of the Permits Unit at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Rodney T. Bloese, R.G., L.P.G., Regional Engineer, Bridgeton Sanitary Landfill
Ms. Susan Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
Mr. Joe Gillman, Geological Survey & Resource Assessment Division
Mr. Phil Schroeder, Water Pollution Control Program
St. Louis Regional Office

Bridgeton SLF
#118912
Permit

Bob Holden
[illegible] • Stephen M. Mahfood, Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City MO 65102-0176

March 22, 2001

CERTIFIED MAIL # 7099 3220 0009 3712 9733
RETURN RECEIPT REQUESTED

Matt Kingsley, P.E.
General Manager
Bridgeton Landfill Authority
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

On January 17, 2001, the Missouri Department of Natural Resources' Solid Waste Management Program received the gas remediation plan for the Bridgeton Sanitary Landfill. The plan was prepared by Lindsey Henry, P.E., of Midwest Environmental Consultants Co., and was submitted in response to the department's letter to you dated November 16, 2000. In the plan, it is proposed to install four (4) additional gas extraction wells and replace two (2) others in the southwest corner of the landfill. Included with the plan was two (2) plan sheets showing the location of the additional wells and the replacement wells.

The program has reviewed the submittal in accordance with the Missouri Solid Waste Management Law and regulations. Based on that review, the program hereby approves the remediation plan with the condition stated.

The following condition is an integral part of this approval. Compliance with this condition shall, in part, determine compliance with Permit Number 118912.

CONDITION:

The gas extraction wells shall be installed or replaced within ninety (90) days of receipt of this letter.

If in the future wells become damaged or are in need of repair or replacement, you may replace or repair them as necessary without prior approval of the department. As-built drawings do not need to be submitted to the department for such work, as long as no significant changes are made in the location of the wells.

This approval should not be construed as compliance with any existing federal or state laws other that the Missouri Solid Waste Management Law; nor should this be construed as a waiver for any other regulatory requirements. This approval is not to be construed as compliance with any existing local permitting or zoning ordinances; nor does it supersede any local permitting and/or zoning requirements.

The department reserves the right to revoke, suspend, or modify the addendum and/or Permit Number 118912 if the permit holder fails to maintain the facility in compliance with the state's Solid Waste Management Law, with the terms and conditions of the permit and with the approved engineering plans and specifications.

We appreciate your continued efforts towards environmentally sound solid waste management practices. If you have any comments or question concerning this letter, contact Mr. Brad Zimmerman of my staff at (573) 751-5401, or P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Jim Bell

Jim Bell
Chief, Engineering Section

JB:bzc

c: Lindsey Henry, P.E., Midwest Environmental Consultants Co.
Ms. Sue Taylor, St. Louis County Department of Health
Ms. Beth Marsala, Chief, Enforcement Section, Solid Waste Management Program
Mr. Joe Trunko, Chief, Solid Waste Unit, St. Louis Regional Office

STATE OF MISSOURI
Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

November 22, 1999

CERTIFIED MAIL # Z 290 182 178
RETRUN RECEIPT REQUESTED

Matt Kingsley, P.E., General Manager
Laidlaw Waste Systems
Bridgeton Sanitary Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Statistical Analysis Plan for Bridgeton Sanitary Landfill, L.L.C., Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

The Solid Waste Management Program (SWMP) has reviewed the Statistical Analysis Plan (SAP) for Bridgeton Sanitary Landfill, L.L.C.

The SWMP hereby approves, with the conditions as stated below, the SAP for Bridgeton Sanitary Landfill, L.L.C. The permittee must ensure that this approval is properly implemented. This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law; nor should this be construed as a waiver for other regulatory requirements. This approval is not to be construed as compliance with any existing local ordinances or zoning requirements; nor does it supersede any local permitting and/or zoning requirements.

The following documents are hereby incorporated by reference into Permit Number 109515:

DOCUMENTS:

1. A letter of transmittal for the report listed below in item 2 (document number 2), dated November 16, 1999, and received November 17, 1999, from Ward E. Herst, P.G., Managing Director of Herst & Associates, Inc.

2. A report entitled, "Statistical Analysis Plan, Bridgeton Sanitary Landfill, LLC, Missouri," by Herst & Associates, Inc., for the Bridgeton Sanitary Landfill. This report is dated November 1999, and was received November 17, 1999.

CONDITIONS:

The following conditions are an integral part of this approval:

1. Because Bridgeton Sanitary Landfill is performing intra-well comparisons for an inward gradient site where the upgradient monitoring wells are the compliance wells, last date outliers (highs or lows) shall not be excluded from compliance wells only for the present analysis.

2. Procedural step A in Section 3.3.5 of Item Number 2 of the above approved documents shall read, "The laboratory analytical report of the groundwater sampling results will be reviewed and a list will be made of any organic parameters with a detectable concentration." There is too much uncertainty with the wording of procedural step A in Section 3.3.5 as to how data validation with evaluation of quality assurance/quality control (QA/QC) blanks might be used in reporting organic concentrations. We have already stated that QA/QC data shall be stored separately and not be used to classify what is detectable/reportable in groundwater samples.

The department reserves the right to revoke, suspend, or modify Permit Number 118912 after due notice if the permit holder fails to maintain the facility in compliance with the state's Solid Waste Management Law and rules, the terms and conditions of the permit, and the approved engineering plans and specifications.

Should you have any questions, please contact Mr. John R. Cramer of my staff at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Ward E. Herst, R.G., Managing Director, Herst & Associates, Inc.
Rodney T. Bloese, R.G., L.P.G., Regional Engineer, Bridgeton Sanitary Landfill
Ms. Susan Taylor, St. Louis County Department of Health
Mr. Edward Galbraith, Chief, Enforcement Section, SWMP
Mr. Bill Duley, Division of Geology and Land Survey
Mr. Phil Schroeder, Water Pollution Control Program
St. Louis Regional Office

Mel Carnahan, Governor • Stephen M. Mahfood, Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

September 1, 1999

CERTIFIED MAIL # Z 290 182 122
RETURN RECEIPT REQUESTED

Matt Kingsley, P.E., General Manager
Laidlaw Waste Systems
Bridgeton Sanitary Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis Plan for Laidlaw Waste Systems, Bridgeton Sanitary Landfill, Inc., Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

The Solid Waste Management Program (SWMP) has reviewed the following documents:

1. A letter with supplemental information for the sampling and analysis plan (SAP). This letter is dated May 13, 1999, and was received May 17, 1999, from Ward Herst, R.G., Director, Herst & Associates, Inc.

2. A letter of transmittal for the Response to the March 24, 1999, SWMP Comment Letter for the Groundwater Sampling and Statistical Analysis Plan, dated November 13, 1998, and received November 16, 1998, prepared by Ward E. Herst, R.G., Director, Herst & Associates, Inc. This letter is dated April 23, 1999, and was received April 26, 1999, from Rodney T. Bloese, R.G., Regional Engineer and Matt Kingsley, P.E., Site Manager, Bridgeton Sanitary Landfill.

3. An attached letter entitled, "Responses to March 24 1999 MDNR Comments, Bridgeton Landfill, LLC Groundwater Sampling and Statistical Analysis Plan," from Ward E. Herst, R.G., Director, Herst & Associates, Inc. on behalf of Bridgeton Landfill, L.L.C. This attached letter is dated April 23, 1999, and was received April 26, 1999. Attached to this letter is the March 24, 1999, SWMP Comment Letter.

4. A report from Dr. Charles B. Davis, Ph.D. entitled, "Response to comments from MDNR to Bridgeton Landfill regarding the proposed groundwater detection monitoring statistics program prepared by EnviroStat." Attached to this report are the following publications:

   A. Simultaneous Nonparametric Prediction Limits, by Dr. Charles B. Davis, Ph.D., and Dr. Roger J. McNichols, Ph.D., which appeared in Technometrics 41, May 1999, with discussion and response.

   B. Ground Water Monitoring Issues: Case Studies, by Dr. Charles B. Davis, Ph.D., and Dr. Roger J. McNichols, Ph.D., which was presented at WASTE TECH '98, San Antonio, Texas, February 2-3, 1998.

   C. Comparisons of Control Chart and Prediction Limit Procedures Recommended for Groundwater Detection Monitoring, by Dr. Charles B. Davis, Ph.D., Principal Statistician, Environmetrics and Statistics Limited, EnviroStat Technical Report 99-1, dated January 1999.

The SWMP has provided comments pertaining to the previous documents and requires the following in the groundwater sampling and statistical analysis plan:

I. ***Statistical Pre-testing and Data Manipulation for Selection of the Appropriate Intra-well Prediction Interval Test Method***

   1. Provide for collection of a minimum of nine (9) background samples per well. For greater than (>) four (4) and up to eight (8) background samples per well Bridgeton Sanitary Landfill, Inc. may use a Poisson's Prediction limit test.

   2. Updating background data annually may only start after the minimum of twelve (12) background samples has been collected for each well.

   3. For < 25% non-detects use the Practical Quantitation Limit (PQL) divided by two (2), or Cohen's Adjustment.

   4. For ≥ 25% and < 75% non-detects use Cohen's Adjustment or the modified Aitchison's Adjustment (also known as the modified delta method).

   5. For outlier testing use Dixon's Test and Rosner's Test (for multiple outliers) for each analytical event. Outliers can only be excluded for the analytical event in which they are determined. Outliers from a previous analytical event must be incorporated in the background database of the current analytical event, unless and until, they are shown to be outliers for the current analytical event.

6. For normality testing use:

   A. For n ≤ 50 use the Shapiro-Wilk Test.

   B. For n > 50 use the Shapiro-Francia Test.

   C. As an alternative to the Shapiro-Wilk Test you may use Filliben's Probability Plot Correlation Coefficient method.

7. Using Levene's Test, determine if there is equal variance among wells that have normal data distribution (original or transformed).

8. For wells that are equal variant, perform ***parametric intra-well prediction interval testing using pooled standard deviation and adjusted degrees of freedom***. Also, specify the minimum number of wells required for ***parametric intra-well prediction interval testing using pooled standard deviation and adjusted degrees of freedom***. Describe how the minimum number of wells is determined, and any factors (e.g., spatial distribution around the landfill) which might alter this minimum number of wells.

9. For any wells that are not equal variant, perform separate ***standard parametric intra-well prediction interval testing***. Also, wells that add up to less than the required minimum number of wells for ***parametric intra-well prediction interval testing using pooled standard deviation and adjusted degrees of freedom*** will be tested individually using ***standard parametric intra-well prediction interval testing***.

10. For wells with ≥ 75% non-detects, perform ***standard non-parametric intra-well prediction interval testing***.

11. Pooling of any background data across wells for non-parametric intra-well prediction interval testing is **not** permitted. Because we do not allow pooling of data across wells for non-parametric intra-well prediction interval testing, there is no need for a chisquare test for pooled well data having non-detects > 60%.

II. ***Parametric Intra-well Prediction Interval Testing Using Pooled Standard Deviation and Adjusted Degrees of Freedom.***

1. Each well's next-date concentration for a test parameter shall be compared to that well's upper prediction limit (UPL). If the UPL is exceeded, then a statistically significant increase (SSI) will be reported in writing to the SWMP and the appropriate resampling strategy will be conducted as discussed later in this letter.

2. The UPL for each well is calculated for each well's intra-well prediction interval using the formula, UPL equals the individual well's mean plus kappa multiplied by the pooled standard deviation from the equal variant wells' data.

III. *Standard Parametric Intra-well Prediction Interval Testing*

1. Each well's next-date concentration for a test parameter shall be compared to that well's upper prediction limit (UPL). If the UPL is exceeded, then a SSI will be reported in writing to the SWMP and the appropriate resampling strategy will be conducted as discussed later in this letter.

2. The upper prediction limit (UPL) for each well is calculated for each well's intra-well prediction interval using the formula, UPL equals the individual well's mean plus kappa multiplied by the standard deviation from the individual well's data.

IV. *Standard Non-Parametric Intra-well Prediction Interval Testing*

In general each well's next-date concentration for a test parameter shall be compared to that well's largest non-outlier concentration. If the UPL is exceeded, then a SSI will be reported in writing to the SWMP and the appropriate resampling strategy will be conducted as discussed later in this letter.

V. *Resampling Strategy Based on the Background Sample Size per Well*

1. For any of the previously described parametric or non-parametric intra-well test methods, resampling shall only be for: 1) pass one of two resamples if the background sample size (n) is ≤ 12; and 2) pass one of one resample if the background sample size (n) is > 12.

2. There shall be no alternate statistical comparison method for **organic parameters**. and resampling for **organic parameters** shall be conducted as per the above item 1. Section V of this letter.

3. Resampling for any of the parametric or non-parametric intra-well prediction interval statistical tests previously described must be a minimum of one quarter later from the previous sampling event. The department's Environmental Services Program laboratory must be given the option to split samples for each resampling event.

VI. *Additional Required Information*

1. A reduced parameter list is not an option. Please note that we presently take the position that infrequently detected parameters such as volatile organic compounds are non-naturally occurring. We have to consider transport/fate mechanisms during SSI demonstrations and assessment monitoring on landfill releases, and not just statistical methods during detection monitoring (e.g., Dr. Davis's Data-Based Power Analysis, (DBPA), method for probabilistic or chance estimate of confirmation of an SSI).

2. Provide a serious written discussion of demonstrations for SSIs confirmed from our described methods of resampling.

3. Provide a statistical flow chart(s), incorporating the information in this letter, with your next submittal. This flow chart(s) must be presented so the SWMP has consistent (and acceptable with this letter) procedural steps we can follow and come up with results that agree with Bridgeton Sanitary Landfill, Inc. results.

4. Please provide us with software as per Dr. Charles B. Davis's proposed action, "supply software to MDNR which can be used to verify individual computations", on page 9 of his April 16, 1999 "Response to Comments from MDNR . . . ." This software must be capable of running verifiable, user-friendly statistical analyses per the requirements of this letter. If such software cannot be provided, then the statistical analysis program will have to be changed to one that can be handled by the software the SWMP currently uses. If statistical software eventually becomes available to handle the statistical analysis per this letter, then the groundwater sampling and statistical analysis plan may be changed at that time.

5. The SWMP and the Division of Geology and Land Survey (DGLS) recognize the groundwater monitoring program as being modified to consist of the following monitoring wells:

1) PZ-100-SS	8) PZ-106-SD
2) PZ-100-SD	9) PZ-205-SS
3) PZ-201A-SS	10) PZ-109-SS
4) PZ-104-SS	11) PZ-110-SS
5) PZ-104-SD	12) PZ-111-SD
6) PZ-105-SS	13) PZ-114-AS
7) PZ-106-SS	14) PZ-115-SS

The SWMP and the DGLS agree that calculation of a well's purge volume will be based on a sand pack porosity of 10% to 15%.

Please submit a corrected report with our requested changes within thirty (30) days of receipt of this letter. The department reserves the right to revoke, suspend, or modify Permit Number 118912 after due notice if the permit holder fails to maintain the facility in compliance with the state's Solid Waste Management Law and rules, the terms and conditions of the permit, and the approved engineering plans and specifications.

Thank you for your prompt attention to this matter. Should you require further assistance, or have questions pertaining to this document, please contact Mr. John R. Cramer of the Permits Unit at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Ward Herst, R.G., Herst & Associates, Inc.
Dr. Charles B. Davis, Ph.D., Environmetrics & Statistics Limited
Rodney T. Bloese, R.G., L.P.G., Regional Engineer, Bridgeton Sanitary Landfill
Ms. Susan Taylor, St. Louis County Department of Health
Mr. Edward Galbraith, Chief, Enforcement Section, SWMP
Mr. Bill Duley, Division of Geology and Land Survey
Mr. Phil Schroeder, Water Pollution Control Program
St. Louis Regional Office

118912
Permit File

Mel Carnahan, Governor • Stephen M. Mahfood, Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

JUN 18 1999

CERTIFIED MAIL # Z 290 140 514
RETURN RECEIPT REQUESTED

Matt Kingsley, P.E.
Bridgeton Landfill Authority
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

On May 22, 1997, the Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) met with staff from Allied Waste Industries of Missouri to discuss the groundwater and gas monitoring plans. One item agreed upon at the meeting was to directly connect the leachate collection force main line to the Missouri River Wastewater Treatment Plant (WWTP), and close the existing leachate collection pond. The SWMP hereby approves the direct connection of the leachate force main to the WWTP as well as closure of the leachate collection pond.

The following conditions are an integral part of this approval. Compliance with these conditions shall, in part, determine compliance with Permit Number 118912.

CONDITIONS

1. This activity may require a permit or approval from the department's Water Pollution Control Program (WPCP). Please contact Mr. Phil Schroeder, Permits Section Chief, WPCP, at (573) 751-1300 for a determination of any necessary requirements, approvals, or permits. The SWMP shall be copied on all correspondence.

2. Any sludge in the bottom of the lagoon must be dewatered and disposed of in the landfill, or otherwise properly disposed of as solid waste, after first verifying the sludge is not hazardous by the Toxicity Characteristic Leaching Procedures.

3. If there is evidence that leakage has occurred through the geomembrane, all visibly contaminated soil must be handled as explained above for the sludge.

4. Within thirty (30) days of completing closure, please submit a report describing the procedures taken to connect the force main line to the WWTP, and the procedures used in pond closure. In addition, all areas disturbed during this project must be vegetated within 180 days of the completion date.

This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law; nor should this be construed as a waiver for any other regulatory requirements. This approval is not to be construed as compliance with any existing local permitting or zoning ordinances; nor does it supersede any local permitting and/or zoning requirements.

The department reserves the right to revoke, suspend, or modify this approval and/or Permit Number 118912 after due notice, if the permit holder fails to maintain the facility in compliance with the Missouri Solid Waste Management Law and regulations, the terms and conditions of the permit, and approved engineering plans and specifications.

We appreciate your continued efforts towards environmentally sound solid waste management practices. If you have any comments or question concerning this letter, please contact Michele Boussad of my staff at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Jim Bell

Jim Bell
Chief, Engineering Section

JB:mbc

c: Mr. Rod Bloese, Allied Waste Industries, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Mr. Ed Galbraith, Chief, Enforcement Section, SWMP
Mr. Phil Schroeder, Chief, Permits Section, WPCP
Mr. Joe Trunko, Chief, Solid Waste Unit, SLRO

Mel Carnahan, Governor • Stephen M. Mahfood, Director
STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

March 24, 1999

CERTIFIED MAIL # Z 290 140 333
RETURN RECEIPT REQUESTED

Mr. Matt Kingsley, General Manager
Laidlaw Waste Systems
Bridgeton Sanitary Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Sampling and Statistical Analysis Plan for the Laidlaw Waste Systems, Bridgeton Sanitary Landfill, Inc., Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

The Solid Waste Management Program (SWMP) has reviewed the following documents:

1. A letter of transmittal for the three volumes of the Groundwater Sampling and Statistical Analysis Plan, dated November 13, 1998, and received November 16, 1998, prepared by Ward Herst, R.G., Director, Herst & Associates, Inc.

2. The transmitted three-volume report entitled, "Sampling and Analysis Plan, Bridgeton Landfill, LLC, by Herst & Associates, Inc.", on behalf of Bridgeton Landfill, LLC. This report is dated November 1998, and received November 16,1998. Volume I is "Text and Tables." Volume II is "Figures." Volume III is "Appendices."

3. A second letter of transmittal for Appendix D of the report of item 2 above, "Ground-Water Monitoring Statistical Analysis Program for Bridgeton Landfill," dated November 24, 1998, and received November 25, 1998, prepared by Ward Herst, R.G., Director, Herst & Associates, Inc.

4. Appendix D of the report of item 2 above, "Ground-Water Monitoring Statistical Analysis Program for Bridgeton Landfill," prepared by Charles B. Davis, Ph.D., Principal Statistician, Environmetrics & Statistics Limited.

The SWMP has prepared the following comments pertaining to the statistical analysis plan of "Sampling and Analysis Plan, Bridgeton Landfill, LLC:"

1. All text of Appendix D, Statistical Evaluation Plan. Please make changes reflecting the collection of the necessary quarterly background data for the complete set of indicator parameters and Appendix I parameters per 10 CSR 80-3.010 (11). Please make the proposal for the necessary quarterly background data for conducting intra-well comparisons (parametric or non-parametric) based on the assumed or understood independence of each monitoring well's data from spatial variability or autocorrelation. Please continue with quarterly background monitoring while the SWMP is deciding on your proposal for background monitoring.

   Please provide discussion(s) of your methods for updating background data during detection monitoring. Please state in your plan that unimpacted data from future statistical comparisons (post-background monitoring) shall be added to the background databases for statistical comparisons.

2. All text of Appendix D, Statistical Evaluation Plan. The SWMP cannot allow any of the cross-well data pooling strategies (e.g., pooling variance/standard deviation estimates, or non-parametric background data pooling on infrequently detected parameters) for intra-well comparisons. Please use an intra-well (parametric or non-parametric) comparison that analyzes each well's data separately in a manner consistent with existing software packages. The SWMP currently uses "Sanitas for Ground Water, Version 7.013" by Intelligent Decision Technologies, Ltd. Please make the necessary changes to the pre-testing, statistical comparison tests, evaluations/controls on alpha (test and site-wide), and power determinations.

3. All text of Appendix D, Statistical Evaluation Plan. Please show that only the next date sample value (next one out of one sample) will be used for determination of any statistically significant increase (SSI) in any intra-well comparison.

4. All text of Appendix D, Statistical Evaluation Plan. In accordance with 10 CSR 80-3.010 (11)(C) 6, please make changes that show only one verification resample for SSIs. Show that when the resample is split that either the results of our Environmental Services Program laboratory or your laboratory is enough to confirm a SSI.

5. All text of Appendix D, Statistical Evaluation Plan. Any reduction in the sampling parameter list shall only be arrived at via the SWMP's and the Division of Geology and Land Survey's (DGLS) review of monitoring results which may include demonstrations preproposed /approved within the statistical analysis plan; or implemented post SSI confirmation.

Projection of isolated (temporally and spatially) and dynamic leachate constituent concentrations to groundwater, is not an acceptable method for sampling parameter list reduction. Infrequency of detects is also not an acceptable method for parameter list reduction. In your data-based power analyses (parametric or non-parametric), we are concerned with SSIs at much lower concentrations than cited for your probabilistic (chance) estimate(s) of leachate concentrations for a confirmed SSI. In your reevaluation of the power of the intra-well statistical tests, as revised by the comments in this letter, you need to show comparison - after sufficient sampling/testing - to an EPA reference power curve of a 99 percent prediction limit applied to a single well. You will need more data before adequate power analyses can be done.

6. All text of Appendix D, Statistical Evaluation Plan. The only non-naturally occurring and trace constituents the SWMP will currently accept an alternate SSI determination approach are organic sampling parameters. This alternate approach must follow a strategy that establishes the "confirmed presence" of an organic in a monitoring well as an SSI based on the following procedural steps:

   A. The laboratory analytical report of the groundwater sampling results will be reviewed and a list will be made of any organic parameters with a detectable concentration.

   B. These detectable concentrations will be evaluated to determine if there is a "confirmed presence" by considering that any detections that are estimated or reported at a concentration below the PQL for the parameter will be disregarded.

   C. Any detections that remain from the above two steps will be considered a potential SSI. Monitoring wells with any potential Appendix I organic parameter SSIs will be resampled and the resampling results will be used to establish a "confirmed presence" of the SSI.

   Please make any necessary changes to the text to show this comment's test strategy for organics.

7. All text of Appendix D, Statistical Evaluation Plan. Please provide an intra-well stastistical analysis flow chart derived from a simple text based discussion as per the required changes of this letter's comments. This flow chart shall run from initial data acquisition/evaluation task blocks to post SSI demonstration decision outcome task blocks of either "return to detection monitoring" or "provide groundwater assessment monitoring plan." Note that we are not looking for another detailed statistical analysis on existing data to substantiate the plan and a reduced parameter list. A simplified statistical analysis plan with flow chart is what is required.

8. All text of Appendix D, Statistical Evaluation Plan. Information in the statistical analysis plan must also include the following:

   A. Detailed descriptions on the handling of non-detects.

   B. Detailed discussions of selection and use of statistical comparison methods based on percent non-detects, adjustments performed on non-detects, and pre-tests (e.g., distribution analyses).

   C. Detailed discussion of what actions will be taken per the rules when SSIs occur.

   D. Technically detailed procedures on demonstration and assessment monitoring.

   E. Corrective action discussions or references to corrective action sections of the rule.

9. All text of Appendix D, Statistical Evaluation Plan. For consistency in designations, monitoring point designations as show on the lithologic logs and construction summaries as provided in the "Sampling and Analysis Plan, Bridgeton Landfill, LLC." These designations shall appear on subsequent groundwater monitoring reports electronically submitted for any quarterly (background) and semi-annual sampling events. The SWMP shall reference these monitoring designations in future correspondence associated with this permit.

10. All text of Appendix D, Statistical Evaluation Plan. Please provide text and/or add a note to the flow chart that states that last date outliers (highs or lows) will not be excluded from wells only for present analysis.

11. All text of Appendix D, Statistical Evaluation Plan. Please show in your text that Shapiro-Wilks normality testing shall be used for less than or equal to fifty (50) samples in the data set, and that Shapiro Francia normality testing shall be used for greater than fifty (50) samples in the data set.

12. All text of Appendix D, Statistical Evaluation Plan. In your text discussions pertaining to re-sampling post-SSI determinations, you must provide wording stating that statistical analysis will be run on all the data (including re-sample data) to confirm or disconfirm SSIs.

13. Volumes I, II, and III. The monitoring plan, as proposed by Herst and Associates, Inc., does not include any monitoring wells screened in the alluvium or wells along the northwestern portion of the site where the boundary of the active permitted landfill extends over the alluvial valley. Coverage along the western side of the landfill is also limited. Also even with the possible proximity influence of other fill areas on wells,

there is the possibility that organic constituents could reach an alluvial monitoring well because of possible fluctuating groundwater levels within the screened interval of an alluvial monitoring well.

The SWMP and DGLS request that the groundwater monitoring program be modified to consist of the following monitoring wells:

1)	PZ-100-SS	9)	PZ-205-SS
2)	PZ-100-SD	10)	PZ-109-SS
3)	PZ-201A-SS	11)	PZ-110-SS
4)	PZ-104-SS	12)	PZ-111-SD
5)	PZ-104-SD	13)	PZ-113-AD
6)	PZ-105-SS	14)	PZ-207-AS
7)	PZ-106-SS	15)	PZ-114-AS
8)	PZ-106-SD	16)	PZ-115-SS

If you can provide information that any of the previous selected subset of wells are malfunctioning due to poor/inadequate construction, then we will consider well replacements or reducing this subset of monitoring wells.

14. DGLS noted that on Figure 23 of Volume II that water level readings for PZ-111-SD were unavailable in May 1998 due to blockage in the riser by the newly installed submersible pump. Please try to remedy this situation so that water levels and monitoring samples can be properly taken. If the problem(s) with PZ-111-SD cannot be remedied, please propose a replacement monitoring well to the SWMP and DGLS.

15. It is unclear whether or not point MW-1204, which was included in Figure 60, "Proposed Detection Groundwater Monitoring Program" of Volume II, is to be included in the proposed monitoring program. It is not listed in the monitoring program, nor is there a monitoring well certification record or well construction details for this point. Please provide the SWMP with clarifying information on MW-1204.

16. Section 6, "Sampling Methodology", Volume I. The volume of the filter pack should be included in the total well volume calculations. If just the volume of the riser pipe is used, the volume of the well will be underestimated. Insufficient purging might allow stagnant water remaining in the filter pack to enter the riser during sampling. Please make necessary text corrections.

Prior to submitting a request and the engineering design for any permit modification to the groundwater monitoring program, please schedule a meeting with the SWMP to discuss changes in the groundwater monitoring program.

Please submit responses and report changes within thirty (30) days of receipt of this letter.

Should you have any questions, please contact Mr. John R. Cramer, of my staff, at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Ward Herst, R.G., Herst & Associates, Inc.
Dr. Charles B. Davis, Ph.D., Environmetrics & Statistics Limited
Rodney T. Bloese, L.P.G., Midwest Environmental Consultants
Ms. Susan Taylor, St. Louis County Department of Health
Mr. Edward Galbraith, Chief, Enforcement Section, SWMP
Mr. Bill Duley, Division of Geology and Land Survey
Mr. Dan Schuette, Water Pollution Control Program
St. Louis Regional Office

Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

MAR 03 1999

CERTIFIED MAIL # Z 290 140 487
RETURN RECEIPT REQUESTED

Matt Kingsley, P.E.
Bridgeton Landfill Authority
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Bridgeton Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

On February 10, 1999, the Missouri Department of Natural Resources' Solid Waste Management Program (SWMP) received your request for approval to install four (4) additional gas monitoring wells at the Bridgeton Sanitary Landfill. The SWMP has reviewed the submittal in accordance with the Missouri Solid Waste Management Law and rules. Based on that review, the SWMP hereby approves the request. Design and installation of these wells will require prior approval from the department Division of Geology and Land Survey (DGLS). Please contact Mr. Bruce Netzler at (573) 368-2100. The SWMP shall be copied on all correspondence and approvals from DGLS. Once the installation of the wells has been approved by DGLS, monitoring shall be conducted in accordance with the approved documents for the Bridgeton Sanitary Landfill, Permit Number 118912.

This approval should not be construed as compliance with any existing federal or state laws other that the Missouri Solid Waste Management Law; nor should this be construed as a waiver for any other regulatory requirements. This approval is not to be construed as compliance with any existing local permitting or zoning ordinances; nor does it supersede any local permitting and/or zoning requirements.

The department reserves the right to revoke, suspend, or modify the addendum and/or Permit Number 118912 if the permit holder fails to maintain the facility in compliance with the state's Solid Waste Management Law, with the terms and conditions of the permit and with the approved engineering plans and specifications.

We appreciate your continued efforts towards environmentally sound solid waste management practices. If you have any comments or question concerning this letter, contact Brad Zimmerman of my staff at (573) 751-5401, or P.O. Box 176, Jefferson City, Missouri 65102-0176

Sincerely,

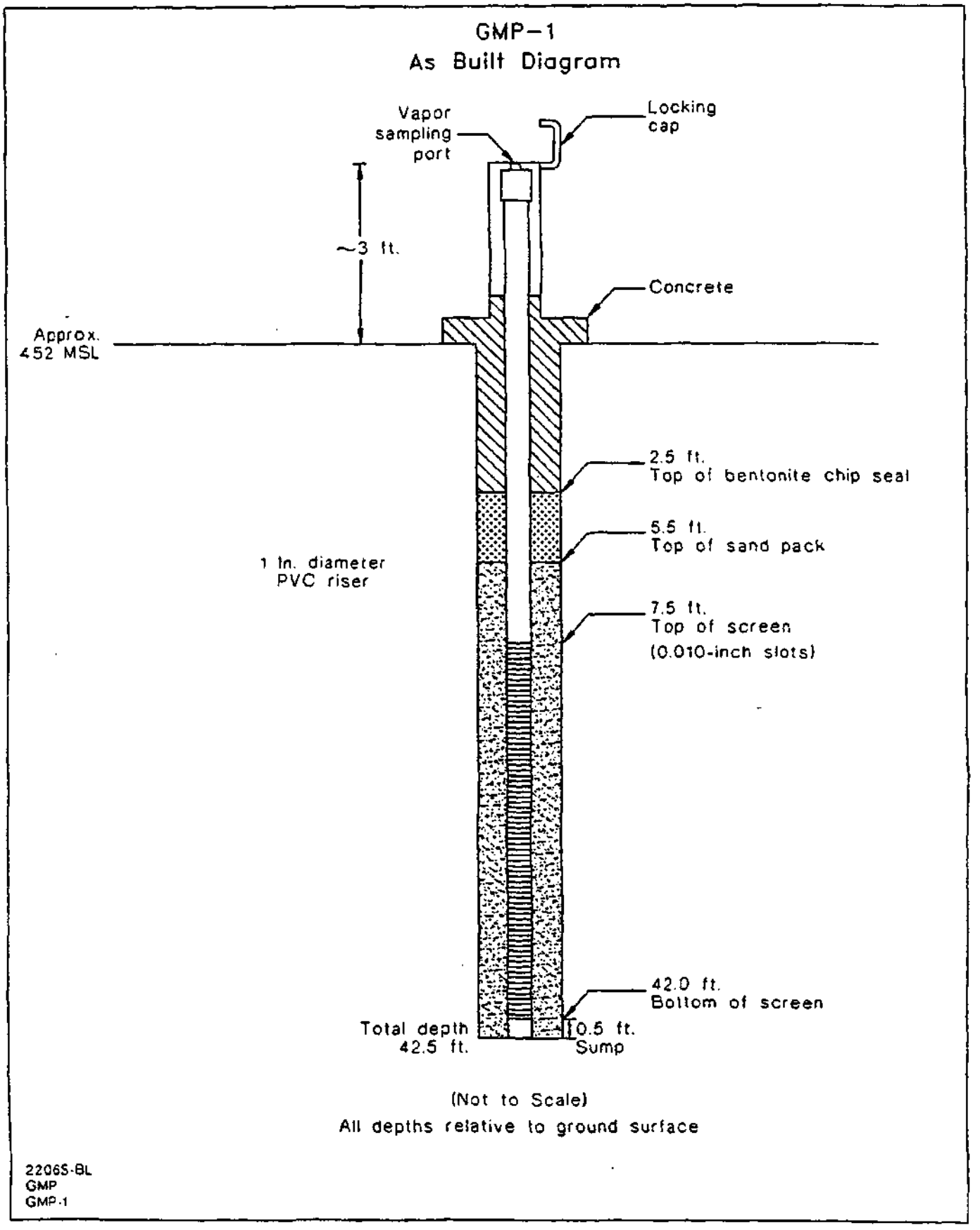
SOLID WASTE MANAGEMENT PROGRAM

Jim Bell

Jim Bell
Chief, Engineering Section

JB:bzc

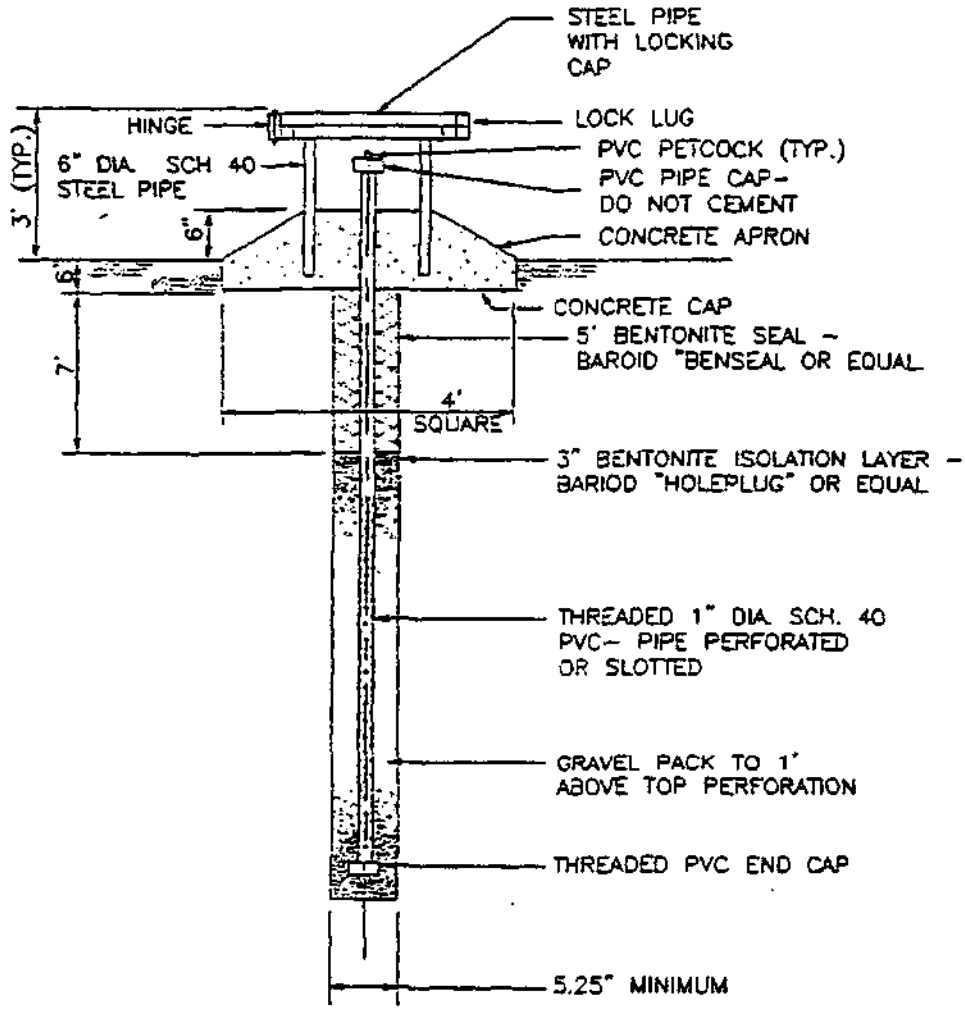
c. Mr. Rod Bloese, Allied Waste Industries, Inc.
Ms. Susan Taylor, St. Louis County Department of Health
Mr. Ed Galbraith, Chief, Enforcement Section, SWMP
Ms. Vickie Heberlie, Solid Waste Unit, SLRO


GMP-1
As Built Diagram
Vapor sampling port
Locking cap
~3 ft.
Concrete
Approx. 452 MSL
2.5 ft.
Top of bentonite chip seal
5.5 ft.
Top of sand pack
1 in. diameter PVC riser
7.5 ft.
Top of screen
(0.010-inch slots)
42.0 ft.
Bottom of screen
Total depth 42.5 ft.
0.5 ft.
Sump
(Not to Scale)
All depths relative to ground surface
2206S-BL
GMP
GMP-1

Project: Laidlaw Waste Systems (Bridgeton), Inc.
Bridgeton Sanitary Landfill

Project Number: 940130-019 Date: 7/97

MIDWEST ENVIRONMENTAL CONSULTANTS, P.C.



GAS MONITORING PROBE DETAIL FOR NEW PROBES

NOT TO SCALE

Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

September 11, 1998

CERTIFIED MAIL # Z 289 843 931
RETURN RECEIPT REQUESTED

Matt Kingsley, P.E.
Bridgeton Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Monitoring: Bridgeton Landfill, Inc., Solid Waste Disposal Area Permit Number 118912, St. Louis County

Dear Mr. Kingsley:

The Solid Waste Management Program (SWMP) has reviewed the groundwater monitoring program for Bridgeton Landfill, Inc., Solid Waste Disposal Area Permit Number 118912, and requires that the following information be provided to the SWMP for review:

1. An updated *field sampling and analysis plan (SAP)*. The SAP must include detailed description of current well conditions, well production details, methods of development and purging for sampling, and sampling methods. In case of low production, prioritization of sampling parameters and turbidity control, wells typically are sampled from the lowest producing/slowest recovery wells to the highest producing/fastest recovery wells. This is so low producers are allowed the maximum amount of time (not exceeding twenty-four (24) hours) to recover prior to sampling, and possibly repurging to collect the remainder of a prioritized sample parameter list. In listing by order of priority, the parameters for sampling, volatile organic compounds (VOCs) are sampled for first; usually with a method (e.g., careful bailing technique) minimizing the potential for loss of any volatiles. Post-purge sample volume and prioritized list of parameter(s) volume must be shown in the SAP for each well not producing enough post-purge sample water for complete analyses for all parameters. In general, a sampling event or round should not exceed five (5) days for all wells. Sampling should also proceed from monitoring wells that have the lowest values for parameters' concentrations to the monitoring wells that have the highest values for parameters' concentrations.

2. Potentiometric surface maps of the same geochemically related aquifer for precise determination of groundwater flow direction(s) with regularly collected water level measurements to evaluate the effectiveness of monitoring wells during different seasons.

On these potentiometric surface maps show monitoring wells with their respective groundwater elevations, boundaries/limits of the progression of quarrying, waste filling, final limits of filling, and the final limits of quarrying. Protocol for the frequency of submission of these maps to the department to account for any changes in the potentiometric surface must also be provided.

3. Written evaluation of any monitoring wells which are prone or projected to go dry for replacement, and/or low flow recovery sampling alternatives (i.e., low flow purging, multi-purge sampling, and parameters prioritization sampling).

4. Information on monitoring well construction, development, abandonment, and reporting as required by Missouri Well Construction Rules 10 CSR 23-1-6.

5. A written detailed discussion of groundwater data statistical methods including the following: 1) Pre-tests; 2) Parametric and non-parametric forms of comparisons; and 3) A flow chart summarizing the detailed text discussion. We recommend consideration of prediction interval testing including intra-point comparisons for this site.

Please submit the previously requested items within sixty (60) days of receipt of this letter. Above items two through five may be submitted as part of the SAP in a single request for permit modification to the groundwater monitoring program for Bridgeton Landfill, Inc., Solid Waste Disposal Area Permit Number 118912.

Should you have any questions, please contact Mr. Steven C. Wyatt or Mr. John R. Cramer of my staff at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Russell J. Seedyk, Jr., P.E.
Chief, Permits Unit

RJS:jcb

c: Mr. Greg Ribaudo, Allied Waste Industries, Inc.
Lee D. Tharp, P.E., Midwest Environmental Consultants
Mr. Edward Galbraith, Chief, Enforcement Section, SWMP
St. Louis Regional Office

STATE OF MISSOURI Mel Carnahan, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF THE DIRECTOR
P.O. Box 176 Jefferson City, MO 65102-0176

MAR 2 3 1998

CERTIFIED MAIL # Z 289 843 581
RETURN RECEIPT REQUESTED

Mr. Greg Ribaudo
District Manager
Bridgeton Landfill Authority
12976 St. Charles Rock Road
Bridgeton, MO 63044

RE: Facility Upgrade Package and Permit Modification, Bridgeton Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Ribaudo:

On March 3, 1997, the Department of Natural Resources' Solid Waste Management Program (SWMP) received a permit modification request on behalf of Bridgeton Landfill Authority for the Bridgeton Sanitary Landfill, Permit Number 118912. The proposed modification was submitted for the purpose of obtaining a vertical expansion, improving the leachate collection force main system, approval of a gas collection system, and other modifications to the landfill design.

The SWMP hereby approves the following parts of the addendum subject to the conditions stated herein:

1. The leachate header and force main improvements;

2. The gas control plan and associated pipe layout as an alternate to the previously approved gas recovery and processing facility;

3. The storm water control plan;

4. The vertical expansion and associated final contours; and

5. The closure and post-closure plan and cost estimates of $2,171,487 for closure and $9,552,900 for post-closure care.

Raising the head levels in the leachate risers is specifically not approved.

This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law; nor should it be construed as a waiver for other regulatory requirements. This addendum is not to be construed as compliance with any existing local ordinances or zoning requirements; nor does it supersede any local permitting and/or zoning requirements.

The permit holder must ensure that the design and operational changes are properly implemented.

Conditions

The following conditions are an integral part of the permit addendum. Compliance with these conditions shall, in part, determine compliance with Permit Number 118912:

1. The permittee must submit either a revised or a new financial assurance instrument in the amount of $11,724,387 specifying the amounts designated for closure and post-closure.

2. The permittee must not, under any circumstances, allow the leachate levels to rise above the currently approved levels.

3. It does not appear that this modification will affect the radiologically contaminated areas. However, monitoring well D-14 may be affected. Please contact the department's Hazardous Waste Program, Superfund Section, prior to abandoning this or any other well which may be affected by the expansion activities.

Document

The following document is hereby incorporated into Permit Number 118912:

Facility Upgrade and Permit Modification for the Laidlaw Waste System (Bridgeton), Inc., MDNR Permit Number 118912, Saint Louis County Permit Number 419, Saint Louis County, Missouri, Volumes I and II; prepared by Midwest Environmental Consultants, P.C., 2014 Williams Street, Jefferson City, Missouri 65109.

The department reserves the right to revoke, suspend, or modify this addendum and/or Permit Number 118912 after due notice, if the permit holder fails to maintain the facility in compliance with the Missouri Solid Waste Management Law and regulations, the terms and conditions of the permit, and the approved engineering plans and specifications.

Should you have any questions, please contact Mr. Steven Wyatt of the SWMP at (573) 751-5401.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Stephen Mahfood
Director

SM:swb

c: Matt Kingsley, P.E., General Manager, Bridgeton Landfill Authority
Lee D. Tharp, P.E., Midwest Environmental Consultants
Mr. Brad Bomanz, St. Louis County Department of Health
Mr. Charles Wildt, St. Louis County Department of Health
Mr. Ed Galbraith, Chief, Enforcement Section, SWMP, MDNR
Mr. David Erickson, Geologist, Division of Geology and Land Survey, MDNR
St. Louis Regional Office, MDNR

4.2

STATE OF MISSOURI

Mel Carnahan, Governor • David A. Shorr, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

December 30, 1997

CERTIFIED MAIL # Z 289 843 539
RETURN RECEIPT REQUESTED

Mr. Steven M. Helm,
Vice-President, Legal
Allied Waste Industries, Inc.
15880 N. Greenway-Hayden Loop, Suite 100
Scottsdale, AZ 85260

RE: Permit Modification for Bridgeton Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Helm:

On December 12, 1997, the Department of Natural Resources' Solid Waste Management Program (SWMP) received your request for approval to change the permitted owner and operator of the Bridgeton Sanitary Landfill. Based on the submitted information, the SWMP hereby approves the request to change the owner and operator of the Bridgeton Sanitary Landfill from Laidlaw Waste Systems (Bridgeton), Inc. to Bridgeton Landfill, LLC.

DOCUMENT:

The following document is hereby incorporated by reference into Permit Number 118912

> A letter dated December 10, 1997, to the SWMP from Mr. Steven M. Helm, Vice-President, Legal, Allied Waste Industries, Inc., requesting approval for the change of owner and operator for the Bridgeton Sanitary Landfill.

This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law; nor should this be construed as a waiver for any other regulatory requirements. This approval is not to be construed as compliance with any existing local ordinances or zoning requirements; nor does it supersede any local permitting and/or zoning requirements.

The department reserves the right to revoke, suspend, or modify this approval and/or Permit Number 118912 after due notice, if the permit holder fails to maintain the facility in compliance with the state's Solid Waste Management Law, the terms and conditions of the permit, and the approved engineering plans and specifications.

If you have any questions or comments regarding this approval, please contact Mr. Karl Finke of my staff at (573) 751-5401, or at P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Jim Hull
Director

JH:kfb

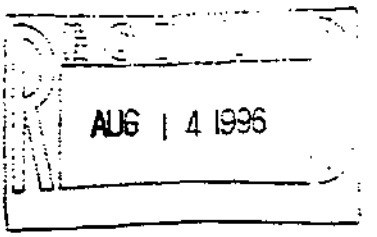
c: Mr. Jerry Brown, Chairman, Region L, SWMD
Mr. Dan Fester, Acting Chief, Enforcement Section, SWMP
St. Louis Regional Office

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

August 13, 1996



CERTIFIED MAIL # Z 776 294 837
RETURN RECEIPT REQUESTED

Mr. Larry Giroux
Landfill Manager
Laidlaw Waste Systems
(Bridgeton), Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Groundwater Monitoring Plan for Laidlaw Waste Systems (Bridgeton), Inc., Sanitary Landfill, Permit Number 118912, St. Louis County

Dear Mr. Giroux:

The Department's Solid Waste Management Program (SWMP) has received a permit modification request for Laidlaw Waste Systems (Bridgeton), Inc., Sanitary Landfill, Permit Number 118912. The proposed modification was submitted for the purpose of updating the design of the landfill to include a groundwater monitoring system as per the requirements of 10 CSR 80-3.010(8).

The SWMP hereby approves the addendum subject to the conditions stated. The permit holder must ensure that the design and operational changes are properly implemented.

This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law; nor should it be construed as a waiver for other regulatory requirements. This addendum is not to be construed as compliance with any existing local ordinances or zoning requirements; nor does it supersede any local permitting and/or zoning requirements.

The following documents are hereby incorporated into Permit Number 118912.

Documents:

1. A copy of the letter with attachments, dated October 6, 1995 from Golder Associates received by SWMP October 10, 1995 transmitting the revisions to the groundwater monitoring plan.

2. A report entitled Draft Groundwater Monitoring Plan Under RCRA Subtitle D for Laidlaw Waste Systems (Bridgeton) Inc.'s Bridgeton Active Sanitary Landfill Bridgeton, Missouri received September 20, 1995 by the SWMP.

3. A report entitled Draft Hydrogeologic Characterization Report for the Bridgeton Active Sanitary Landfill, Bridgeton Missouri, two volumes dated September, 1995 and received September 20, 1995 by the SWMP.

4. A letter from Lee D. Tharp, P.E. of MEC dated January 27, 1993 to Stephen Jones, P.E. at SWMP concerning the post-closure care fund.

Conditions:

The following conditions are an integral part of the permit addendum. Compliance with these conditions shall, in part, determine compliance with Permit Number 118912.

1. Groundwater monitoring shall be conducted in accordance with the enclosed program entitled Groundwater Monitoring Program, Laidlaw Waste Systems Bridgeton Landfill Permit Number 118912, July, 1996.

2. All abandoned monitoring wells, exploratory boreholes and abandoned piezometers shall be plugged in accordance with 10 CSR 23 Chapters 1-6 "Permanent Abandonment of Wells."

3. A piezometer, PZ-102-RSS, was installed to replace PZ-102-SS. The Department's Division of Geology and Land Survey Wellhead Protection Unit has not received documentation of abandonment. Submit documentation regarding this issue to the Department's SWMP within sixty (60) days of the date of this letter. In addition, please submit documentation of abandonment of monitoring point 1204 which was to be abandoned by January 1, 1996.

4. All wells shall be constructed in accordance with Missouri Department of Natural Resources' (MDNR) Well Construction Codes 10 CSR 23 Chapters 1-6.

5. Post-Closure Plan

   A. The permittee shall revise the post-closure plans and post-closure costs to reflect the changes in the frequency and types of groundwater and soil gas monitoring and in the post-closure care period from thirty (30) years to perpetual care for leachate removal.

B. The post-closure plans shall be revised to provide for replacement or repair/maintenance of leachate and gas pumps, replacement of leachate and gas wells.

Three (3) copies of the revised post-closure plans and cost estimates shall be submitted to the SWMP within sixty (60) days of receipt of this letter.

6. The report did not follow the work plan as submitted to MDNR in 1994. On page 18 of the work plan, it is stated that water level measurements will be taken from the proposed piezometers, and from existing groundwater monitoring wells, piezometers, leachate collection pumps, gas wells and gas collection manholes over a period of twelve (12) months. Data from only a few of the above collection points have been submitted. Within sixty (60) days of receipt of this addendum, please submit all of the required measurements.

7. A grout curtain was installed in the northeast corner of the southern quarry. The grout curtain installed in 1985 is in close proximity to PZ-1201-SS, PZ-202-SS, PZ-103-SS and the PZ-104-SS series of piezometers. This may affect water level measurements and hydraulic conductivity tests. The SWMP believes that PZ-1201-SS should be properly abandoned due to its proximity to the grout curtain and other piezometers finished at the same level. This piezometer should be properly abandoned in accordance with Missouri Well Construction Rules 10 CSR 23 Chapters 1-6.

8. Before constructing the monitoring points 1242-1245, the area around the leachate pond must be characterized to ensure correct placement and effective target monitoring zones.

9. Continue to monitor PZ-203-SS (Monitoring Point 1235). If further water elevation data indicates it is not yielding significant results, it should either be redrilled or replaced. If it is replaced, the old borehole should be reconstructed as a landfill gas monitoring well or abandoned in accordance with Missouri Well Construction Rules 10 CSR 23 Chapters 1-6.

It should be noted that PZ-200-SS, PZ-201-SS and PZ-204-SS have been excluded from the groundwater monitoring program. They will be used to monitor for landfill gas.

The department reserves the right to revoke, suspend, or modify this addendum and/or Permit Number 118912 after due notice, if the permit holder fails to maintain the facility in compliance

with the state's Solid Waste Management Law and Rules, the terms and conditions of the permit and the approved engineering plans and specifications.

Should you have any questions, please contact the Special Projects Unit of the Solid Waste Management Program at (573) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Jim Hull
Chief, Engineering and Planning Section

JH:swc

Enclosures

c: Lee D. Tharp, P.E., Midwest Environmental Consultants
Ms. Sue Taylor, St. Louis County Department of Health
Mr. Charles Wildt, St. Louis County Department of Health
Mr. Jim Bell, Chief, Enforcement Section, SWMP
Mr. Jim Brown, Chief, Environmental Assistance Unit, DGLS
St. Louis Regional Office

GROUNDWATER MONITORING PROGRAM
Laidlaw Waste Systems Bridgeton Landfill
Permit Number 118912
February, 1996

A. Monitoring Points

The monitoring points listed below are those for which the Laidlaw Waste Systems (Bridgeton) Inc. is responsible to report bailing, purging, sampling and field observations, and to provide representative sampling parameter analyses. The original location of proposed monitoring point designations and the Solid Waste Management Program's (SWMP) four digit monitoring point numbers are listed below for each point. These four digit numbers shall appear on subsequent groundwater monitoring report forms submitted for any semi-annual and quarterly sampling events. These monitoring numbers shall be referenced in future correspondence associated with this permit.

UPGRADIENT/ DOWNGRADIENT /INWARD	MONITORING WELL LOCATION	FOUR DIGIT MONITORING NUMBER
Inward Gradient	Located at N1067302.42 and E516903.56 identified as PZ-1201-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1201
Inward Gradient	Located near N1066400 and E515900, TO BE ABANDONED BY 1/1/96	1204
Inward Gradient	Located near N1067499 and E515600, TO BE ABANDONED BY 7/1/96	1205
Inward Gradient	Located near N1067400 and E515600, TO BE ABANDONED BY 7/1/96	1206
Inward Gradient	Located at N1068867.81 and E517175.03 identified as PZ-100-SS, monitoring 10 feet below the water table in the middle to upper St. Louis formation	1207
Inward Gradient	Located at N1068851.79 and E517195.45 identified as PZ-100-SD, monitoring deep in the basal Salem formation	1208

UPGRADIENT/ DOWNGRADIENT /INWARD	MONITORING WELL LOCATION	FOUR DIGIT MONITORING NUMBER
Inward Gradient	Located at N1068842.03 and E517211.63 identified as PZ-100-KS, monitoring the upper Keokuk formation	1209
Inward Gradient	Located at N1068472.89 and E516622943 identified as PZ-101-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1210
Inward Gradient	Located at N1068131.86 and E516858.81 identified as PZ-102R-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1211
Inward Gradient	Located at N1067660.40 and E516723.54 identified as PZ-103-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1212
Inward Gradient	Located at N1067028.01 and E516847.19 identified as PZ-104-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1213
Inward Gradient	Located at N1067013.26 and E516834.43 identified as PZ-104-SD, monitoring deep in the lower Salem formation	1214
Inward Gradient	Located at N1066993.15 and E516820.50 identified as PZ-104-KS, monitoring the upper Keokuk formation	1215
Inward Gradient	Located at N1066421.35 and E516230.23 identified as PZ-105-SS, monitoring 10 feet below the water table in the lower/basal St. Louis formation	1216
Inward Gradient	Located at N1066726.29 and E515399.94 identified as PZ-106-SS, monitoring 10 feet below the water table in the upper Salem formation	1217

UPGRADIENT/ DOWNGRADIENT /INWARD	MONITORING WELL LOCATION	FOUR DIGIT MONITORING NUMBER
Inward Gradient	Located at N1066715.14 and E515415.96 identified as PZ-106-SD, monitoring deep in the lower Salem formation	1218
Inward Gradient	Located at N1066703.87 and E515432.10 identified as PZ-106-KS, monitoring the upper Keokuk formation	1219
Inward Gradient	Located at N1067163.45 and E515254.52 identified as PZ-107-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1220
Inward Gradient	Located at N1067678.37 and E515972.61 identified as PZ-108-SS, monitoring 10 feet below the water table in the middle Salem formation	1221
Inward Gradient	Located at N1068011.70 and E516144.36 identified as PZ-109-SS, monitoring 10 feet below the water table in the middle to upper Salem formation	1222
Inward Gradient	Located at N1068336.09 and E515919.72 identified as PZ-110-SS, monitoring 10 feet below the water table in the lower St. Louis formation	1223
Inward Gradient	Located at N1068638.11 and E515834.57 identified as PZ-111-SD, monitoring 10 feet below the water table in the lower/basal Salem formation	1224
Inward Gradient	Located at N1068620.78 and E515850.23 identified as PZ-111-KS, monitoring the upper Keokuk formation	1225
Inward Gradient	Located at N1069002.00 and E515674.01 identified as PZ-112-AS, monitoring 10 feet below the water table in the shallow alluvium	1226

UPGRADIENT/ DOWNGRADIENT /INWARD	MONITORING WELL LOCATION	FOUR DIGIT MONITORING NUMBER
Inward Gradient	Located at N1069224.31 and E515747.72 identified as PZ-113-AS, monitoring 10 feet below the water table in the shallow alluvium	1227
Inward Gradient	Located at N1069233.33 and E515759.85 identified as PZ-113-AD, monitoring the water table at the base of the basal alluvium	1228
Inward Gradient	Located at N1069242.39 and E515776.57 identified as PZ-113-SS, monitoring 10 feet below the water table in the upper Salem formation	1229
Inward Gradient	Located at N1069418.88 and E516768.25 identified as PZ-114-AS, monitoring 10 feet below the water table in the alluvium	1230
Inward Gradient	Located at N1069408.54 and E516755.35 identified as PZ-115-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1231
Inward Gradient	Located at N1066410.28 and E515843.88 identified as PZ-116-SS, monitoring 10 feet below the water table in the middle Salem formation	1232
Inward Gradient	Located at N1067831.76 and E516846.40 identified as PZ-201A-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1233
Inward Gradient	Located at N1067320.25 and E517101.58 identified as PZ-202-SS, monitoring 10 feet below the water table in the middle to upper St. Louis formation	1234
Inward Gradient	Located at N1066661.50 and E516607.70 identified as PZ-203-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1235

UPGRADIENT/ DOWNGRADIENT /INWARD	MONITORING WELL LOCATION	FOUR DIGIT MONITORING NUMBER
Inward Gradient	Located at N1066429.82 and E515556.28 identified as PZ-204A-SS, monitoring 10 feet below the water table in the lower to middle St. Louis formation	1236
Inward Gradient	Located at N1067463.60 and E515463.34 identified as PZ-205-AS, monitoring 10 feet below the water table in the base of the shallow Alluvium	1237
Inward Gradient	Located at N1067483.54 and E515477.78 identified as PZ-205-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1238
Inward Gradient	Located at N1068030.83 and E515809.45 identified as PZ-206-SS, monitoring 10 feet below the water table in the basal St. Louis formation	1239
Inward Gradient	Located at N1069644.67 and E516037.64 identified as PZ-207-AS, monitoring 10 feet below the water table in the shallow Alluvium	1240
Inward Gradient	Located at N1069219.14 and E517169.45 identified as PZ-208-SS, monitoring 10 feet below the water table in the middle St. Louis formation	1241
To be determined	Located near N1066300 and E514800 monitoring the shallow groundwater in the alluvium	1242
To be determined	Located near N1066200 and E514400 monitoring the shallow groundwater in the alluvium	1243
To be determined	Located near N1066700 and E514300 monitoring the shallow groundwater in the alluvium	1244
To be determined	Located near N1066900 and E514800 monitoring the shallow groundwater in the alluvium	1245

Existing or new wells improperly constructed or screened to monitor improper or inadequate zones shall be properly abandoned.

All wells shall be constructed in accordance with Missouri Department of Natural Resources Well Construction Rules 10 CSR 23-1 through 6.

Background water levels, including any seasonal variations need to be established. Water levels shall be measured monthly over a course of one (1) year after development and approval of each well. Water level measurements shall be taken after each significant rainfall event (rainfall amounts of one (1) inch or more within a 72 hour period) for a period of one (1) year. This monitoring program shall be in addition to the monthly water level measurements.

B. Sampling Frequency/Parameters

I. Background Sampling

Background sampling shall consist of at least four independent samples as described in 10 CSR 80-3.010(8)(C)2.E. for all monitoring points. The four independent samples should be taken over the first four quarters after the date of this letter. Each background sample shall be for the groundwater monitoring parameters contained in both the Semi-Annual/Background and Quarterly Lists as given on the attached list entitled Groundwater Monitoring Parameters. During background sampling, downgradient wells shall be sampled during the first and third quarters for the parameters contained in the Quarterly List, and during the second and fourth quarters for the parameters contained in both the Quarterly List and the Semi-Annual/Background List.

II. Detection Monitoring

All wells except wells designated 1233, 1234, 1236, 1239, 1240, and 1241 shall be monitored as follows.

After background sampling has been completed, inward gradient monitoring points to be sampled for groundwater monitoring parameters shall be sampled as follows: First and third quarters, samples shall be taken for the parameters contained in the Quarterly List. Second and fourth quarters, samples shall be taken for the parameters contained in both the Quarterly List and the Semi-Annual/Background List.

All first and third quarter sampling results shall be submitted to the department's SWMP within (30) days from the date the sample is obtained. All second and fourth quarter sampling results shall be submitted to the

department's SWMP within ninety (90) days from the date the sample is obtained.

Wells designated 1233, 1234, 1236, 1239, 1240, and 1241 shall be monitored quarterly for groundwater elevation, temperature, pH and conductivity. These readings shall be reported with the sampling data from the other wells.

All groundwater sampling and reporting shall be conducted in accordance with the attached department's technical bulletin entitled Collection, Handling and Reporting Procedures for Groundwater Sampling, latest revision.

C. Groundwater Monitoring Program

Additional hydrogeologic characterization through subsurface sampling and testing could alter the interpretation of previous hydrogeologic investigations. Approval of this Groundwater Monitoring Program does not preclude it from any future revision.

D. Inquiries

All inquiries concerning these reporting procedures and/or any discussion of possible deviations from these reporting procedures should first be directed to the Special Projects Unit of the Solid Waste Management Program at (573) 751-5401 for prior consideration by the department.

GROUNDWATER MONITORING PARAMETERS

I. Semi-Annual/Background List

Inorganic Constituents

Ammonia as N (NH3)
Antimony (Sb)
Arsenic (As)
Barium (Ba)
Beryllium (Be)
Boron (B)
Cadmium (Cd)
Calcium (Ca)
Chromium (Cr)
Cobalt (Co)
Copper (Cu)
Fluoride (F)
Hardness (calculated)
Lead (Pb)
Magnesium (Mg)
Manganese (Mn)
Mercury (Hg)
Nickel (Ni)
Nitrate/Nitrite (NO3/NO2)
Total Phosphorus (P)
Selenium (Se)
Silver (Ag)
Sodium (Na)
Sulfate (SO4)
Thallium (Tl)
Total Organic Carbon
Vanadium (Va)
Zinc (Zn)

Organic Constituents

Acetone
Acrylonitrile
Benzene
Bromochloromethane
Bromodichloromethane
Tribromomethane
Carbon Disulfide
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Trichloromethane
Chlorodibromomethane
1,2-Dibromo-3-chloropropane
1,2-Dibromoethane
1,2-Dichlorobenzene
1,4-Dichlorobenzene
trans-1,4-Dichloro-2-butene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,2-Dichloropropane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
Ethylbenzene
2-Hexanone
Bromomethane
Chloromethane
Dibromomethane
Dichloromethane
2-Butanone
Iodomethane
4-Methyl-2-pentanone
Styrene
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
Tetrachloroethene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene
Trichlorofluoromethane
1,2,3-Trichloropropane
Vinyl acetate
Vinyl chloride
Xylenes

II. Quarterly List

pH
Chemical Oxygen Demand (COD)
Chlorides (Cl)
Total Dissolved Solids (TDS)
Specific Conductance (Conductivity corrected to 25° C)
Iron (Fe)

ALL METALS ARE TOTAL RECOVERABLE - DO NOT FIELD FILTER SAMPLES
ALL FIELD OBSERVATIONS SHOULD BE REPORTED ON THE SWMP'S FORMS

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

October 28, 1993

Mr. Miles Stotts
Environmental Compliance Manager
Laidlaw Waste Systems, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Permit Modification Addendum for West Lake (Bridgeton) Sanitary Landfill, Solid Waste Disposal Area Operating Permit Number 118912, St. Louis County

Dear Mr. Stotts:

A permit modification, submitted as an addendum to the West Lake (Bridgeton) Sanitary Landfill (Permit Number 118912) was filed with the Missouri Department of Natural Resources on October 8, 1993. The proposal requests modifying the length of the permit from a fixed term to a term of the anticipated life of the facility in order to be consistent with Chapter 260.205.2(4) RSMo.

The permit addendum is hereby approved as submitted on the document listed below. This document is attached hereon and made an official part of permit number 118912.

1. The letter dated October 8, 1993 and received October 8, 1993 from Mr. Miles Stotts, Laidlaw Waste Systems, to Mr. Warner Sherman, Solid Waste Management Program, which requests an extension of the facility's operating permit.

This approval is not to be construed as compliance with any existing federal or state environmental laws other than the Missouri Solid Waste Management Law, nor should this be construed as a waiver for other regulatory requirements. This addendum is not to be construed as compliance with any existing local ordinances or zoning requirements nor does it supersede any local permitting and/or zoning requirements. The design, construction and operation of the landfill and related landfill appurtenances shall conform to all applicable water quality laws, rules, regulations, and permits which are enforced by the department's Water Pollution Control Program.

The department reserves the right to revoke, suspend, or modify this addendum and/or permit number 118912 after due notice:

1. If it is found that the holder of the permit is in violation of the Missouri Solid Waste Management Law or Rules.

2. For failure to operate in accordance with the approved plans, specifications, and operating procedures.

3. For failure to comply with any and all conditions of the permit.

4. For creating a public nuisance, health hazard, or causing environmental pollution.

5. If it is found that additional construction or alteration of the solid waste disposal area is necessary to comply with any and all rules promulgated under and in accordance with the Missouri Solid Waste Management Law.

Should you have any questions, please contact the Solid Waste Management Program at (314) 751-5401.

Sincerely,

SOLID WASTE MANAGEMENT PROGRAM

Harold T. Morton
Director

HTM:fdk

c: St. Louis Regional Office
Jim Bell, SWMP Enforcement Section
St. Louis-Jefferson Solid Waste Management District

Bill Reed
Bridge
H.O

JOHN ASHCROFT
Governor

G. TRACY MEHAN III
Director

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176
Jefferson City, MO 65102

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks, Recreation, and Historic Preservation

January 11, 1991

Mr. Miles Stotts
Regional Environmental Manager
Laidlaw Waste, Inc
P.O. Box 5192
Kansas City, MO 64132

Dear Mr. Stotts:

The Waste Management Program (WMP) approves the following requested changes in the groundwater monitoring program at the Westlake Landfill, permit number 118912, as proposed in the December 19, 1990, letter from your consultant Foth and Van Dyke:

1. Proper abandonment of wells 1202 and 1203 and removal from the WMP's groundwater monitoring program;

2. Installation of one bedrock monitoring well along the southwest side of the former quarry;

3. Installation of one nested bedrock monitoring well, approximately 220 foot depth, along the northwest side of the former quarry; and

4. Installation of one nested bedrock monitoring well, approximately 150 foot depth, along the northwest side of the former quarry.

The WMP should be notified of the date and time installation will occur to observe the well construction. Well abandonment procedures, well as-builts, boring logs and a background sample for each newly constructed well must be submitted by April 1, 1991, to the Waste Management Program. A new permit on groundwater monitoring will be issued to Westlake Landfill upon receipt of the submittals.

If you have any further questions or comments, please call me at (314) 751-3176.

Sincerely,

DIVISION OF ENVIRONMENTAL QUALITY

Janese A. Neher

Janese A. Neher, P.E.
Enforcement Section
Waste Management Program

JAN:sw

cc: Mr. Rodney Bloese, Foth & Van Dyke
St. Louis Regional Office

JOHN ASHCROFT
Governor

FREDERICK A. BRUNNER
Director

Division of Energy
Division of Environmental Quality
Division of Geology and Land Survey
Division of Management Services
Division of Parks and
Historic Preservation

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

OFFICE OF THE DIRECTOR
1915 Southridge Drive
P.O. Box 176
Jefferson City, Missouri 65102
Telephone 314-751-4422

CERTIFIED MAIL P196186810

November 18, 1985

Mr. William McCullough, President
West Lake Landfill, Inc.
13570 St. Charles Rock Road
Bridgeton, MO 63044

Dear Mr. McCullough:

RE: Solid Waste Disposal Area Operating Permit #118912.

An Application for Operating Permit has been filed with the Missouri Department of Natural Resources requesting a permit to operate a sanitary landfill designated in the application as the West Lake Landfill, Inc. Sanitary Landfill. The application was filed by West Lake Landfill, Inc. and submitted to the Department of Natural Resources for review and approval. The application includes engineering plans, and specifications, operating procedures and subsequent correspondence or amendments for the subject facility. The application has been prepared by Burns & McDonnell. The application has been reviewed for compliance with the Missouri Solid Waste Management Law (Section 260.200 to 260.245, RSMo, 1978) and the Missouri Solid Waste Management Rules and Regulations.

In accordance with Section 260.205, Paragraph 2, RSMo, 1978, the Missouri Department of Natural Resources hereby approves the application and issues Permit Number 118912 to West Lake Landfill, Inc. for the operation of a solid waste disposal area set forth in the application as the West Lake Landfill, Inc. Sanitary Landfill. This permit applies only to that tract of land of approximately 52 acres, as described by the engineering plans, specifications and operating procedures submitted to the department. This permit is issued for a period of ten (10) years. This permit expires at midnight on November 18, 1995, unless a complete application for a permit is submitted to the Waste Management Program at least 12 months before the expiration date. If an application for a permit is made prior to November 18, 1994, then this permit and its conditions remain in effect

until the effective date of a new permit, or effective date of denial of the application for a new permit. The department shall review this permit approximately five (5) years after the date of issuance to determine the compliance status of the landfill and shall modify the permit as necessary to assure that the facility continues to comply with applicable requirements of the provisions of Sections 260.200 to 260.245 RSMo and the rules and regulations adopted thereunder.

The final approved engineering plans, specifications and operating procedures described below are attached hereon and made an official part of this permit:

1. The completed Application for Operating Permit form, dated September 25, 1984, designating West Lake Landfill, Inc. as both the owner and operator of the facility.

2. The engineering report entitled Permit Application and Engineering Report for West Lake Landfill, Inc. Sanitary Landfill Expansion Bridgeton, Missouri, 1985; prepared by Burns & McDonnell; received July 5, 1985.

3. The operations manual entitled West Lake Landfill, Inc. Sanitary Landfill Expansion Operations Manual, 1985; prepared by Burns & McDonnell; received July 5, 1985.

4. Plan Sheets entitled West Lake Landfill, Inc. Sanitary Landfill, Bridgeton, Missouri, 1984; prepared by Burns & McDonnell, including: drawing 1, revision 1; drawing 2, revision 1; and drawings 3 through 5 (no revisions).

5. Letter dated September 25, 1985, to Mr. Thomas R. Gredell, P.E. from Mr. Robert M. Robinson, P.E. (including attachments) providing additional details of the landfill design and operation.

6. Document entitled Part IV, Post Closure Plan; received October 3, 1985; replaces the section of the engineering report entitled Part IV, Post Closure Plan.

7. Letter dated October 1, 1985, to Mr. William McCullough from Mr. Robert M. Robinson, P.E. (including attachments), received October 3, 1985, providing details of the Hazardous Waste Contingency Plan and the Waste Disposal Monitoring Plan.

8. Letter dated March 14, 1985, to Mr. Thomas R. Gredell, P.E. from Mr. Robert M. Robinson, P.E. providing additional details of the landfill design and operation.

9. Report entitled Spring Grouting Summary, West Lake Landfill, Inc., Bridgeton, Missouri, received April 30, 1985; prepared by Drilling Service Company; dated February 15, 1985, through April 18, 1985.

10. Report entitled Spring Grouting Summary, Grout Curtain #2, West Lake Landfill, Inc. Bridgeton, Missouri, received October 3, 1985; prepared by Drilling Service Company; dated May 23, 1985, through August 2, 1985.

11. Letter dated July 5, 1985, to Mr. John D. Doyle, P.E. from Mr. Robert M. Robinson, P.E. providing additional information concerning the grouting reports.

12. Report entitled Hydrogeologic Investigation, West Lake Landfill, Preliminary Phase Report, January, 1985; prepared by Burns & McDonnell; received March 18, 1985.

13. Report entitled Interim Report on the Proposed Groundwater Sampling Program for the Primary Phase of the Hydrogeologic Investigation, West Lake Landfill, St. Louis County, Missouri, October 1985; received October 8, 1985.

Approval of the application and issuance of this permit is given with the explicit understanding that the sanitary landfill will be developed and operated in compliance with the approved plans, specifications and operating procedures, with the conditions of the permit, with the Missouri Solid Waste Rules and Regulations, and in accordance with the Missouri Solid Waste Management Law. This permit is not to be construed as compliance with any existing local ordinances or zoning requirements. This permit for operation of a solid waste disposal area is issued only to the person named in the application and shall not be transferable.

Conditions

The following conditions are an integral part of the permit. Compliance with these conditions shall, in part, determine compliance with the permit.

1. This permit, Solid Waste Disposal Area Operating Permit #118912, encompasses the proposed expansion area and additional solid waste fill by West Lake Landfill, Inc. over the disposal areas permitted under Solid Waste Disposal Area Operating Permit Numbers 118906 and 118909 issued to West Lake Landfill, Inc. This document supersedes and replaces the previous permits and permit documents.

2. West Lake Landfill, Inc. shall establish and maintain an escrow fund for the purpose of providing post-closure care and maintenance of the landfill. The amount and manner of maintaining this fund shall be as described in the approved permit documents.

A. Fifty percent of the first yearly cost of this fund shall be deposited in this fund prior to acceptance of solid waste.

B. The existence and maintenance of this fund shall be verified to the department by the permittee prior to acceptance of solid waste. The maintenance of this fund shall be verified to the department annually prior to the anniversary date of establishment of the fund, in writing, by the financial institution wherein this fund is deposited.

3. An environmental assessment of the entire landfill site shall be initiated by West Lake Landfill, Inc. or any successor or assign ("hereinafter West Lake") immediately after the issuance of this permit. This assessment, including hydrogeologic investigation, shall be completed by November, 1986, and shall be used as the basis for the development of a monitoring program and feasibility study to assess necessary remedial action. The conclusions of the feasibility study shall be submitted to the department within two years after the issuance of this permit. Implementation of necessary remedial action will be undertaken by West Lake in accordance with reasonable design and construction scheduling. Additional groundwater monitoring requirements will be required, based on review of the hydrogeologic investigation and feasibility study.

4. Initial training of the waste inspector (spotter) shall be provided so that he/she is able to adequately perform the duties as described in the permit documents. At a minimum, the initial training for this employee shall include:

A. Familiarization with 10 CSR 80-3.010(3), solid waste excluded.

B. Identification and recognition of unacceptable wastes, as described in 10 CSR 80-3.010(3).

C. Familiarization with the necessary procedures to obtain approval of special waste disposal requests.

D. Provision of a list of all special wastes approved for disposal by the department.

5. Intermediate cover is not required until the fill is above the quarry rim, as proposed in the approved permit documents.

6. Leachate and sludge from leachate treatment shall be collected, treated and disposed of as per the approved permit documents.

A. Leachate shall be treated and disposed of in accordance with all applicable water quality laws, rules, regulations, and policies as enforced by the Water Pollution Control Program, Missouri Department of Natural Resources.

B. West Lake Landfill, Inc. shall two times a year test the leachate and leachate treatment sludge for hazardous waste characteristics pursuant to 10 CSR 25-4.010 (2 through 5) and submit the results of such tests within sixty days to Missouri Department of Natural Resources. If hazardous wastes are detected in the leachate or sludge West Lake Landfill, Inc. shall implement proper handling of such hazardous wastes in accordance with the Missouri Hazardous Waste Management law, Rules and Regulations.

C. Sludge from the on-site leachate treatment system is acceptable for disposal at the landfill, unless tested to be a characteristic hazardous waste as per condition 6B.

D. Static leachate levels in the collection sumps in the unfilled area of the quarry, as shown in the approved permit documents, will be maintained at a level less than 30 feet above the base of the sump. The leachate level shall be checked monthly, recorded and made available upon department request.

E. Static leachate levels in the previously filled areas of the quarry, as shown on the approved permit documents, shall be maintained at a level less than 50 feet above the base of the sump. The leachate level shall be checked monthly, recorded and made available upon department request.

7. A. Groundwater monitoring shall be required as per the attached document entitled Monitoring Program for the West Lake Landfill, Inc. Sanitary Landfill. The wells shall be sampled within 30 days of issuance of the permit. The first sample will be used as a background sample and should be analyzed for the extended list of parameters, as if it were an annual analysis.

B. Three groundwater monitoring wells have been installed in the area of the grout curtain in the northeast corner of the large quarry. Two wells were installed during the placement of the initial grout curtain and were designated as groundwater monitoring wells (GWMW) #4/III and (GWMW) #14/III in the application for operating permit. The third well was installed during the placement of grout curtain #2 and was designated as groundwater monitoring well (GWMW) #17/IV in the application for operating permit. The water level in these wells shall be monitored monthly, recorded, and made available upon department request.

C. All three wells will be monitored, unless the department is requested to reevaluate the monitoring program. If requested and approved, one or more of the wells can be eliminated from the sampling program if hydraulic communication between the wells is verified.

D. Additional sampling points may be added to the monitoring program depending on the results of the hydrogeologic investigation (See Condition #4).

8. The following previously approved special wastes are approved for disposal under permit #118912:

A. Fly ash derived from a coal burning industrial boiler, generated by McDonnell Douglas Corporation; 400 tons per month; approved November 1, 1984.

B. Incinerator ash derived from municipal refuse incineration, generated by McDonnell Douglas Corporation; 800 cubic yards per month; approved November 1, 1984.

A special waste disposal request will have to be submitted to, and approved by, the Waste Management program prior to accepting any other special waste as per 10 CSR 80-3.010(3).

9. Each eight inch lift of the twelve foot wide pad in the northeast corner should be tested for soil density to confirm that a minimum compaction of 90% of the standard proctor density is obtained.

10. All surface water discharges shall be made in accordance with all applicable water quality laws, rules, regulations and policies as enforced by the Water Pollution Control Program, Missouri Department of Natural Resources.

11. Methane gas shall be vented or burned in accordance with all applicable air quality laws, rules, regulations, and policies as enforced by the appropriate air pollution control regulatory agency.

12. Department review and approval of any planned final use is required prior to implementing a designated, commercial, final use of the site.

13. Within six months of the date of issuance of the permit, two copies of a final, comprehensive engineering report shall be submitted to the Waste Management Program. This report shall incorporate all present design and operating information into one reference manual detailing the final approved plans and specifications for the design and operation of the proposed sanitary landfill. This report shall incorporate all information required by regulation, eliminate all contradictory information, and include all revisions and additions to the original application for operating permit, as approved.

Facility Description

The proposed sanitary landfill is located in U.S. Survey 131, Township 46 North, Range 5 East, St. Louis County, Missouri. The proposed site consists of a total of approximately 214 acres of which approximately

52 acres will be utilized for the sanitary landfill. The types of wastes to be accepted will consist of municipal solid waste, bulky waste, dead animals, demolition and construction waste, and brush and untreated wood waste. Approval to dispose of special wastes other than the wastes listed above (except hazardous wastes, explosives, or radioactive material) will be considered on a case-by-case basis, as provided in 10 CSR 80-3.010(3). The area method of sanitary landfill operation will be utilized. The fill heights and area locations are to be completed as shown on the approved engineering plans and specifications and maintenance of the area shall be provided in accordance with the post-closure maintenance plan. Upon completion of the landfill, it will be used for as yet undesignated commercial operations.

All fencing, gates, equipment, maintenance buildings, all-weather access roads, signs, surface-water control devices, operating equipment, standby equipment and other necessary appurtenances shall be provided as per the final approved plans, specifications and operating procedures. The plans, specifications and operating procedures described above have been examined as to sanitary features of design which might affect the operation of the solid waste disposal area as a sanitary landfill.

Modification and Termination of Permit

The department reserves the right to revoke or modify this permit after due notice:

1. If it is found that the holder of the permit is in violation of the Missouri Solid Waste Management Law, or the Missouri Solid Waste Management Rules and Regulations;

2. For failure to operate in accordance with the approved plans, specifications and operating procedures;

3. For creating a public nuisance, health hazard or causing environmental pollution;

4. For failure to comply with any and all conditions of the permit, as described herein;

5. If it is found that additional construction or alteration of the solid waste disposal area is necessary to comply with any and all rules and regulations promulgated in accordance with the Missouri Solid Waste Management Law;

6. If it is determined a facility has not been operated for a period of one year.

This permit shall become void after notice to the department by the person named in the permit that said person has discontinued operation of the disposal area.

Upon initiation of operation at your landfill, you will have indicated your acknowledgement and acceptance of this permit and conditions of the permit. If you have any questions, please contact the Waste Management Program at (314) 751-3241 or P. O. Box 176, Jefferson City, MO 65102.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Frederick A. Brunner, Ph.D., P.E.
Director

FAB:mpl

cc: East-West Gateway Regional Planning Commission
Mr. Robert M. Robinson, P.E.

Missouri Department of Natural Resources
Facility Operating Permit
Permit No. 218912

CERTIFIED MAIL P395083426

September 17, 1984

Mr. William J. McCullough
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Solid Waste Disposal Area Operating Permit #218912

Dear Mr. McCullough:

An application for Operating Permit has been filed with the Missouri Department of Natural Resources requesting a permit to operate a demolition landfill designated in the application as the West Lake Landfill, Inc. The application was filed by William J. McCullough and submitted to the Department of Natural Resources for review and approval. The application includes engineering plans, and specifications, operating procedures and subsequent correspondence or amendments for the subject facility. The application has been prepared by Reitz & Jens, Inc. The application has been reviewed for compliance with the Missouri Solid Waste Management Law (Sections 260.200 to 260.245, RSMo. 1978) and the Missouri Solid Waste Management Rules and Regulations.

In accordance with Section 260.205, Paragraph 2, RSMo, 1978 the Missouri Department of Natural Resources hereby approves the application and issues Permit Number 218912 to West Lake Landfill, Inc. for the operation of a solid waste disposal area set forth in the application as the West Lake Landfill. This permit applies only to that tract of land of approximately 22 acres, as described by the engineering plans, specifications and operating procedures submitted to the Department. The final approved engineering plans, specifications and operating procedures described below are attached hereon and made an official part of this permit:

Documents

1. The completed Application for Operating Permit form dated September 10, 1982, which signified William J. McCullough as the operator of the facility and West Lake Landfill, Inc. as the legal owner of the land and/or facility.

2. The engineering report titled Memorandum Report West Lake Demolition Landfill, Bridgeton, MO., dated August 1984, prepared by Reitz & Jens, Inc., and sealed by David E. Murray, P. E.

SOURI DEPARTMENT OF NATURAL RESOURCES
x 176 Jefferson City, Missouri 65102 (314) 751-4422

3. Plan sheet one of two titled "West Lake Landfill, Inc. Demolition Landfill Grading Plan" revised August 16, 1984 and plan sheet two of two titled "West Lake Landfill, Inc. Demolition Landfill Cross Sections" revised August 16, 1984. Prepared by David E. Murray, P. E., of Reitz & Jens, Inc.

4. Correspondence dated August 17, 1984 from David E. Murray, P. E. of Reitz & Jens, clarifying design and operating procedures.

5. Correspondence dated August 24, 1984 from David E. Murray P. E. of Reitz & Jens, providing background information of West Lake Landfill, Inc.

Approval of the application and issuance of this permit is given with the explicit understanding that the demolition landfill will be developed and operated in compliance with the plans, specifications and operating procedures, with the conditions of the permit, with the Missouri Solid Waste Rules and Regulations, and in accordance with the Missouri Solid Waste Management Law. This permit is not to be construed as compliance with any existing local ordinances or zoning requirements. This permit for operation of a solid waste disposal area is issued only to the person named in the application and shall not be transferable.

Conditions

The following conditions are an integral part of the permit. Compliance with these conditions shall, in part, determine compliance with the permit.

1. The equipment will be available and operated to spread and compact the solid waste as received or at anytime the quantity of waste has accumulated to 200 cubic yards without being spread and compacted as per 10 CSR 80-4.010(12)(C)(2).

2. Peripheral drainage in ditches, dikes, and terraces will be maintained in such a manner so as to prevent ponding, and drainage into the surrounding fill areas.

3. Upon closing of the demolition landfill, a detailed description, on a licensed surveyor's plat, shall be recorded with the recorder of deeds in St. Louis County as per 10 CSR 80-4.010(14)(C)(2).

4. Records will be maintained covering [illegible] and each day that all solid waste is [illegible] of cover material as per 10 CSR 80-[illegible]

Facility Description

The proposed demolition landfill is located in the U.S. Survey 47, T47N, R5E, St. Louis County, Missouri. The proposed site consists of a total of approximately 200+ acres of which approximately 22 acres will be utilized for demolition landfill. This is a previously filled site. Approval to operate a demolition landfill on this site was given October 10, 1974, and Permit Number 218903 was issued January 1, 1976. Previous to that the site had been used as an unpermitted sanitary landfill. The types of wastes to be accepted will consist of demolition wastes, construction wastes, tires, inert plastics, soil, rock, and concrete. Approval to dispose of special wastes other than the wastes listed above (except hazardous wastes, explosives, or radioactive material) will be considered on a case-by-case basis, as provided in 10 CSR 80-3.010(3). The area method of demolition landfill operation will be utilized. The fill heights and area locations are to be completed as shown on the approved engineering plans and specifications. Upon completion of the landfill, the site will be used as an open storage yard.

All fencing, gates, all-weather access roads, signs, surface-water control devices, operating equipment, standby equipment and other necessary appurtenances shall be provided as per the final approved plans, specifications and operating procedures. The plans, specifications and operating procedures described above have been examined as to sanitary features of design which might affect the operation of the solid waste disposal area as a demolition landfill.

Modification and Termination of Permit

The Department reserves the right to revoke or modify this permit after due notice:

1. If it is found that the holder of the permit is in violation of the Missouri Solid Waste Management Law, or the Missouri Solid Waste Management Rules and Regulations;

2. For failure to operate in accordance with the approved plans, specifications and operating procedures;

3. For creating a public nuisance, health hazard or causing environmental pollution;

4. For failure to comply with any and all conditions of the permit, as described herein;

5. If it is found that additional construction or alteration of the solid waste disposal area is necessary to comply with any and all rules and regulations promulgated in accordance with the Missouri Solid Waste Management Law;

6. If it is determined a facility has not been operated for a period of one year.

This permit shall become void after notice to the Department by the person named in the permit that said person has discontinued operation of the disposal area.

Upon initiation of operation at your landfill, you will have indicated your acknowledgement and acceptance of this permit and conditions of the permit. If you have any questions, please contact the Waste Management Program at (314) 751-3241, or P.O. Box 1368, Jefferson City, MO 65102.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Fred A. Lafser
Director

FAL:mpl

Enclosure

cc: East-West Gateway Regional Planning Commission
St. Louis Regional Office
David E. Murray, P. E., Reitz & Jens, Inc.
St. Louis County, Dept. of Health
Waste Management Program

Missouri Department of Natural Resources
Part 70 Operating Permit
Permit No. OP2001009

C`rlie A. Dooley
C...nty Executive

Saint Louis COUNTY HEALTH

To: Allen
FX [signature] 8/30/04
Jacquelynn A. Meeks, DrPH
Director of Health

August 23, 2004

Certified Mail
Return Receipt

Ms. Jacinta Douma
General Manager
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Return Receipt of the Part 70 Operating Permit Notification/Application

Dear Ms. Douma:

On Aug. 9, 2004, we received your Part 70 operating permit notification/application. I will be reviewing your application.

If you have any questions or need additional information, please contact me at (314) 615-8936, or you may write to St. Louis County – Health, Air Pollution Control Program at 111 S. Meramec Ave., Clayton, MO, 63105.

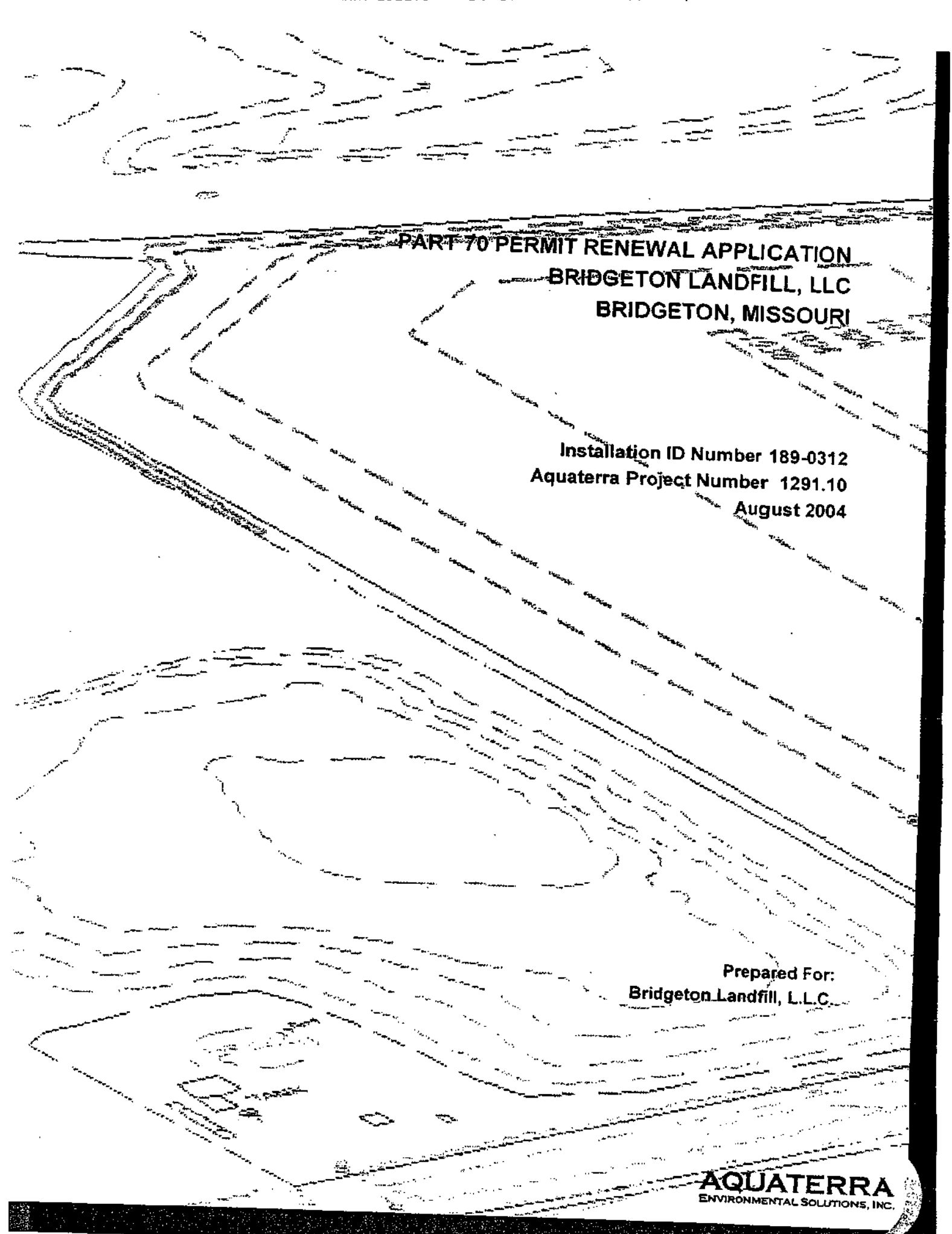
Thank you,

AIR POLLUTION CONTROL PROGRAM

[signature]

Kathrina M. Donegan
Permit Engineer

c: Amish Daftari, Missouri Department of Natural Resources
Source file



PART 70 PERMIT RENEWAL APPLICATION
BRIDGETON LANDFILL, LLC
BRIDGETON, MISSOURI

Installation ID Number 189-0312
Aquaterra Project Number 1291.10
August 2004

Prepared For:
Bridgeton Landfill, L.L.C.

AQUATERRA
ENVIRONMENTAL SOLUTIONS, INC.

BRIDGETON
Landfill Authority

13570 St. Charles Rock Rd.
Bridgeton, MO 63044
314/739-1919 • Fax 314/739-2588

August 6, 2004

Ms. Kathrina Donegan
St. Louis County Department of Health
Air Pollution Control
111 South Meramec Avenue
Clayton, MO 63105

Re: Air Operating Permit Renewal Application
Bridgeton Landfill, LLC, 189-0312
Air Operating Permit Number OP2001009

Dear Ms. Donegan:

Enclosed are two copies of the Bridgeton Landfill, LLC (Bridgeton Landfill) Application for Authority to Operate and a $100 application fee for the referenced permit application completed by Aquaterra Environmental Solutions, Inc. (Aquaterra). During the development of the attached application, Aquaterra reviewed site operating activities, applicable Missouri and St. Louis County regulations, the 2003 Emission Inventory Questionnaire, and the 2001 Permit to Operate. The current operating permit expires February 7, 2005.

Bridgeton Landfill is subject to 40 CFR 60 Subpart WWW (New Source Performance Standards, NSPS) and 10 CSR 10-5.490. The facility has an approved Gas Collection and Control System Design Plan. The second of a three-phase process to upgrade the collection system was completed in July 2004. In May 2004, a 3,500 SCFM flare was constructed to better manage the landfill gas collected and the second 3,500 SCFM enclosed flare is scheduled to be installed within the next four months.

If you have any questions regarding this application package, please contact me at (314) 739-1919 or Michele Boussad at Aquaterra at (573) 635-2075.

Sincerely,

BRIDGETON LANDFILL, L.L.C.

Allen Steinkamp
Environmental Manager

C: Jacinta Douma – Bridgeton Landfill
Michele Boussad - Aquaterra

Attachments:
Filing Fee
Application for Authority to Operate
Potential to Emit Calculations

ORIGINAL DOCUMENT IS PRINTED ON CHEMICAL REACTIVE PAPER WITH MICROPRINTED BORDER - DO NOT CASH IF THE WORD VOID IS VISIBLE

52-153
112

AWIN MANAGEMENT, INC.

C/O Allied Waste North America, Inc.
C/ Browning Ferris Industries, Inc.
1 N. Greenway-Hayden Loop, Suite 100
Scottsdale, AZ 85260

FLEET MAINE, N.A.
South Portland, ME

CHECK NO.
785519

DATE	AMOUNT
8/06/2004	100.00

PAY ***EXACTLY ********100 *** DOLLARS and 00 CENTS

TO THE ORDER OF
MISSOURI DEPT OF NATURAL RESOU
P O BOX 477
JEFFERSON CITY MO 65102

AWIN MANAGEMENT, INC.
VOID IF OVER 180 DAYS OLD

PER James E Ag

PER

DOCUMENT CONTAINS A TRUE WATERMARK - DO NOT CASH IF THE WATERMARK IS NOT VISIBLE - SEE REVERSE SIDE FOR COMPLETE SECURITY FEATURES

⑈0000785519⑈ ⑆011201539⑆ 00802 31000⑈

AWIN MANAGEMENT, INC.

INVOICE NUMBER	INVOICE DATE	GROSS AMOUNT	DISCOUNT	NET AMOUNT
TITLE-V-RENEWJUL04 Message : RTD 337 337 Bridgeton Landfill	7/30/2004	100.00		100.00
CHECK # 278519 VENDOR # 0000022621 MISSOURI DEPT OF NATURAL RESOU		CHECK TOTALS	100.00	100.00

DETACH THIS PORTION FOR YOUR RECORDS

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
AIR POLLUTION CONTROL PROGRAM
P.O. BOX 176, JEFFERSON CITY, MO 65102

APPLICATION FOR AUTHORITY TO OPERATE

OFFICE USE ONLY	
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NOTE: Please read all instructions to assist in completing all forms properly.

FORM OP-A01 — Section A

A01.00 – GENERAL APPLICATION INFORMATION

All applications MUST be in duplicate and accompanied by a single $100 filing fee.

1. INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

INSTALLATION STREET ADDRESS	COUNTY NAME
13570 St. Charles Rock Road	St. Louis

CITY	STATE	ZIP CODE	INSTALLATION TELEPHONE NO.
Bridgeton	MO	63044	(314) 739 -1919

INSTALLATION MAILING ADDRESS	INSTALLATION FAX NO.
13570 St. Charles Rock Road	(314) 739-2588

CITY	STATE	ZIP CODE	MO SENATORIAL DISTRICT NO.
Bridgeton	MO	63044	7

INSTALLATION CONTACT PERSON	MO REPRESENTATIVE DISTRICT NO.
MR. ☐ MS. ☒ Jacinta Douma	78

CONTACT PERSON TITLE	CONTACT PERSON E-MAIL
General Manager	Jacinta.douma@awin.com

2. PARENT COMPANY NAME	MAILING ADDRESS
Allied Waste Industries	13570 St. Charles Rock Road

CITY	STATE	ZIP CODE
Bridgeton	MO	63044

PARENT COMPANY CONTACT PERSON	TELEPHONE NUMBER
MR. ☒ MS. ☐ Allen Steinkamp	(314) 739-1919

PARENT COMPANY CONTACT PERSON TITLE	CONTACT PERSON E-MAIL
Environmental Manager	Allen.Steinkamp@awin.com

3. TYPE OF APPLICATION

☒ PART 70 (MAJOR)
- ☐ INITIAL
- ☒ RENEWAL
- ☐ OFF-PERMIT CHANGE
- ☐ ADMINISTRATIVE AMENDMENT
- ☐ MINOR MODIFICATION
- ☐ SIGNIFICANT MODIFICATION

☐ INTERMEDIATE STATE
- ☐ INITIAL
- ☐ RENEWAL
- ☐ AMENDMENT

☐ BASIC STATE
- ☐ INITIAL
- ☐ RENEWAL
- ☐ AMENDMENT

4. APPLICANT'S CERTIFICATION STATEMENT

"I certify, based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete."

SIGNATURE OF RESPONSIBLE OFFICIAL OF COMPANY	DATE
Rusty Waldrup	7/30/2004

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL	TELEPHONE NUMBER
Mr. ☒ Ms. ☐ Rusty Waldrup	(314) 739-5099

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL	RESPONSIBLE OFFICIAL E-MAIL
District Manager	Rusty.Waldrup@awin.com

FORM OP-A02 - APPLICATION FOR AUTHORITY TO OPERATE - SECTION A

A02.00 - APPLICATION FOR AUTHORITY TO OPERATE

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

1. LIST THE INSTALLATION'S PRINCIPAL PRODUCT(S)

PRINCIPAL PRODUCT(S)	TWO-DIGIT SIC CODE
Solid Waste Landfill	49

2. LIST ALL OF THE INSTALLATION'S PROCESSES

PROCESSES	TWO-DIGIT SIC CODE
Refuse Systems: Refuse Disposal by landfilling	53

3. HAS THE INSTALLATION SUBMITTED AN EMISSION INVENTORY QUESTIONNAIRE (EIQ) IN THE PAST FIVE YEARS?

YES ☒ | NO ☐ If No, submit one (1) copy of a completed EIQ with this application and complete the table below.

IF NO, INDICATE THE NUMBER OF EACH EIQ FORM SUBMITTED WITH THE APPLICATION.

	1.1	Process Flow Diagram		2.3	VOC Process Mass-Balance Worksheet
	1.2	Summary of Emission Points		2.4	Petroleum Loading Worksheet
	2.0	Emission Point Information		2.5	Organic Liquid Storage-Fixed Roof Tank
	2.0C	Control Device Information		2.5L	General Liquid Storage Tank Information
	2.0P	Portable Plant Information		2.6	Organic Liquid Storage-Floating Roof Tank
	2.0S	Stack Information		2.7	Haul Road Fugitive Emissions Worksheet
	2.0Z	Ozone Season Information		2.8	Storage Pile Worksheet
	2.1	Fuel Combustion Worksheet		2.9	Stack Test/Continuous Emission Monitoring Worksheet
	2.2	Incinerator Worksheet		2.T	Hazardous Air Pollutant Worksheet

4. INDICATE THE NUMBER OF EACH APPLICATION FORM LISTED BELOW INCLUDED WITH THIS APPLICATION.

2	C01.00	Insignificant Activities Required To Be Listed	0	D03.20	Combustion Turbines and Internal Combustion Engines
2	D01.00	Existing Plant-Wide Conditions	0	D03.30	Spray Booths
1	D02.00	Proposed Plant-Wide Conditions	1	D04.00	Alternate Operating Scenario/Voluntary Conditions
3	D03.00	General Emission Unit	3	D05.00	Compliance Determination
0	D03.10	Indirect Heating Sources	1	F01.00	General Comments

FORM OP-B01 — APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B01.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

ENTIRE STATE OF MISSOURI
(NOTE: ALL INSTALLATIONS MUST SUBMIT FORM OP-B01.00)

1. STATE ADMINISTRATIVE PERMIT REQUIREMENTS

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON		
	X	J	10 CSR 10-6.010	Ambient Air Quality Standards [1]
X		J	10 CSR 10-6.020	Definitions and Common Reference Tables [1]
	X	J	10 CSR 10-6.030	Sampling Methods for Air Pollution Sources [1]
	X	J	10 CSR 10-6.040	Reference Methods [1]
	X	J	10 CSR 10-6.300	Conformity of General Federal Actions to State Implementation Plans [1]
	X	J	10 CSR 10-6.320	Sales Tax Exemption [2]

2. CORE PERMIT REQUIREMENTS

SECTION	ORGANIZATION
10 CSR 10-6.050	Start-Up, Shutdown, and Malfunction Conditions [1]
10 CSR 10-6.060	Construction Permits Required [1]
10 CSR 10-6.065	Operating Permits [1]
10 CSR 10-6.110	Submission of Emission Data, Emission Fees and Process Information [1]
10 CSR 10-6.130	Controlling during Episodes of High Air Pollution [1]
10 CSR 10-6.140	Restrictions of Emissions Credit for Reduced Pollutant Concentrations from the use of Dispersion Techniques [1]
10 CSR 10-6.150	Circumvention [1]
10 CSR 10-6.170	Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin [1]
10 CSR 10-6.180	Measurement of Emissions of Air Contaminants [1]
10 CSR 10-6.210	Confidential Information [1]
10 CSR 10-6.230	Administrative Penalties [2]
10 CSR 10-6.250	Asbestos Abatement Projects-Certification, Accreditation, and Business Exemption Requirements [2]
10 CSR 10-6.280	Compliance Monitoring Usage [1]

3. STATE APPLICABLE REQUIREMENTS

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON		
X			10 CSR 10-6.070	New Source Performance Regulations (**NOTE**: if yes, check specific subpart on Form OP-BO2.00) [2]
X			10 CSR 10-6.075	Maximum Achievable Control Technology Regulations (**NOTE**: if yes, check specific subpart Form OP-BO3.00) [2]
X			10 CSR 10-6.080	Emission Standards for Hazardous Air Pollutants (**NOTE**: if yes, check specific subpart Form OP-BO4.00) [2]
	X		10 CSR 10-6.090	Restriction of Emission of Fluorides From Primary Aluminum Reduction Installations [1]
	X		10 CSR 10-6.100	Alternate Emission Limits For Ozone Nonattainment Areas [2]
	X		10 CSR 10-6.120	Restriction of Emissions of Lead From Specific Lead Smelter-Refinery Installations [1]
	X		10 CSR 10-6.200	Hospital, Medical, Infectious Waste Incinerators [1]
	X		10 CSR 10-6.220	Restriction of Emission of Visible Air Contaminants [1]
X			10 CSR 10-6.240	Asbestos Abatement Projects—Registration, Notification and Performance Requirements [2]
	X		10 CSR 10-6.260	Restriction of Emission of Sulfur Compounds [1]
	X		10 CSR 10-6.270	Acid Rain Source Permits Required – If Applicable, Submit Acid Rain Permit Applications to the EPA [2]
	X		10 CSR 10-6.310	Restriction of Emissions From Municipal Solid Waste Landfills [1]
	X		10 CSR 10-6.330	Restriction of Emissions From Batch-Type Charcoal Kilns [1]
	X		10 CSR 10-6.350	Emission Limitations and Emissions Trading of Oxides of Nitrogen [1]
	X		10 CSR 10-6.400	Restriction of Emission of Particulate Matter From Industrial Processes [1]

[1] Federal, State and Local Agency Enforceable Regulation
[2] State and Local Agency Enforceable Regulation

FORM OP-B02 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B02.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

NEW SOURCE PERFORMANCE REGULATIONS - 10 CSR 10-6.070

(NOTE: IF CHECKED YES ON FORM OP-B01.00 FOR 10 CSR 10-6.070, PLEASE IDENTIFY SPECIFIC SUBPART. IF CHECKED NO THIS FORM DOES NOT NEED TO BE SUBMITTED. ALL STANDARDS ARE FEDERALLY ENFORCEABLE.)

APPLICABILITY			TITLE V SUBPARTS	10 CSR 10-6.070 (40 CFR PART 60 NEW SOURCE PERFORMANCE STANDARDS) ORGANIZATION
YES	NO	REASON		
X			A	General Provisions
	X		B	Adoption and Submittal of State Plans for Designated Facilities
	X		C	Emission Guidelines and Compliance Times
	X		Ca	Emission Guidelines and Compliance Times for Municipal Waste Combusters
	X		Cb	Emission Guidelines and Compliance Times for Municipal Waste Combusters that are Constructed on or before 12/19/95
	X		Cc	Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills
	X		Cd	Emission Guidelines and Compliance Times for Sulfuric Acid Productions Units
	X		Ce	Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators
	X		D	Fossil-Fuel Fired Steam Generators (construction started after 8/17/71)
	X		Da	Electric Utility Steam Generating Units(construction started after 9/18/78)
	X		Db	Industrial-Commercial-Institutional Steam Generating Units
	X		Dc	Small Industrial-Commercial-Institutional Steam Generating Units
	X		E	Incinerators
	X		Ea	Municipal Waste Combustors Constructed Between 12-20-89 / 9-20-94
	X		Eb	Municipal Waste Combustors After 9-20-94
	X		Ec	Hospital/Medical/Infectious Waste Incinerators Constructed After 6-20-96
	X		F	Portland Cement Plants
	X		G	Nitric Acid Plants
	X		H	Sulfuric Acid Plants
	X		I	Asphalt / Concrete Plants
	X		J	Petroleum Refineries
	X		K	Storage vessels for Petroleum Liquids which construction, reconstruction or Modification started between (6/11/73 – 5/19/78)
	X		Ka	Storage Vessels for Petroleum Liquids 5/19/78 – 7/23/84
	X		Kb	Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) after 7/23/84
	X		L	Secondary Lead Smelters
	X		M	Secondary Brass and Bronze Production Plants
	X		N	Primary Emissions from Basic Oxygen Process Furnaces(construction after 6/11/73
	X		Na	Secondary Emissions from Basic Oxygen Process Steelmaking Facilities (Construction started after1/20/83)
	X		O	Sewage Treatment Plants
	X		P	Primary Copper Smelters
	X		Q	Primary Zinc Smelters
	X		R	Primary Lead Smelters
	X		S	Primary Aluminum Reduction Plants
	X		T	Phosphate Fertilizer Industry; Wet-Process Phosphoric Acid Plants
	X		U	Phosphate Fertilizer Industry; Superphosphoric Acid Plants
	X		V	Phosphate Fertilizer Industry; Diammonium Phosphate Plants
	X		W	Phosphate Fertilizer Industry; Triple Superphosphate Plants
	X		X	Phosphate Fertilizer Industry; Granular Triple Superphosphate Storage Facilities
	X		Y	Coal Preparation Plants
	X		Z	Ferroalloy Production Facilities
	X		AA	Steel Plants Electric Arc Furnaces (Constructed from 11/21/74 to 8/17/83)
	X		AAa	Steel Plants Electric Arc Furnaces and Argon-oxygen Decarburization Vessels (Constructed after 8/7/83)
	X		BB	Kraft Pulp Mills
	X		CC	Glass Manufacturing Plants
	X		DD	Grain Elevators
	X		EE	Surface Coating of Metal Furniture

FORM OP-B02 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B02.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

NEW SOURCE PERFORMANCE REGULATIONS – 10 CSR 10-6.070 (CONTINUED)

NOTE: IF CHECKED YES ON FORM OP-B01.01 FOR 10 CSR 10-6.070, PLEASE IDENTIFY SPECIFIC SUBPART. IF CHECKED NO, THIS FORM DOES NOT NEED TO BE SUBMITTED. ALL STANDARDS ARE FEDERALLY ENFORCEABLE.

APPLICABILITY			STATE	
YES	NO	REASON	SUBPART	ORGANIZATION (40 CFR PART 60 NEW SOURCE PERFORMANCE STANDARDS)
	X		FF	[Reserved]
	X		GG	Stationary Gas Turbines
	X		HH	Lime Manufacturing Plants
	X		KK	Lead-Acid Battery Manufacturing
	X		LL	Metallic Mineral Processing Plants
	X		MM	Automobile and Light-Duty Truck Surface Coating Operations
	X		NN	Phosphate Rock Plants
	X		PP	Ammonium Sulfate Manufacture
	X		QQ	Graphic Arts Industry; Publication Rotogravure Printing
	X		RR	Pressure Sensitive Tape and Label Surface Coating Operations
	X		SS	Industrial Surface Coating Large Appliances
	X		TT	Metal Coil Surface Coating
	X		UU	Asphalt Processing and Asphalt Roofing Manufacture
	X		VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
	X		WW	Beverage Can Surface Coating Industry
	X		XX	Bulk Gasoline Terminals
	X		AAA	New Residential Wood Heaters
	X		BBB	Rubber Tire Manufacturing Industry
	X		CCC	[Reserved]
	X		DDD	Polymer Manufacturing Industry
	X		EEE	[Reserved]
	X		FFF	Flexible Vinyl and Urethane Coating and Printing
	X		GGG	Equipment Leaks of VOC in Petroleum Refineries
	X		HHH	Synthetic Fiber Production Facilities
	X		III	VOC Emissions from SOCMI Air Oxidation Unit Processes
	X		JJJ	Petroleum Dry Cleaners
	X		KKK	Equipment Leaks of VOC from Onshore Natural Gas Processing
	X		LLL	Onshore Natural Gas Processing-SO_2 Emissions
	X		MMM	[Reserved]
	X		NNN	VOC Emissions from SOCMI Distillation Operations
	X		OOO	Nonmetallic Mineral Processing Plants
	X		PPP	Wool Fiberglass Insulation Manufacturing Plants
	X		QQQ	VOC Emissions form Petroleum Refinery Wastewater Systems
	X		RRR	Synthetic Organic Chemical Manufacturing Reactor Processes
	X		SSS	Magnetic Tape Coating Facilities
	X		TTT	Industrial Surface Coating of Plastic Parts for Business Machines
	X		UUU	Calciners and Dryers in Mineral Industries
	X		VVV	Polymeric Coating of Supporting Substrates Facilities
X			WWW	Landfills
	X		AAAA	Small Municipal Waste Combustion Units (started after 8/30/99, Modifications or Reconstruction after 6/6/01)
	X		CCCC	Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced After November 30, 1999 or for which Modification or Reconstruction is Commenced on or After June 1, 2001

FORM OP-B03 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B03.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS - 10 CSR 10-5.075

(NOTE: IF CHECKED YES ON FORM OP-B01.00 FOR 10 CSR 10-6.075, PLEASE IDENTIFY THE SPECIFIC SUBPART. IF YOU CHECKED NO, THIS FORM DOES NOT NEED TO BE SUBMITTED. ALL STANDARDS ARE FEDERALLY ENFORCEABLE.)

APPLICABILITY			SUBPART	ORGANIZATION (40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES)
YES	NO	REASON		
X			A	General Provisions
X			B	Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act Sections, Sections 112(g) and 112(j)
	X		F	Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry
	X		G	Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
	X		H	Organic Hazardous Air Pollutants for Equipment Leaks
	X		I	Organic Hazardous Air Pollutants for Certain Process Subject to the Negotiated Regulation for Equipment Leaks
	X		J	Polyvinyl Chloride Copolymers Production
	X		K	[Reserved]
	X		L	Coke Oven Batteries
	X		M	Perchloroethylene Air Emission for Dry Cleaning
	X		N	Chromium Emissions from Hard and Decorative Chromium Electroplating and from Chromium Anodizing Tanks
	X		O	Ethylene Oxide Emission for Sterilization Facilities
	X		Q	Hazardous Air Pollutants for Industrial Process Cooling Towers
	X		R	Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
	X		S	Hazardous Air Pollutants from the Pulp and Paper Industry
	X		T	Halogenated Solvent Cleaning
	X		U	Group I Polymers and Resins
	X		W	Epoxy Resins Production and Non-Nylon Polyamides Production
	X		X	Hazardous Air Pollutants from Secondary Lead Smelting
	X		Y	National Emission Standards for Marine Vessel Loading and Unloading Operations
	X		Z	[Reserved]
	X		AA	Hazardous Air Pollutants from Phosphoric Acid Manufacturing Plants
	X		BB	Hazardous Air Pollutants from Phosphate Fertilizer Production Plants
	X		CC	Hazardous Air Pollutants; Petroleum Refineries
	X		DD	Off-Site Waste and Recovery Operations
	X		EE	Magnetic Tape Manufacturing Operations
	X		FF	[Reserved]
	X		GG	Hazardous Air Pollutants for Source Categories: Aerospace Manufacturing and Rework Facilities
	X		HH	Hazardous Air Pollutants from Oil and Natural Gas Production Facilities
	X		II	Hazardous Air Pollutants for Shipbuilding & Ship Repair (Surface Coating) Operations
	X		JJ	Hazardous Air Pollutant Emissions from Wood Furniture Manufacturing
	X		KK	Printing and Publishing Industry
	X		LL	Hazardous Air Pollutants for Primary Aluminum Reduction Plants
	X		MM	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills
	X		OO	Tanks—Level 1
	X		PP	Containers
	X		QQ	Surface Impoundments
	X		RR	Individual Drain Systems
	X		SS	Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process
	X		TT	Equipment Leaks—Control Level 1
	X		UU	Equipment Leaks—Control Level 2 Standards
	X		VV	Oil Water Separators and Organic-Water Separators
	X		WW	Storage Vessels (tanks)—Control Level 2
	X		YY	Hazardous Air Pollutants for Source Categories: Generic Maximum Available Control Technology Standards

FORM OP-B03 — APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B03.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS, 10 CSR 10-6.075 (CONTINUED)

(NOTE: IF CHECKED YES ON FORM OP-B03.00 FOR 10 CSR 10-6.075, PLEASE IDENTIFY THE SPECIFIC SUBPART. IF YOU CHECKED NO, THIS FORM DOES NOT NEED TO BE SUBMITTED. ALL STANDARDS ARE FEDERALLY ENFORCEABLE.)

APPLICABILITY			TITLE 40 CFR PART 63 SUBPART	40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES
YES	NO	REASON		
	X		CCC	Steel Pickling HCl Process Facilities and Hydrochloric Acid Regeneration Plants
	X		DDD	Hazardous Air Pollutants for Mineral Wool Production
	X		EEE	Hazardous Air Pollutants from Hazardous Waste Combustors
	X		FFF	[Reserved]
	X		GGG	Pharmaceuticals Production
	X		HHH	Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities
	X		III	Hazardous Air Pollutants for Flexible Polyurethane Foam Production
	X		JJJ	Hazardous Air Pollutant Emissions: Group IV Polymers and Resins
	X		LLL	Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
	X		MMM	Hazardous Air Pollutants for Pesticide Active Ingredient Production
	X		NNN	Hazardous Air Pollutants for Wool Fiberglass Manufacturing
	X		OOO	Manufacture of Amino/Phenolic Resins
	X		PPP	Hazardous Air Pollutant Emissions for Polyether Polyols Production
	X		QQQ	Primary Copper Smelting
	X		RRR	Secondary Aluminum Production
	X		SSS	[Reserved]
	X		TTT	Hazardous Air Pollutants for Primary Lead Smelting
	X		UUU	Petroleum Refineries:Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
	X		VVV	Hazardous Air Pollutants: Publicly Owned Treatment Works
	X		WWW	[Reserved]
	X		XXX	Hazardous Air Pollutants for Ferroalloys Production: Ferromanganese and Silicomanganese
X			AAAA	Municipal Solid Waste Landfills **(Proposed 11/07/2000 and 5/23/02)**
	X		CCCC	Manufacturing of Nutritional Yeast
	X		DDDD	Plywood and Composite Wood Products **(Yet to be proposed)**
	X		EEEE	Organic Liquid Distribution (non-gasoline) **(Proposed 4/2/02)**
	X		FFFF	Miscellaneous Organic Chemical Manufacturing **(Proposed 4/4/02)**
	X		GGGG	Solvent Extraction for Vegetable Oil Production
	X		HHHH	Wet Formed Fiberglass Mat Production
	X		IIII	Automobile and Light Duty Truck Coating/Manufacturing **(Yet to be proposed)**
	X		JJJJ	Paper and Other Web Coating **(Proposed 9/13/00)**
	X		KKKK	Surface Coating of Metal Cans **(Yet to be proposed)**
	X		MMMM	Surface Coating of Miscellaneous Metal Parts and Products **(Proposed 8/13/02)**
	X		NNNN	Surface Coating of Large Appliances
	X		OOOO	Printing, Coating and Dyeing of Fabrics and Other Textiles **(Proposed 7/11/02)**
	X		PPPP	Surface Coating of Plastic Parts **(Yet to be proposed)**
	X		QQQQ	Surface Coating of Wood Building Products **(Proposed 6/21/02)**
	X		RRRR	Surface Coating of Metal Furniture **(Proposed 4/24/02)**
	X		SSSS	Surface Coating of Metal Coil
	X		TTTT	Leather Finishing Operations
	X		UUUU	Cellulose Production Manufacturing
	X		VVVV	Boat Manufacturing
	X		WWWW	Reinforced Plastic Composites Production **(Proposed 8/02/01)**
	X		XXXX	Rubber Tire Manufacturing
	X		YYYY	Combustion Turbines **(Yet to be Proposed)**
	X		ZZZZ	Reciprocating Internal Combustion Engines (RICE) **(Yet to be Proposed)**
	X		AAAAA	Lime Manufacturing **(Yet to be Proposed)**
	X		BBBBB	Semiconductor Manufacturing **(Proposed 5/08/02)**
	X		CCCCC	Coke Ovens: Pushing, Quenching and Battery Stacks **(Proposed 7/03/01)**
	X		DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters **(Yet to be Proposed)**
	X		EEEEE	Iron Foundries **(Yet to be Proposed)**
	X		FFFFF	Integrated Iron and Steel Manufacturing **(Proposed 7/10/01)**

FORM OP-B03 — APPLICABLE REQUIREMENTS CHECKLIST – SECTION B			
B03.00 – Applicable Requirements Checklist			
INSTALLATION NAME Bridgeton Landfill, LLC	FIPS 189	PLANT NO. 0312	YEAR SUBMITTED 2004

MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY REGULATIONS, 10 CSR 10-6.075 (CONTINUED)
(NOTE: IF CHECKED YES ON FORM OP-B01.00 FOR 10 CSR 10-6.075, PLEASE IDENTIFY THE SPECIFIC SUBPART. IF YOU CHECKED NO, THIS FORM DOES NOT NEED TO BE SUBMITTED. ALL STANDARDS ARE FEDERALLY ENFORCEABLE.)

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON	SUBPART	40 CFR PART 63 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES
	X		GGGGG	Site Remediation **(Proposed 7/30/02)**
	X		HHHHH	Miscellaneous Coating Manufacturing (MON) **(Proposed 4/04/02)**
	X		IIIII	Mercury Emissions from Mercury Cell Chlor-Alkali Plants **(Proposed 7/03/02)**
	X		JJJJJ	Brick and Structural Clay Products Manufacturing **(Proposed 7/22/02)**
	X		KKKKK	Clay Ceramics Manufacturing **(Proposed 7/22/02)**
	X		LLLLL	Asphalt Roofing and Processing **(Proposed 11/21/01)**
	X		MMMMM	Flexible Polyurethane Foam Fabrication Operations **(Proposed 08/8/01)**
	X		NNNNN	Hydrochloric Acid Production **(Proposed 9/18/01)**
	X		PPPPP	Engine Test Cells/Stands **(Proposed 5/14/02)**
	X		QQQQQ	Friction Parts Manufacturing **(Proposed 10/04/01)**
	X		RRRRR	Taconite Iron Ore Processing **(Yet to be Proposed)**
	X		SSSSS	Refractory Products Manufacturing **(Proposed 7/20/02)**

FORM OP-B04 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B04.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS - 10CSR 10-6.080

NOTE: If checked yes on Form OP-B01.00 for 10 CSR 10-6.080, please identify the specific subpart. If checked no, this form does not need to be submitted. All standards are federally enforceable.

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON	SUBPART	(40 CFR PART 61 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS)
X			A	General Provisions
	X		B	Radon Emissions from Underground Uranium Mines
	X		C	Beryllium
	X		D	Beryllium Rocket Motor Firing
	X		E	Mercury
	X		F	Vinyl Chloride
	X		G	[Reserved]
	X		H	Emissions of Radionuclides Other Than Radon From Department of Energy Facilities
	X		I	Radionuclides Emissions from Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H
	X		J	Equipment Leaks (Fugitive Emission Sources) of Benzene
	X		K	Radionuclide Emission from Elemental Phosphorous Plants
	X		L	Benzene Emissions from Coke By-Products Recovery Plants
X			M	Asbestos
	X		N	Inorganic Arsenic Emissions from Glass Manufacturing Plants
	X		O	Inorganic Arsenic Emissions from Primary Copper Smelters
	X		P	Inorganic Arsenic Emissions from Arsenic Trioxide and Metallic Arsenic Production Facilities
	X		Q	Radon Emissions from Department of Energy Facilities
	X		R	Radon Emissions from Phosphogypsum
	X		S	Radon Emissions from Surface Uranium Mines (proposed 3/07/89)
	X		T	Radon Emissions from the Disposal of Uranium Mill Tailings
	X		U	[Reserved]
	X		V	Equipment Leaks (Fugitive Emission Sources)
	X		W	Radon Emissions from Operating Mill Tailings
	X		X	[Reserved]
	X		Y	Benzene Emissions from Benzene Storage Vessels
	X		Z	[Reserved]
	X		AA	[Reserved]
	X		BB	Benzene Emissions from Benzene Transfer Operations
	X		FF	Benzene Waste Operations

FORM OP-B10 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B10.00 - Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

ST. LOUIS METROPOLITAN AREA

NOTE: PLEASE INCLUDE FORM OP-B10 IF LOCATED WITHIN CITY OF ST. LOUIS AREA AND COUNTIES (ST. CHARLES, JEFFERSON, ST. LOUIS AND FRANKLIN).

1. STATE ADMINISTRATIVE PERMIT REQUIREMENTS

APPLICABILITY YES	APPLICABILITY NO	APPLICABILITY REASON	TITLE	ORGANIZATION TITLE
	X	J	10 CSR 10-5.130	Certain Coals to be washed [1]
X		J	10 CSR 10-5.250	Time Schedule for Compliance [1]
	X	J	10 CSR 10-5.375	Motor Vehicle Emission Inspection Waiver [2]
	X	J	10 CSR 10-5.380	Motor Vehicle Emissions Inspection [1]
	X	J	10 CSR 10-5.480	Conformity to State or Federal Implementation Plans of Transportation Plans, Programs, and Projects Developed, Funded, or Approved Under Title 23 U.S.C. or the Federal Transit Laws [1]

2. CORE PERMIT REQUIREMENTS

TITLE	ORGANIZATION
10 CSR 10-5.070	Open Burning Restrictions [1]
10 CSR 10-5.160	Control of Odors in the Ambient Air [2]

3. APPLICABLE REQUIREMENTS

APPLICABILITY YES	APPLICABILITY NO	APPLICABILITY REASON	TITLE	ORGANIZATION
	X		10 CSR 10-5.030	Maximum Allowable Emission of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating [1]
	X		10 CSR 10-5.040	Use of Fuel in Hand-Fired Equipment Prohibited [1]
	X		10 CSR 10-5.080	Incinerators [3]
	X		10 CSR 10-5.120	Information on Sales of Fuels (Coal and Residual Fuel Oil) to be Provided and Maintained [1]
	X		10 CSR 10-5.170	Control of Odors From Processing of Animal Matter [2]
	X		10 CSR 10-5.180	Emission of Visible Air Contaminants from Internal Combustion Engines [3]
	X		10 CSR 10-5.220	Control of Petroleum Liquid Storage, Loading and Transfer [1]
			10 CSR 10-5.240	Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area [1]
	X		10 CSR 10-5.290	More Restrictive Emission Limitations for Particulate Matter in the South St. Louis Area [1]
	X		10 CSR 10-5.295	Control of Emissions From Aerospace Manufacture and Rework Facilities [1]
	X		10 CSR 10-5.300	Control of Emissions From Solvent Metal Cleaning [1]
	X		10 CSR 10-5.310	Liquefied Cutback Asphalt Paving Restricted [1]
	X		10 CSR 10-5.320	Control of Emissions From Perchloroethylene Dry Cleaning Installations [3]
	X		10 CSR 10-5.330	Control of Emissions From Industrial Surface Coating Operations [1]
	X		10 CSR 10-5.340	Control of Emissions From Rotogravure and Flexographic Printing Facilities [1]
	X		10 CSR 10-5.350	Control of Emissions From Manufacture of Synthesized Pharmaceutical Products [1]
	X		10 CSR 10-5.360	Control of Emissions From Polyethylene Bag Sealing Operations [1]
	X		10 CSR 10-5.370	Control of Emissions From the Application of Deadeners and Adhesives [1]
	X		10 CSR 10-5.390	Control of Emissions From Manufacture of Paints, Varnishes, Lacquers, Enamels and Other Allied Surface Coating Products [1]
	X		10 CSR 10-5.410	Control of Emissions From Manufacture of Polystyrene Resin [1]
	X		10 CSR 10-5.420	Control of Equipment Leaks From Synthetic Organic Chemical and Polymer Manufacturing Plants [1]
	X		10 CSR 10-5.430	Control of Emissions From the Surface Coating of Chrome-Plated and Resist Plastic Parts [2]
	X		10 CSR 10-5.440	Control of Emissions From Bakery Ovens [1]
	X		10 CSR 10-5.442	Control of Emissions From Lithographic Printing Operations [1]
	X		10 CSR 10-5.450	Control of VOC Emissions From Traffic Coatings [1]
	X		10 CSR 10-5.451	Control of Emissions From Aluminum Foil Rolling [1]
	X		10 CSR 10-5.455	Control of Emissions From Solvent Cleanup Operations [1]
X			10 CSR 10-5.490	Municipal Solid Waste Landfills [1]

[1] Federal, State and Local Agency Enforceable Regulation
[2] State and Local Agency Enforceable Regulation
[3] Only Federally Enforced Regulation

FORM OP-B10 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B10.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

ST. LOUIS METROPOLITAN AREA (CONTINUED)

(NOTE: PLEASE INCLUDE FORM OP-B10.00 IF LOCATED WITHIN GREATER ST. LOUIS AREA AND COUNTIES ST. CHARLES, JEFFERSON, ST. LOUIS, AND FRANKLIN)

APPLICABLE REQUIREMENTS

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON		
	X		10 CSR 10-5.500	Control of Emissions From Volatile Organic Liquid Storage [1]
	X		10 CSR 10-5.510	Control of Emissions of Nitrogen Oxides [1]
	X		10 CSR 10-5.520	Control of Volatile Organic Compound Emissions From Existing Major Sources [1]
	X		10 CSR 10-5.530	Control of Volatile Organic Compound Emissions From Wood Furniture Manufacturing Operations [1]
	X		10 CSR 10-5.540	Control of Emissions From Batch Process Operations [1]
	X		10 CSR 10-5.550	Control of Volatile Organic Compound Emissions From Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Process [1]

[1] Federal, State and Local Agency Enforceable Regulation
[2] State and Local Agency Enforceable Regulation

FORM OP-B11 — APPLICABLE REQUIREMENTS CHECKLIST – SECTION B

B11.00 – Applicable Requirements Checklist

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

ST. LOUIS COUNTY DEPARTMENT OF HEALTH, AIR, LAND & WATER BRANCH
AIR POLLUTION CONTROL SECTION CHAPTER 612 – AIR POLLUTION CONTROL CODE
ST. LOUIS COUNTY LOCAL ORDINANCES
(NOTE: PLEASE INCLUDE FORM OP-B11.00 IF LOCATED WITHIN ST. LOUIS COUNTY)

APPLICABILITY				
YES	NO	REASON	TITLE	ORGANIZATION
	X		612.010	Short Title [4]
	X		612.020	Scope [4]
	X		612.030	Definitions [4]
X			612.040	Air Quality Standards and Air Pollution Control Regulations [4]
	X		612.050	Enforcement, By Whom [4]
	X		612.060	Director of Air Pollution – Duties [4]
	X		612.070	Appeal Board Establishment [4]
	X		612.080	Duties of Appeal Board [4]
	X		612.090	Board of Consider Appeal [4]
X			612.100	Emergency Abatement of Violation-Procedure [4]
X			612.110	Permits Required [4]
X			612.120	Permits to be Visibly Affixed or Placed [4]
	X		612.130	Permit to sell or rent [4]
	X		612.140	Transfer [4]
	X		612.150	Permit to Operate- When Required [4]
	X		612.160	General Requirements for Applications for Authority to Construct and Operating Permits [4]
	X		612.170	Information Required for Application for Permits [4]
	X		612.180	Standards for Granting Permits [4]
	X		612.190	Cancellation of Authority to Construct [4]
X			612.200	Testing Prior to granting of Operating Permits [4]
	X		612.210	Action on Application for Permits [4]
X			612.220	Suspension or Revocation of Permits [4]
	X		612.230	Suspension or Revocation of Operating Permits or Authority to Construct, Board Hearing, Stay of Action [4]
	X		612.240	Surrender of Permits [4]
	X		612.250	Fees, When Payable, Exceptions [4]
X			612.260	Permit Fees; Schedules [4]
	X		612.270	Permit Fees; Refund [4]
X			612.280	Testing by order of the Board [4]
X			612.290	Right of Entry; Inspections; Samples [4]
	X		612.300	Variances [4]
	X		612.305	Variances Granted by Director [4]
X			612.310	Upset Conditions, Breakdown, or Scheduled Maintenance [4]
	X		612.320	Service of Notice [4]
	X		612.330	Reports of Division Technical Experts; Presumptive Evidence of Facts [4]
	X		612.335	Permitted Hours of Incinerator Operation [4]
X			612.340	Air Pollution Nuisances Prohibited [4]
	X		612.350	Disclosure of Secret Processes Prohibited [4]
	X		612.360	Disclosure of Secret Processes Prohibited. Penalty for [4]
	X		612.370	False or Misleading Oral Statements; Unlawful Reproduction or Alteration of Documents [4]
X			612.380	Interfering with or Obstructing Division Personnel [4]
	X		612.390	Penalties for Violation [4]
	X		612.400	Construction [4]
	X		612.410	Incinerators [4]
	X		612.420	Incinerator Stack; Emergency Vent Stack Use [4]
	X		612.430	Recycling Requirements for Incineration of Waste [4]
	X		612.440	Preparation and Submission of Plan for Recycling [4]
	X		612.450	Use of Recycled Goods in Lieu of Recycling [4]

[4] Only Local Agency Enforced Regulation

FORM OP-B11 – APPLICABLE REQUIREMENTS CHECKLIST – SECTION B			
B11.00 – Applicable Requirements Checklist			
INSTALLATION NAME Bridgeton Landfill, LLC	FIPS 189	PLANT NO. 0312	YEAR SUBMITTED 2004

ST. LOUIS COUNTY DEPARTMENT OF HEALTH, AIR, LAND & WATER BRANCH
AIR POLLUTION CONTROL SECTION, CHAPTER 612 – AIR POLLUTION CONTROL CODE
ST. LOUIS COUNTY LOCAL ORDINANCES (CONTINUED)
(NOTE: PLEASE INCLUDE FORM OP-B11.00 IF LOCATED WITHIN ST. LOUIS COUNTY.)

APPLICABILITY			TITLE	ORGANIZATION
YES	NO	REASON		
	X		612.460	Use of Reusable Materials in Lieu of Recycling [4]
	X		612.470	Approval of Plan for Recycling [4]
	X		612.480	Modification of Existing Plan [4]
	X		612.490	Appeal from Decision of Director Disapproving Plan [4]
	X		612.500	Compliance with Plan [4]
	X		612.510	"Recyclable" Defined [4]
	X		612.520	Reduction in Quantity of Waste Prior to Incineration [4]
X			612.530	Saint Louis County Department of Health Asbestos Abatement Rules and Regulations –Registration, Notification, and Performance Requirements [4]

[4] Only Local Agency Enforced Regulation

FORM OP-C01 – INSIGNIFICANT ACTIVITIES REQUIRED TO BE LISTED – SECTION C

C01.00 – INSIGNIFICANT ACTIVITIES

FOR PART 70 APPLICATIONS ONLY

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

INSIGNIFICANT ACTIVITY	POTENTIAL ESTIMATED EMISSIONS (TONS/YR)						
EMISSION UNIT ID: 3	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Haul Road, Packers	1.02						
EMISSION UNIT ID: 4	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Haul Road, Trailers	0.16						
EMISSION UNIT ID: 6	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Diesel Fuel Tank, Breathing Loss				<1.0			
EMISSION UNIT ID: 6	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Diesel Fuel Tank, Working Loss				<1.0			

DUPLICATE THIS FORM AS NEEDED

FORM OP-C01 – INSIGNIFICANT ACTIVITIES REQUIRED TO BE LISTED – SECTION C

C01.00 – INSIGNIFICANT ACTIVITIES

FOR PART 70 APPLICATIONS ONLY

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

INSIGNIFICANT ACTIVITY	POTENTIAL ESTIMATED EMISSIONS (TONS/YR)						
EMISSION UNIT ID: 7	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Diesel Fuel Tank, Breathing Loss				<1.0			
EMISSION UNIT ID: 7	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Diesel Fuel Tank, Working Loss				<1.0			
EMISSION UNIT ID: 9	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Borrow Area Stockpile	32.17						
EMISSION UNIT ID: 10	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION: Haul Road, Borrow Area	1.83						
EMISSION UNIT ID	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION							
EMISSION UNIT ID	PM_{10}	SO_x	NO_x	VOC	CO	LEAD	HAPS
DESCRIPTION							

DUPLICATE THIS FORM AS NEEDED

FORM OP-001 – EXISTING PLANT-WIDE CONDITIONS – SECTION D

D01.00 – EXISTING PLANT-WIDE CONDITIONS

INCLUDE THIS PAGE IN FORM WHEN NO EXISTING PLANT-WIDE CONDITIONS ARE APPLICABLE

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

PLEASE LIST IN THE SPACE PROVIDED BELOW ANY PERMIT CONDITIONS WHICH ARE CURRENTLY APPLICABLE ON A PLANT-WIDE BASIS (I.E. PRODUCTION IS LIMITED TO 10,000 UNITS PER 7 MONTH ROLLING AVERAGE OR A LIMIT ON THE INSTALLATION'S HOURS OF OPERATION)

PERMIT NO.	APPLICABLE PERMIT CONDITION
OP2001009 PW001	**10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin** Emission Limitation: No person may cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter to go beyond the premises of origin in quantities that the particulate matter: · Remains visible in the ambient air beyond the property line of origin; or · May be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined by microscopy or other technique proven to be equally accurate and approved by the Director. The facility is currently performing monthly monitoring of PM emissions at the property boundary.
OP2001009 PW002	**10 CSR 10-6.250 Asbestos Abatement Projects- Certification, Accreditation, and Business Exemption Requirements** Emission Limitation: All asbestos abatement projects subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos shall be conducted within the procedures established for certification and accreditation by 10 CSR 10-6.250
OP2001009 PW003	**10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants** **40 CFR Part 61 Subpart M National Emission Standard for Asbestos** Emission Limitation: The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
OP2001009 PW004	**10 CSR 10-5.040 Use of Hand Fired Equipment Prohibited** Emission Limitation: The permittee shall not operate any hand fired fuel burning equipment
OP2001009 PW005	**10 CSR 10-5.180 Emission of Visible Air Contaminants From Internal Combustion Engine** Emission Limitation: No Person shall cause or permit the emission of visible air contaminants from any internal combustion engine for more than ten (10) consecutive seconds at any one (1) time.
OP2001009 PW006	**10 CSR 10-5.490 Municipal Solid Waste Landfills** Emission Limitation: The permittee shall operate: - The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the land fill that warrants control - The passive collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the land fill that warrants control - The operator of the gas collection and control system shall operate the system with negative pressure at each well head, a temperature less than 55 degrees Celsius, nitrogen level less than 20 %, and oxygen level less than 5%. Operator shall operate so that the methane concentration is less than 500 ppm above background at the surface of the landfill. - Route all the collected gas to a control system as described in required collection and control system design plan. - The collection and control system may be capped or removed provided these conditions are met the landfill shall be no longer accepting solid waste and be permanently closed; the collection and control system has been in operation a minimum of 15 years; and the calculated NMOC gas produced by the landfill is less than 25 megagrams per year on 3 successive test dates.

	- Test in accordance to 10 CSR 10-5.249(4) - Any reading of 500 ppm or more above background at any location shall be recorded as an exeedance.
OP2001009 V007	**40 CFR Part 60 Subpart CC Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills** Emission Limitation: The permittee shall provide the calculation of the landfill NMOC emission rate to determinate whether the landfill meets the operation standards, the compliance provisions, and the monitoring provisions as specified in 40 CSR Part 60 Subpart WWW. *The Bridgeton Landfill is an existing facility that has been modified after May 30,1991 when it obtained a vertical expansion in 1996. Therefore it is subject to the provisions of 40 CFR Part 60 Subpart WWW not 40 CFR Part 60 Subpart CC..*
	40 CFR Part 60 Subpart WWW New Source Performance Standards for Municipal Solid Waste Landfills

PERMITTING	COMPLIANCE DEMONSTRATION METHOD	DESCRIBE METHOD AND GIVE REFERENCE

DUPLICATE THIS FORM AS NEEDED

FORM OP-D02 – PROPOSED PLANT-WIDE CONDITIONS – SECTION D

D02.00 – PROPOSED PLANT-WIDE CONDITIONS

INCLUDE BLANK FORM WHEN NO EXISTING PLANT-WIDE CONDITIONS ARE APPLICABLE

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
'ridgeton Landfill, LLC	189	0312	2004

PLEASE LIST IN THE SPACE PROVIDED BELOW ANY PROPOSED PERMIT CONDITIONS THAT THE INSTALLATION INTENDS TO ESTABLISH IN THIS OPERATING PERMIT.

PROPOSED CONDITION

PLEASE DESCRIBE THE METHODOLOGIES YOU INTEND TO USE TO DEMONSTRATE COMPLIANCE WITH EACH OF THE PROPOSED PLANT-WIDE CONDITIONS THAT ARE BEING ESTABLISHED ABOVE. (TESTING, MONITORING, RECORDKEEPING, ETC.)

PROPOSED CONDITION NUMBER	COMPLIANCE DEMONSTRATION METHOD	DESCRIBE METHOD AND GIVE REFERENCE

DUPLICATE THIS FORM AS NEEDED

FORM OP-D03 – EMISSION UNIT INFORMATION – SECTION D

D03.00 – GENERAL EMISSION UNITS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
1	1	50100402

1. EMISSION UNIT DESCRIPTION

INSTALLATION'S NAME FOR THIS EMISSION UNIT
Municipal Solid Waste Landfill

DESCRIPTION OF EMISSION UNIT

MANUFACTURER	MODEL NO./SERIAL NO.

CONSTRUCTION DATE	MAXIMUM HOURLY DESIGN RATE
1 / 01 / 1979	

STACK NO.	TEMPERATURE	FLOW RATE
	°F	ft^3/min

2. ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT

CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
Enclosed Flares	NMOC	98 %	75 %
ADDITIONAL CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
		%	%

3. APPLICABLE REQUIREMENTS

POLLUTANT	APPLICABLE REQUIREMENT AUTHORITY (CSR, CFR, PERMIT NO., ETC.)	EMISSION LIMIT OR STANDARD (INCLUDING UNITS)
NMOC	10 CSR 10-6.070, 40 CFR 60 WWW	Operate the GCCS in accordance with 40 CFR60.753. Monitor in accordance with 40 CFR 60.756. The flare will be operated and maintained in accordance with the manufacturer's specifications. See PW006
NMOC	10 CSR 10-6.075 40 CFR 63 Subpart AAAA	Monitoring of the GCCS will be conducted in accordance with 40 CFR 60.756 and 40 CFR 63 Subpart AAAA.
Asbestos	40 CFR 61.154	Asbestos containing material will be documented and properly disposed in accordance with 40 CFR 61.154. The administrator will be notified 45 days prior to excavating ACM.
NMOC	10 CSR10-5.490	Operate the GCCS in accordance with 10 CSR 10-5.490(7). Monitor in accordance with 10 CSR 10-5.490(6). The flare will be operated and maintained in accordance with the manufacturer's specifications

DUPLICATE THIS FORM AS NEEDED

FORM OP-D03 – EMISSION UNIT INFORMATION – SECTION D

D3.00 - GENERAL EMISSION UNITS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
2	2	50100402

1. EMISSION UNIT DESCRIPTION

INSTALLATION'S NAME FOR THIS EMISSION UNIT: Enclosed Flare

DESCRIPTION OF EMISSION UNIT:

MANUFACTURER	MODEL NO./SERIAL NO.
John Zink	11'x40' ZTOF

CONSTRUCTION DATE	MAXIMUM HOURLY DESIGN RATE
5/04 / /	210,000 standard cubic feet per hour

STACK NO.	TEMPERATURE	FLOW RATE
	1400-1800 °F	3500 ft^3/min

2. ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT

CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
Enclosed Flare	NMOC	98 %	75 %
ADDITIONAL CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
		%	%

3. APPLICABLE REQUIREMENTS

POLLUTANT	APPLICABLE REQUIREMENT AUTHORITY (CSR# [CFR# [PERMIT NO. - ETC.])	EMISSION LIMIT OR STANDARD (INCLUDING UNITS)
NMOC	10 CSR 10-6.070, 40 CFR 60 WWW, 10 CSR 10-5.490	Operate and maintain control system in accordance with NSPS
NMOC	10 CSR 10-6.075 40 CFR 63 Subpart AAAA	Monitoring of the GCCS will be conducted in accordance with 40 CFR 60.756 and 40 CFR 63 Subpart AAAA.
Visible Emissions	40 CFR Part 60.18	Flares shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

DUPLICATE THIS FORM AS NEEDED

FORM OP-D03 – EMISSION UNIT INFORMATION – SECTION D

D03_00 – GENERAL EMISSION UNITS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
3	8	50100402

1. EMISSION UNIT DESCRIPTION

INSTALLATION'S NAME FOR THIS EMISSION UNIT
Open Flare (temporary to be replaced in 2004)

DESCRIPTION OF EMISSION UNIT

MANUFACTURER	MODEL NO./SERIAL NO.
Perennial Energy	

CONSTRUCTION DATE	MAXIMUM HOURLY DESIGN RATE
12/ 05/ 03	150,000 standard cubic feet per hour

STACK NO	TEMPERATURE	FLOW RATE
	°F	2500 ft^3/min

2. ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT

CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
Open Flare	NMOC	98 %	75 %
ADDITIONAL CONTROL DEVICE TYPE	POLLUTANT(S) CONTROLLED	CONTROL EFFICIENCY	CAPTURE EFFICIENCY
		%	%

3. APPLICABLE REQUIREMENTS

POLLUTANT	APPLICABLE REQUIREMENT, AUTHORITY (CSR# CFR PERMIT NO. ETC.)	EMISSION LIMIT OR STANDARD (INCLUDING UNITS)
NMOC	10 CSR 10-6.070, 40 CFR 60 WWW 10 CSR 10-5.490	Operate and maintain control system in accordance with NSPS
NMOC	10 CSR 10-6.075 40 CFR 63 Subpart AAAA	Monitoring of the GCCS will be conducted in accordance with 40 CFR 60.756 and 40 CFR 63 Subpart AAAA.
Visible Emissions	40 CFR Part 60.18	Flares shall be designed for and operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

DUPLICATE THIS FORM AS NEEDED

FORM OP-D04 – ALTERNATE OPERATING SCENARIO/VOLUNTARY CONDITIONS – SECTION D

D04.00 – ALTERNATE OPERATING SCENARIO/VOLUNTARY CONDITIONS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

MISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)

ALTERNATE OPERATING SCENARIO (FLEXIBILITY)

ALTERNATE SCENARIO ID	SIC CODE ASSOCIATED WITH SCENARIO

DESCRIPTION

VOLUNTARY PERMIT CONDITIONS

POLLUTANT CONTROLLED	LIMITATION

DUPLICATE THIS FORM AS NEEDED

FORM OP-005 – COMPLIANCE DETERMINATION METHODS – SECTION D

D05.00 – COMPLIANCE DETERMINATION

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
1	1	50100402

1 APPLICABLE REQUIREMENT

APPLICABLE REQUIREMENT	POLLUTANT(S)
40 CFR 60 WWW, 10 CSR 10-5.490	NMOC (VOC and HAPs)

EMISSION LIMITATION OR STANDARD

NSPS, 10 CSR 10-5.490

2 TESTING

DATE	TEST METHOD
To be conducted / /	Method 25A

SUMMARY OF RESULTS

To be completed within 180 days of initial startup.

3 MONITORING

PARAMETER MONITORED	MONITORING METHOD
See Approved GCCS Plan	See Approved GCCS Plan

MONITORING SCHEDULE

Monitoring the gas collection and control system continues in accordance with the approved GCCS.

4 Record Keeping

PARAMETER RECORDED	RECORD KEEPING METHOD
See GCCS Plan	See GCCS Plan

RECORD KEEPING SCHEDULE

Recordkeeping of the gas collection and control system continues in accordance with the approved GCCS.

5 Reporting

REPORTING REQUIREMENT	REPORTING SCHEDULE
Semi-Annual	Semi-Annually

Reporting is being conducted in accordance with 40 CFR 60.757. The NSPS report will be combined with the SSM report and submitted every 6 months. April 1st for the period July 1 through December 31st and October 1st for the period January 1st through June 30th.

DUPLICATE THIS FORM AS NEEDED

FORM OP-D05 – COMPLIANCE DETERMINATION METHODS – SECTION D

D05.00 – COMPLIANCE DETERMINATION

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
1	1	50100402

1. APPLICABLE REQUIREMENT

APPLICABLE REQUIREMENT	POLLUTANT(S)
40 CFR 61.154	Asbestos

EMISSION LIMITATION OR STANDARD
40 CFR 61 Subpart M

2. TESTING

DATE	TEST METHOD
N/A / /	

SUMMARY OF RESULTS

3. MONITORING

PARAMETER MONITORED	MONITORING METHOD
See Approved GCCS plan	See Approved GCCS plan

MONITORING SCHEDULE

Waste is covered with at least 6 inches of compacted non-asbestos containing material daily, therefore no monitoring is required.

4. Record Keeping

PARAMETER RECORDED	RECORD KEEPING METHOD
See Approved GCCS plan	See Approved GCCS plan

RECORD KEEPING SCHEDULE

All asbestos containing waste received, owner must maintain waste shipment records send a signed waste shipment record to the waste generator, and reconcile any discrepancy between the shipment record and the amount received.
All records and reports must by kept for at least 2 years.
Records of the location, depth and area and quantity of asbestos containing waste within the disposal site must be maintained until closure of the site.
Upon closure, the requirements of 61.151 must be complied with. A copy of records of asbestos waste disposal location and quantities must be submitted to the Administrator.

5. Reporting

REPORTING REQUIREMENT	REPORTING SCHEDULE
Unreconciled differences of asbestos containing material received versus shipped	Report immediately if not reconciled within 15 days

DUPLICATE THIS FORM AS NEEDED

FORM OP-D05 – COMPLIANCE DETERMINATION METHODS – SECTION D

D05.00 – COMPLIANCE DETERMINATION

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

EMISSION UNIT ID	EIQ REFERENCE NUMBER (ID)	SOURCE CLASSIFICATION CODE (SCC)
1	1	50100402

1. APPLICABLE REQUIREMENT

APPLICABLE REQUIREMENT	POLLUTANT(S)
40 CFR 63 Subpart AAAA	NMOC (VOC and HAPs)

EMISSION LIMITATION OR STANDARD
NESHAP (40 CFR 63 Subpart AAAA)

2. TESTING

DATE	TEST METHOD
1/16/04 / /	

SUMMARY OF RESULTS

Bridgeton Landfill is a new facility and is subject to the requirements set forth in 40 CFR 60.756. Upon promulgation of NESHAP standard the installation was subject to the requirements.

3. MONITORING

PARAMETER MONITORED	MONITORING METHOD
See SSM plan	See SSM plan

MONITORING SCHEDULE

Accordance with the NSPS and the SSM Plan.

4. Record Keeping

PARAMETER RECORDED	RECORD KEEPING METHOD
See SSM plan	See SSM plan

RECORD KEEPING SCHEDULE

SSM Plan was implemented on 1/16/04 and SSM events are documented in accordance with the SSM Plan.

5. Reporting

REPORTING REQUIREMENT	REPORTING SCHEDULE
SSM events	Semi-annual, unless inconsistent with plan then within 7 days

If an SSM event occurs consistent with plan, submit an SSM report is submitted every 6 months. The SSM report will be combined with the NSPS report and submitted every 6 months. April 1st for the period July 1 through December 31st and October 1st for the period January 1st through June 30th.

If an SSM event occurs is inconsistent with the plan, a report will be submitted within two working days followed by a letter sent with seven working days after the end of the SSM event. SSM report will be revised to account for SSM events inconsistent with the plan.

DUPLICATE THIS FORM AS NEEDED

FORM OP-D06 – CORE PERMIT REQUIREMENTS – SECTION D			
D06.00 – CORE PERMIT REQUIREMENTS (NOTE: THIS IS A REQUIRED FORM FOR ALL PERMIT APPLICATIONS)			
INSTALLATION NAME Bridgeton Landfill, LLC	FIPS 189	PLANT NO. 0312	YEAR SUBMITTED 2004

THE INSTALLATION SHALL COMPLY WITH EACH OF THE FOLLOWING EMISSION LIMITATIONS. CONSULT THE APPROPRIATE SECTIONS IN THE CODE OF FEDERAL REGULATIONS (CFR) AND CODE OF STATE REGULATIONS (CSR) FOR THE FULL TEXT OF THE APPLICABLE REQUIREMENTS.

10 CSR 10-6.050, *Start-up, Shutdown and Malfunction Conditions*

(a) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days in writing the following information:
- (1) Name and location of installation;
- (2) Name and telephone number of person responsible for the installation;
- (3) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
- (4) Identity of the equipment causing the excess emissions;
- (5) Time and duration of the period of excess emissions;
- (6) Cause of the excess emissions;
- (7) Air pollutants involved;
- (8) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
- (9) Measures taken to mitigate the extent and duration of the excess emissions; and
- (10) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

(b) The permittee shall submit the paragraph (a.) information list to the director in writing at least ten (10) days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one (1) hour. If notice of the event cannot be given ten (10) days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one (1) hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten (10) working days.

(c) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph (a.) list and shall be submitted not later than fifteen (15) days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.

(d) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.

(e) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060, *Construction Permits Required*

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065, *Operating Permits*

The permittee shall file for renewal of this operating permit no sooner than eighteen months, nor later than six months, prior to the expiration date of this operating permit. The permittee shall retain the most current operating permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request.

10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*
40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

(a) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

(b) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

THE INSTALLATION SHALL COMPLY WITH EACH OF THE FOLLOWING EMISSION LIMITATIONS. CONSULT THE APPROPRIATE SECTIONS IN THE CODE OF FEDERAL REGULATIONS (CFR) AND CODE OF STATE REGULATIONS (CSR) FOR THE RULE TEXT FOR THE APPLICABLE REQUIREMENTS.

10 CSR 10-6.100, *Alternate Emission Limits*

Proposals for alternate emission limitations shall be submitted on Alternate Emission Limits Permit forms provided by the department. An installation owner or operator must obtain an Alternate Emission Limits Permit in accordance with 10 CSR 10-6.100 before alternate emission limits may become effective.

10 CSR 10-6.110, *Submission of Emission Data, Emission Fees and Process Information*

(a) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.

(b) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.

(c) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

10 CSR 10-6.130, *Controlling Emissions During Episodes of High Air Pollution Potential*

This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150, Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

(a) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line or origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director;

(b) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

(c) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary.

10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*

(a) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.

(b) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.

(c) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-6.250, *Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements*

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

THE INSTALLATION SHALL COMPLY WITH EACH OF THE FOLLOWING EMISSION LIMITATIONS. CONSULT THE APPROPRIATE SECTIONS IN THE CODE OF FEDERAL REGULATIONS (CFR) AND CODE OF STATE REGULATIONS (CSR) FOR THE FULL TEXT OF THE APPLICABLE REQUIREMENTS.

Yes No **Regulation** *(Please check the appropriate response regarding applicability)*

☐ x **10 CSR 10-2.070** (Kansas City Metropolitan Area)
☐ x **10 CSR 10-3.090** (Outstate Area)
☐ x **10 CSR 10-4.070** (Greene County)

Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one (1) volume of odorous air is diluted with seven (7) volumes of odor-free air for two (2) separate trials not less than fifteen (15) minutes apart within the period of one (1) hour.

This requirement is not federally enforceable.

10 CSR 10-5.160, *(Not Applicable if not in St. Louis Metropolitan Area)* ***Restriction of Emission of Odors***

No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

(a) Residential, recreational, institutional, retail sales, hotel or educational premises.
(b) Industrial premises when air containing odorous matter is diluted with twenty (20) or more volumes of odor-free air; or
(c) Premises other than those in paragraphs (1)A.1. and (2) of the rule when air containing odorous matter is diluted with four (4) or more volumes of odor-free air.

The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when thirty percent (30%) or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least twenty (20) people or seventy-five percent (75%) of those exposed if fewer than twenty (20) people are exposed.

This requirement is not federally enforceable.

10 CSR 10-6.280, ***Compliance Monitoring Usage***

(a) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  (1) Monitoring methods outlined in 40 CFR Part 64;
  (2) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  (3) Any other monitoring methods approved by the director.

Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:

  (1) Monitoring methods outlined in 40 CFR Part 64;
  (2) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  (3) Compliance test methods specified in the rule cited as the authority for the emission limitations.

(c) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  (1) Applicable monitoring or testing methods, cited in:
    - 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - 10 CSR 10-6.040, "Reference Methods";
    - 10 CSR 10-6.070, "New Source Performance Standards";
    - 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  (2) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

FORM OP-D06 – CORE PERMIT REQUIREMENTS – SECTION D			
D06.00 – CORE PERMIT REQUIREMENTS (CONTINUED) (THIS IS A REQUIRED FORM FOR ALL PERMIT APPLICATIONS)			
INSTALLATION NAME Bridgeton Landfill, LLC	FIPS 189	PLANT NO. 0312	YEAR SUBMITTED 2004

THE INSTALLATION SHALL COMPLY WITH EACH OF THE FOLLOWING EMISSION LIMITATIONS. CONSULT THE APPROPRIATE SECTIONS IN THE CODE OF FEDERAL REGULATIONS (C.F.R.) AND CODE OF STATE REGULATIONS (C.S.R.) FOR THE FULL TEXT OF THE APPLICABLE REQUIREMENTS.

10 CSR 10-5.040, *(Delete if not in St. Louis Metropolitan Area)* *Use of Fuel in Hand-Fired Equipment Prohibited*

It shall be unlawful to operate any hand-fired fuel-burning equipment in the St. Louis, Missouri metropolitan area. This regulation shall apply to all fuel-burning equipment including, but not limited to, furnaces, heating and cooking stoves and hot water furnaces. It shall not apply to wood-burning fireplaces and wood-burning stoves in dwellings, nor to fires used for recreational purpose, nor to fires used solely for the preparation of food by barbecuing. Hand-fired fuel-burning equipment is any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

Yes	No	Regulation *(Please check the appropriate response regarding applicability)*
☐	x	**10 CSR 10-2.100** (Kansas City Metropolitan Area)
☐	x	**10 CSR 10-3.030** (Outstate Area)
☐	x	**10 CSR 10-4.090** (Greene County)
x	☐	**10 CSR 10-5.070** (St. Louis Metropolitan Area)

Open Burning Restrictions

(a) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.

(b) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.

(c) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
   (1) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
   (2) The schedule of burning operations;
   (3) The exact location where open burning will be used to dispose of the trade wastes;
   (4) Reasons why no method other than open burning is feasible; and
   (5) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.

(d) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt the installation from the provisions of any other law, ordinance or regulation.

(e) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

St. Louis City Ordinance 64749, Sec 17, *(Not Applicable if not in City Limits of St. Louis City)* Open Burning Restrictions

(a) No person shall cause, suffer, allow or permit the open burning of refuse.

(b) No person shall conduct, cause or permit the conduct of a salvage operation by open burning.

(c) No person shall conduct, cause or permit the disposal of trade waste by open burning.

(d) No person shall cause or permit the open burning of leaves, trees or the byproducts therefrom, grass, or other vegetation.

(e) It shall be prima-facie evidence that the person who owns or controls property on which open burning occurs, has caused or permitted said open burning.

10 CSR 10-5.240, *(Not Applicable if not in St. Louis Metropolitan Area)* *Additional Air Quality Control Measures May be Required When Sources Are Clustered in a Small Land Area*

The Air Conservation Commission may prescribe more restrictive air quality control requirements that are more restrictive and more extensive than provided in regulations of general application for:

(a) Areas in which there are one (1) or more existing sources and/or proposed new sources of particulate matter in any circular area with a diameter of two (2) miles (including sources outside metropolitan area) from which the sum of particulate emissions allowed from theses sources by regulations of general application are or would be greater than two thousand (2000) tons per year or five hundred (500) pounds per hour.

(b) Areas in which there are one (1) or more existing sources and/or proposed new sources of sulfur dioxide in any circular area with a diameter of two (2) miles from which the sum of sulfur dioxide emissions from these sources allowed by regulations of general application are or would be greater than one thousand (1000) tons for any consecutive three (3) months or one thousand (1000) pounds per hour."

FORM OP-D06 – CORE PERMIT REQUIREMENTS – SECTION D			
D06.00 – CORE PERMIT REQUIREMENTS (CONTINUED) (THIS IS A REQUIRED FORM FOR ALL PERMIT APPLICATIONS)			
INSTALLATION NAME Bridgeton Landfill, LLC	FIPS 189	PLANT NO. 0312	YEAR SUBMITTED 2004

THE INSTALLATION SHALL COMPLY WITH EACH OF THE FOLLOWING EMISSION LIMITATIONS. CONSULT THE APPROPRIATE SECTIONS IN THE CODE OF FEDERAL REGULATIONS (CFR) AND CODE OF STATE REGULATIONS (CSR) FOR THE FULL TEXT OF THE APPLICABLE REQUIREMENTS.

Title VI – 40 CFR Part 82, *Protection of Stratospheric Ozone*

(a) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   (1) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
   (2) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
   (3) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
   (4) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

(b) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
   (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
   (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
   (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
   (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
   (5) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
   (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

(c) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

(d) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.
Federal Only - 40 CFR part 82

FORM OP-E01 – COMPLIANCE PLAN/STATUS – SECTION E

E01.00 – COMPLIANCE PLAN/STATUS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Landfill, LLC	189	0312	2004

COMPLETION OF THIS FORM OF THE OPERATING PERMIT FORMS PACKAGE IS MANDATORY FOR ALL SOURCES. COMPLETE THIS FORM ONCE FOR EACH APPLICATION.

1. COMPLIANCE STATUS WITH ALL APPLICABLE REQUIREMENTS EFFECTIVE AT THE TIME OF THE ISSUANCE OF THIS PERMIT

WILL YOUR INSTALLATION BE IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS AT THE TIME OF THE PERMIT ISSUANCE AND CONTINUE TO COMPLY WITH THESE REQUIREMENTS FOR THE DURATION OF THE PERMIT?

YES ☒ NO ☐ (IF NO, COMPLETE A COMPLIANCE PLAN AS DESCRIBED IN THE INSTRUCTIONS ON FORM OP–F01.00)

2. COMPLIANCE STATUS WITH ALL APPLICABLE REQUIREMENTS EFFECTIVE DURING THE PERMIT TERM

WILL YOUR INSTALLATION BE IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS TAKING EFFECT DURING THE TERM OF THE PERMIT?

YES ☒ NO ☐ (IF NO, COMPLETE A COMPLIANCE PLAN AS DESCRIBED IN THE INSTRUCTIONS ON FORM OP–F01.00)

3. COMPLIANCE STATUS WITH ENHANCED MONITORING AND COMPLIANCE CERTIFICATION

IS THE INSTALLATION IDENTIFIED IN THIS APPLICATION IN COMPLIANCE WITH ALL APPLICABLE ENHANCED MONITORING AND COMPLIANCE CERTIFICATION REQUIREMENTS?

YES ☒ NO ☐ (IF NO, COMPLETE A COMPLIANCE PLAN AS DESCRIBED IN THE INSTRUCTIONS ON FORM OP–F01.00)

4. SCHEDULE OF SUBMISSION OF COMPLIANCE CERTIFICATION DURING THE PERMIT TERM

FREQUENCY OF SUBMITTALS	BEGINNING DATE
Semi-Annually	10/1/04

5. CERTIFICATION STATEMENT FOR PART 70 MINOR PERMIT MODIFICATIONS

I HEREBY CERTIFY THAT THIS REQUEST FOR A PERMIT MODIFICATION MEETS THE CRITERIA DESCRIBED IN 10 CSR 10-6.065(5)(E)5.B.(I) FOR MINOR PERMIT MODIFICATIONS AND REQUEST THAT THE MINOR PERMIT MODIFICATION PROCEDURES BE FOLLOWED.

SIGNATURE OF RESPONSIBLE OFFICIAL OF COMPANY	DATE
	/ /

6. CERTIFICATION OF COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS

EXCEPT FOR REQUIREMENTS IDENTIFIED IN THE ABOVE STATEMENT FOR WHICH COMPLIANCE IS NOT ACHIEVED, I HEREBY CERTIFY THAT, BASED ON INFORMATION AND BELIEF FORMED AFTER REASONABLE INQUIRY, THE AIR CONTAMINANT SOURCE IDENTIFIED IN THIS APPLICATION IS IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS.

SIGNATURE OF RESPONSIBLE OFFICIAL OF COMPANY	DATE
[signature]	7 / 30 / 2004

TYPE OR PRINT NAME OF RESPONSIBLE OFFICIAL	OFFICIAL TITLE OF RESPONSIBLE OFFICIAL
Mr. ☒ Ms. ☐ Rusty Waldrup	District Manager

FORM OP-F01 – GENERAL COMMENTS – SECTION F

F01.00 – GENERAL COMMENTS

INSTALLATION NAME	FIPS	PLANT NO.	YEAR SUBMITTED
Bridgeton Sanitary Landfill, LLC	189	0312	2004

1. GENERAL INFORMATION

A1.00 Regarding 10 CSR 10-6.220 Restriction of Emissions from Visible Air Contaminates
Reason Code K – Not applicable due to exemption per paragraph (1)(H) of the section. Facility is regulated under 40 CFR 60 Subpart WWW

B01.00 Regarding 10 CSR 10-6.260 Restriction of Emissions of Sulphur Compounds
Not applicable to the facility control devices per paragraph (1)(A) of the section. Facility is regulated under 40 CFR 60 Subpart WWW.

B01.00 Regarding 40 CFR 60 Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. Not applicable to the 1000 gallon mobile and 4000 gallon diesel storage tanks, each storage vessel capacity is less than 75 cubic meters.

B01.00 Regarding 10 CSR 10-6.220 Emission of Visible Air Contaminates
Reason Code K – Not applicable due to exemption per paragraph (1)(H) of the section. Facility is regulated under 40 CFR 60 Subpart WWW.

B02.00 Regarding 40 CFR 60 Subpart Cc Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills, The Bridgeton Landfill is an existing facility that has been modified after May 30,1991 when it obtained a vertical expansion in 1996. Therefore it is subject to the provisions of NSPS not EG.

B10.00 Regarding 10 CSR 10-5.040 Use of Fuel in Hand-Fired Equipment Prohibited
Reason Code K – Not applicable, no hand-fired fuel burning equipment is utilized at this installation.

B10.00 Regarding 10 CSR 10-5.180 Emission of Visible Air Contaminants from Internal Combustion Engines
Not applicable, rule was rescinded 11/30/02.

B10.00 Regarding 10 CSR 10-5.300 Control of Emissions From Solvent Metal Cleaning
Not applicable, parts washer uses water based solvent to clean metal surfaces.

B10.00 Regarding 10 CSR 10-5.510 Control of Emissions of Nitrogen Oxides
Not applicable, potential to emit of Nitrogen Oxides is less than 100 tons per year. Maximum potential NOx emissions is based on capacity of 2-3500 SCFM flares is 67 tons/yr.

B10.00 Regarding 10 CSR 10-5.520 Control of Volatile Organic Compound Emissions From Existing Major Sources
Not applicable, potential to emit of VOC is less than 100 tons per year. Maximum potential VOC emissions emitted is with no control of landfill gas is 41 tons/yr.

D05 Page 29 of 38 - 10 CSR 10-3.050: The burning of landfill gas should not exceed the rule limit. Landfill gas should be similar to the burning of natural gas. No testing has been performed.

D05 Page 29 of 38 - 10 CSR 10-6.260: The burning of landfill gas should not exceed the SO2 emissions restrictions or exceed the ambient air quality standard. No testing has been performed

The Bridgeton Landfill will replace the existing 2500 SCFM temporary open flare with a 3500 SCFM enclosed flare prior to the expiration of the operating permit. The second enclosed flare is equivalent to the first enclosed flare installed in May 2004. The existing 2500 SCFM open flare is intended to be used only as a temporary control device until the second 3500 SCFM enclosed flare is installed. The open flare will be taken offline and non-operational upon installation of the second enclosed flare. Bridgeton Landfill requests permitting of the permanent control device, the second 3500 SCFM enclosed flare instead of the temporary 2500 SCFM open flare.

DUPLICATE THIS FORM AS NEEDED

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

3	HAUL ROAD FOR LANDFILL, PACKERS
4	HAUL ROAD FOR LANDFILL, TRAILERS
6	GALLON DIESEL FUEL STORAGE (4,000 GAL)
7	GALLON DIESEL FUEL STORAGE (1,000 GAL)
9	BORROW AREA STOCKPILE
10	HAUL ROAD, BORROW AREA

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

Insignificant activities for the Bridgeton Sanitary Landfill are listed on Form C01 .00 in the Operating Permit Application.

It requires emissions to be calculated for each emission point listed as insignificant activities requited to be listed. Below is the list of these activities:

- Haul Road for Landfill
- Haul Road for Borrow Area
- Diesel Fuel Storage
- Borrow Area Stockpile

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

HAUL ROAD FOR LANDFILL

Traffic on roadways on the landfill site results in particulate matter emissions. These emissions are estimated using site-specific information and EPA published emission factors for roadways. The table below presents average site-specific values used to determine fugitive emissions from the haul road. The emissions for the haul road are further broken down into two vehicles types: packer trucks and roll-off trucks. See attached worksheets for fugitive emissions calculations for the haul roads assuming 90 percent control. Attached is a summary of the emissions based on AP-42, Fifth Edition, Volume I: Chapter 13: Miscellaneous Sources 13.2.1 Paved Roads - Final Section.:

The waste haul road is paved and approximately 0.25 miles in length. Water spray is routinely applied to the haul road to reduce dust emissions. In order to reduce particulate emissions from the haul road, the facility regularly applies water. The amount and frequency of application is documented in order to achieve the assumed higher particulate control efficiency of 90%.

BRIDGETON LANDFILL, L.L.C.
HAUL ROAD EMISSIONS

Emi__on Point 3 and 4: Waste Hauling - Paved*

AP-42, Fifth Edition, Volume I Chapter 13: Miscellaneous Sources 13.2.1 Paved Roads - Final Section

For Vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

$$E=k(sL/2)^{.65}(W/3)^{1.5}-C$$

E = particulate emission factor (having units matching the units of k),		
k = particle size multiplier for particle size range and units of interest	0.016 lb/VMT	Table 13.2-1.1
sL = road surface silt loading (grams per square meter) (g/m2),	7.4 for MSW Table	Table 13.2-1.4
W = average weight (tons) of the vehicles traveling the road, and	18 tons Packer	
	22 tons Roll-off	
C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire we	0.11147 lb/VMT	Table 13.2-1.2

	E (lb/VMT)	Maximum Hourly VMT	PTE (lbs/hr)	PTE (tons/yr)	PTE Controlled (tons/yr)
Packer	0.44	5.32	2.34	10.23	1.02
Roll-Off	0.63	0.56	0.35	1.55	0.16
Total				**11.78**	**1.18**

Form 2.0 EMISSION POINT INFORMATION

Facility Name	County FIPS No.	Plant No.	Year of Data
BRIDGETON SANITARY LANDFILL	189	0312	2004

[1] POINT IDENTIFICATION

Point No.	AIRS ID - Pt	SIC Code	Point Description
3		4953	Haul Road for Landfill

Source Classification Code (SCC)	Emission Factor Units	Number of SCCs Used with this Point	Seg. No.
50100401	Vehicle-Miles	1	

SCC Description: Waste Hauling

[2] STACK/VENT PARAMETERS

Stack No.	AIR ID - St	Height (Ft)	Diameter (Ft)	For a non-circular stack Diameter = (1.128A)^12 (A = Cross Scetional Area in sq. feet)

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] Air Pollution Controls

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs
CD-002	61	Water Spray		90						

[4] OPERATING RATE/SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
13,278	Vehicle-Miles	9	25	25
		Day/week 5.33		
Maximum Hourly Design Rate	Units/Hr		Jul-Sep (%)	Oct-Dec (%)
5.32	Vehicle-Miles	Week/Year 52	25	25

Emission Calculations

Source of Emissions Factor: (List below in [6])
1. CEM 3. Mass Balance 5. Other ## Worksheet Number
2. Stack Test 4. AP-42 or FIRE 6 Eng Calc (Please Identify worksheet)

AP 42/Other Reference

List other worksheets: 2.7

Air Pollutant	Source	Emission Factor (Lbs/Unit)	Ash or Sulfur (%)	Control Efficiency (%)	Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
PM10	2.7	1.00		50	3.32	2.66	11.67	23.34
SOx								
NOx								
VOC								
CO								
Lead								
HAPs								

Duplicate this form as needed.

Form 2.7 HAUL ROAD FUGITIVE EMISSIONS WORKSHEET

Facility Name	FIPS County No.	Plant No.	Year of Data
BRIDGETON SANITARY LANDFILL	189	0312	2004

***** PLEASE NOTE *****

If the sum of all Vehicle Miles Traveled (VMT) for all haul roads and trucks is less than 100 VMT, then the PM10 emissions for all the haul roads do not need to be reported on these forms. However, if the emissions are not reported, documentation on the actual annual VMT figures for the facility must be provided.

[1] HAUL ROAD INFORMATION

Point No.	AIRIDPt	SCC	Seg No.
3		50100401	

Length of Road (Miles)	Silt Content (%)	Surface Material of Road
0.25	8.3 (Default = 8.3%)	ROCK

Surface Material Moisture Content (%)	Days of Rain with at least 0.01" per Year
0.2 (Default = 0.2%)	105 (Default = 105 Days)

Type of Dust Control (Check One)	Control Eff %
☐ Surfactant Spray	90
☑ Water Spray Documented	> 50
☐ Water Spray	50
☐ No Control	0
☐ Other (Specify)	

[2] HAUL TRUCK INFORMATION

Make/Model	Unloaded Truck Wt (Tons)
PACKER	18

Average Wt of Material per Load (Ton)	Average Loaded Truck Wt (Tons)
6	24

Average Truck Speed (MPH): 5

[3] MATERIAL HAULED

Type of materials(s) Hauled	List any permit conditions limiting the amount hauled.
MUNICIPAL SOLID WASTE	NA

Annual Amount Hauled (Tons)	Maximum Hourly Amount Hauled (Tons)
159,334.0	63.9

[4] CALCULATION OF ANNUAL VEHICLE MILES TRAVELED (VMT)

ANNUAL VMT =

2 x {Length of Haul Road} x {Annual Amount Hauled} / {Average Wt of Material per Load}

Annual VMT	Reportable Level = the Sum of all Road VMT > 100	Maximum Hourly VMT
13,277.8		5.32

[5] CALCULATION OF HAUL ROAD EMISSION FACTORS

PM10 EMISSION FACTOR =

2.6 x ({Silt Content (%)} / 12)^0.8[({Unloaded Truck Wt}+{Average Loaded Truck Wt})/6]^0.4 x [(365 - {Days of Rain}) / 365] /[{Surface Material Moisture Content (%)}/0.2]^0.3

*If Average Truck Speed is <15 (MPH), multiply the equation by (Average Truck Speed/15)

[5] PM10 Emission Factor: 1.00 Lbs PM10 / VMT

The PM10 emission factor for the haul roads can be calculated using the equation from the AP 42 section on Unpaved Haul Roads (Section 13.2.2) provided in Block 5 of this worksheet. When using these equations, PM10 emission factors should be calculated for each separate haul road and type of haul truck. The Stone Quarrying SCC number (3-05-020-11) should be used as the SCC number on Form 2.0. The calculated PM10 emission factor should be entered in the PM10 Box in Block 7 on Form 2.0.

A more detailed discussion on dust control method and the resulting Control Efficiency (%) can be found in the AP 42 Section 13.2.2. The appropriate dust control method should be checked in Block 1 and the control efficiency should be entered in the PM10 box of Block 9 on Form 2.0.

ALTERNATE METHODS TO ESTABLISH THE HAUL ROAD PM10 EMISSION FACTOR

Instead of using this form to calculate the PM10 emission factor for the haul roads, the Source Classification Code (SCC) for Stone Quarrying and Processing Haul Road Emissions (3-05-020-11) may be used as a default SCC number. The PM10 emission factor to use with this SCC number is 6.2 Lbs. of PM10 per VMT.

Form 2.0 EMISSION POINT INFORMATION

Facility Name	County FIPS No.	Plant No.	Year of Data
BRIDGETON SANITARY LANDFILL	189	0312	2004

[1] POINT IDENTIFICATION

Point No.	AIRS ID - Pt	SIC Code	Point Description
4		4953	Haul Road for Landfill - Roll Offs

Source Classification Code (SCC)	Emission Factor Units	Number of SCCs Used with this Point	Seg. No.
50100401	Vehicle-Miles	1	

SCC Description: Hauling

[2] STACK/VENT PARAMETERS

Stack No.	AIR ID - St	Height (Ft)	Diameter (Ft)	For a non-circular stack Diameter = (1.128A)^12 (A = Cross Scetional Area in sq. feet)

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] Air Pollution Controls

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs
CD-002	61	Water Spray		96						

[4] OPERATING RATE/SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
1,172	Vehicle-Miles	9	25	25
		Day/week 5.33		
Maximum Hourly Design Rate	Units/Hr		Jul-Sep (%)	Oct-Dec (%)
0.56	Vehicle-Miles	Week/Year 52	25	25

Emission Calculations

Source of Emissions Factor: (List below in [6]) 1. CEM 2. Stack Test 3. Mass Balance 4. AP-42 or FIRE 5. Other 6 Eng Calc ## Worksheet Number (Please identify worksheet)	AP 42/Other Reference	List other worksheets
		2.7

Air Pollutant	Source	Emission Factor (Lbs/Unit)	Ash or Sulfur (%)	Control Efficiency (%)	Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
PM10	2.7	1.16		96	0.03	0.03	0.11	2.87
SOx								
NOx								
VOC								
CO								
Lead								
HAPs								

Duplicate this form as needed.

Form 2.7 HAUL ROAD FUGITIVE EMISSIONS WORKSHEET

Facility Name	FIPS County No.	Plant No.	Year of Data
BRIDGETON SANITARY LANDFILL	189	0312	2004

***** PLEASE NOTE *****

If the sum of all Vehicle Miles Traveled (VMT) for all haul roads and trucks is less than 100 VMT, then the PM10 emissions for all the haul roads do not need to be reported on these forms. However, if the emissions are not reported, documentation on the actual annual VMT figures for the facility must be provided.

[1] HAUL ROAD INFORMATION

Point No.	AIR ID-Pt	SCC	Seg No.
4		30502011	

Length of Road (Miles)	Silt Content (%)	Surface Material of Road
0.25	8.3 (Default = 8.3%)	GRAVEL

Surface Material Moisture Content (%)	Days of Rain with at least 0.01" per Year
0.2 (Default = 0.2%)	105 (Default = 105 Days)

Type of Dust Control (Check One)	Control Eff %
☐ Surfactant Spray	90
☑ Water Spray Documented	> 50
☐ Water Spray	50
☐ No Control	0
☐ Other (Specify)	

[2] HAUL TRUCK INFORMATION

Make/Model	Unloaded Truck Wt (Tons)
ROLL-OFF	22

Average Wt of Material per Load (Ton)	Average Loaded Truck Wt (Tons)
17	39

Average Truck Speed (MPH): 5

[3] MATERIAL HAULED

Type of materials(s) Hauled	List any permit conditions limiting the amount hauled.
MUNICIPAL SOLID WASTE	NA

Annual Amount Hauled (Tons)	Maximum Hourly Amount Hauled (Tons)
39,834.0	16.0

[4] CALCULATION OF ANNUAL VEHICLE MILES TRAVELED (VMT)

ANNUAL VMT =

2 x {Length of Haul Road} x {Annual Amount Hauled} / {Average Wt of Material per Load}

Annual VMT	Reportable Level = the Sum of all Road VMT > 100	Maximum Hourly VMT
1,171.6		0.56

[5] CALCULATION OF HAUL ROAD EMISSION FACTORS

PM10 EMISSION FACTOR =

2.6 x ({Silt Content (%)} / 12)^0.8[({Unloaded Truck Wt}+{Average Loaded Truck Wt})/6]^0.4 x [(365 - {Days of Rain}) / 365] /[{Surface Material Moisture Content (%)}/0.2]^0.3

*If Average Truck Speed is <15 (MPH), multiply the equation by (Average Truck Speed/15)

5] PM10 Emission Factor: 1.16 Lbs PM10 / VMT

The PM10 emission factor for the haul roads can be calculated using the equation from the AP 42 section on Unpaved Haul Roads (Section 13.2.2) provided in Block 5 of this worksheet. When using these equations, PM10 emission factors should be calculated for each separate haul road and type of haul truck. The Stone Quarrying SCC number (3-05-020-11) should be used as the SCC number on Form 2.0. The calculated PM10 emission factor should be entered in the PM10 Box in Block 7 on Form 2.0.

A more detailed discussion on dust control method and the resulting Control Efficiency (%) can be found in the AP 42 Section 13.2.2. The appropriate dust control method should be checked in Block 1 and the control efficiency should be entered in the PM10 box of Block 9 on Form 2.0.

ALTERNATE METHODS TO ESTABLISH THE HAUL ROAD PM10 EMISSION FACTOR

Instead of using this form to calculate the PM10 emission factor for the haul roads, the Source Classification Code (SCC) for Stone Quarrying and Processing Haul Road Emissions (3-05-020-11) may be used as a default SCC number. The PM10 emission factor to use with this SCC number is 6.2 Lbs. of PM10 per VMT.

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

BORROW AREA STOCKPILE

The Bridgeton Landfill has a borrow area approximately 23 acres in size, where soil is stockpiled to be used for daily operations and closure of the landfill.

Attached are the calculations for the stockpile.

Form 2.0 EMISSION POINT INFORMATION

Facility Name	FIPS County No.	Plant No.	Year of Data
Bridgeton Landfill, LLC	189	0312	2004

1) POINT IDENTIFICATION

Point No.	AIR ID - Pt	SIC Code	Point Description
9		4953	Stock Piles, Load in , Load out

So… Classification Code (SCC)	Emission Factor Units	Number of SCCs Used with this Point	Seq. No.
3-05-020-07	Tons	1	

SCC Description

Open Storage

2) STACK/VENT PARAMETERS

Stack No.	AIR ID - St	Height (Ft)	Diameter (Ft)	

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

3) Air Pollution Control Equipment

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs

4) OPERATING RATE SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
138456	Tons	24	0	0
		Day/week: 7		

Maximum Hourly Design Rate	Units/Hr	Week/Year	Jul-Sep (%)	Oct-Dec (%)
NA	Tons	13	1	99

5) Emission Calculations

	AP 42/Other Reference	[5]List other worksheets
…ber		2.8

Air Pollutant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Overall Control Efficiency	[10] Actual Emissions (Tons/Yr)			
PM10	2.8	0.056			3.87			
SOx								
NOx								
VOC								
CO								
Lead								
HAPs								

Form 2.0 EMISSION POINT INFORMATION

Facility Name	FIPS County No.	Plant No.	Year of Data
Bridgeton Landfill, LLC	189	0312	2004

[1] POINT IDENTIFICATION

Point No.	[redacted]	SIC Code	Point Description
9	[redacted]	1422	Stock Piles, Wind

Sc[illegible] Classification Code (SCC)	Emission Factor Units	Number of SCCs Used with this Point	[redacted]
3-05-025-07	Pounds/Acres	1	[redacted]

SCC Description: Mineral Products
Sand/Gravel
Open Storage

[2] STACK/VENT PARAMETERS

Stack No.	[redacted]	Height (Ft)	Diameter (Ft)	[redacted]
	[redacted]			[redacted]

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] Pollution Control Equipment

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs

[4] OPERATING RATE/SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
23.0	Acres	24	0	0
		Day/week: 7		

Maximum Hourly Design Rate	Units/Hr	Week/Year	Jul-Sep (%)	Oct-Dec (%)
	Acres	13	1	99

[5] Emission Calculations

[redacted]	AP 42/Other Reference	[5]List other worksheets
[redacted] ...mber		2.8

Air Pollutant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Overall Control Efficiency	[10] Actual Emissions (Tons/Yr)	[redacted]	[redacted]	[redacted]
PM10	2.8	240.75			2.77	[redacted]	[redacted]	[redacted]
SOx						[redacted]	[redacted]	[redacted]
NOx			[redacted]			[redacted]	[redacted]	[redacted]
VOC			[redacted]			[redacted]	[redacted]	[redacted]
CO			[redacted]			[redacted]	[redacted]	[redacted]
Lead			[redacted]			[redacted]	[redacted]	[redacted]
HAPs			[redacted]			[redacted]	[redacted]	[redacted]

[redacted]

FORM 2.8 STORAGE PILE WORKSHEET

Facility Name	FIPS County No.	Plant No.	Year of Data
Bridgeton Landfill, LLC	189	0312	2004

STORAGE PILE INFORMATION

Point No.	SCC	Type of Material Stored
9	3-05-020-07 3-05-025-07	Clay

Moisture Content (%)	Area of Storage Pile (Acres)
10 (Default = 0.7%)	23 entire borrow area

Silt Content (%)	Raw Material Loading Method (Check One)	Raw Material Unloading Method (Check One)
6 (Default = 1.6%)	☐ Barge ☐ Rail ☒ Truck ☐ Conveyor ☐ Other (Specify)	☐ Barge ☐ Rail ☒ Truck ☐ Conveyor ☐ Other (Specify)

Storage Duration (Days)
30

Annual Amount Stored (Tons)
3,000,000

Maximum Hourly Amount Stored
NA

PROCESS FACTORS AFFECTING EMISSION RATES

Mean Wind Speed Mph)	% of Time Wind > 12 Mph
10 (Default = 10 Mph)	32 (Default = 32%)

Dry Days per Year	Vehicle Activity Factor
260 (Default = 260 Days)	0.25 (Default = 1.0)

STORAGE PILE EMISSION FACTOR CALCULATIONS

[3-A-1] LOAD IN-LOAD OUT FACTOR

.00224 x ({Mean Wind Speed} / 5)^1.3 / ({Moisture Content (%)} / 2)^1.4

Load In-Load Out Factor

0.0005795

[3-A-2] VEHICLE ACTIVITY FACTOR

0.05 x ({Silt Content (%)} / 1.5) x ({Dry Days per Year} / 235) x {Vehicle Activity Factor}

Vehicle Acitvity Factor

0.0553191

[3-A-3] WIND EROSION FACTOR

0.85 x ({Silt Content (%)} / 1.5) x ({Storage Duration (Days)})
x ({Dry Days per Year} / 235) x ({% of Time Wind > 12 mph} / 15) lb/acre

Wind Erosion

240.74894

[3] STORAGE PILE PM10 EMISSION FACTOR

ACTIVITY PM 10 EMISSION FACTOR =
{[3-A-1]Load In-Load Out Factor} + {[3-A-2] Vehicle Activity Factor}

0.055898616

PM 10 Emission Factor

0.0558986 **lb. PM10/Ton** 240.748936 **lb PM10/Acre**

RELEASE NOTES

If you use a Source Classification Code (SCC) number and Emission Factor from the list in the instructions for this form, make sure to complete Block 1, Storage Pile Information for each storage pile. When using this form to calculate the PM10 Emission Factor, use the Default SCC 3-05-020-07. Enter the PM10 Emission Factor in the PM10 box in Block 7 of Form 2.0 for this storage pile.

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

4,000 GALLON DIESEL STORAGE TANK

The Bridgeton Landfill has one 4,000 gallon distillate fuel oil number 2 tank used for fueling landfill operations equipment. EPA's software TANKS 4.09b was utilized to estimate VOC emissions from the tank.

See the attached Tanks 4.0 Emissions Report for emissions calculations.

TANKS 4.0
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Bridgeton Landfill EU06
City:	St. Louis
State:	Missouri
Company:	Bridgeton Landfill, LLC
Type of Tank:	Horizontal Tank
Description:	Emission Point 6: 4000 gallon stationary tank

Tank Dimensions

Shell Length (ft):	18.00
Diameter (ft):	10.00
Volume (gallons):	4,000.00
Turnovers:	20.00
Net Throughput (gal/yr):	80,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Red/Primer
Shell Condition:	Good

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: St. Louis, Missouri (Avg Atmospheric Pressure = 14.46 psia)

TANKS 4.0
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp. (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	67.87	56.17	79.57	60.37	0.0084	0.0057	0.0121	130.0000			188.00	Option 5: A=12.101, B=8907

TANKS 4.0
Emissions Report - Summary Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	2.07	5.36	7.43

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

1,000 GALLON DIESEL STORAGE TANK

The Bridgeton Landfill has one mobile 1,000 gallon distillate fuel oil number 2 tank used for fueling landfill operations equipment. EPA's software TANKS 4.09b was utilized to estimate VOC emissions from the tank.

See the attached Tanks 4.0 Emissions Report for emissions calculations.

TANKS 4.0
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification:	Bridgeton Landfill EU07
City:	St. Louis
State:	Missouri
Company:	Bridgeton Landfill, LLC
Type of Tank:	Horizontal Tank
Description:	Emission Unit 7: 1,000 gallon mobile field tank

Tank Dimensions

Shell Length (ft):	6.00
Diameter (ft):	5.33
Volume (gallons):	1,000.00
Turnovers:	80.00
Net Throughput (gal/yr):	80,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition:	Good

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig):	0.03

Meteorological Data used in Emissions Calculations: St. Louis, Missouri (Avg Atmospheric Pressure = 14.46 psia)

TANKS 4.0
Emissions Report - Summary Format
Liquid Contents of Storage Tank

Mixture/Component	Month	Daily Liquid Surf. Temperatures (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressures (psia) Avg.	Min.	Max.	Vapor Mol. Weight	Liquid Mass Fracl.	Vapor Mass Fracl.	Mol. Weight	Basis for Vapor Pressure Calculations
Distillate fuel oil no. 2	All	62.99	54.57	71.41	58.27	0.0072	0.0054	0.0094	130.0000			188.00	Option 5: A=12.101, B=8907

TANKS 4.0
Emissions Report - Summary Format
Individual Tank Emission Totals

Annual Emissions Report

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	0.96	0.31	1.27

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR: 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-C01.00

HAUL ROAD FOR BORROW AREA

Traffic on roadways on the landfill site results in particulate matter emissions. These emissions are estimated using site-specific information and EPA published emission factors for roadways. The table below presents average site-specific values used to determine fugitive emissions from the borrow area haul road. The facility operates two articulated dump trucks to transport soil from the borrow area to the landfill for soil cover. See attached calculations for fugitive emissions calculations for the haul roads assuming 90 percent control. Attached is a summary of the emissions based on AP-42, Fifth Edition, Volume I: Chapter 13: Miscellaneous Sources 13.2.2 Unpaved Roads - Final Section.

The borrow area haul road is unpaved and approximately 0.57 miles in length. Water spray is routinely applied to the haul road to reduce dust emissions. In order to reduce particulate emissions from the haul road, the facility regularly applies water. The amount and frequency of application is documented in order to achieve the assumed higher particulate control efficiency of 90%.

BRIDGETON LANDFILL, L.L.C.
HAUL ROAD EMISSIONS

Emission Point 10: Unpaved Road Traffic - Fugitive Emissions

*AP-42, Fifth Edition, Volume I Chapter 13: Miscellaneous Sources 13.2.2 Unpaved Roads - Final Section

For Vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

$E=k(s/12)^a(W/3)^b$

Table 13.2.2-2. Constants for Equations 1a and 1b

	PM-2.5*	PM-10	PM-30
k	0.23	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

*Assumed equivalent to TSP

where k, a, b, c and d are empirical constants (Reference 6) given below and
E = size-specific emission factor (lb/VMT)
s = surface material silt content (%) 8.30
W = mean vehicle weight (tons)
M = surface material moisture content (%)
S = mean vehicle speed (mph)
Haul R 0.57 miles

Vehicle Type	Vehicle Weight (tons) unloaded	Vehicle Weight (tons) loaded	Average Vehicle Weight (tons)	Average Vehicle Speed (mph)	PM10 Emission Factor (lb/VMT)	PM10 Emissions (lb/yr)
Articulated Dump T	9230	33	48	40.5	3.4726	36,538.87
					PM10 emissions (lbs)	**36,538.87**
					Uncontrolled PM10 emissions (tons)	**18.27**
					Controlled PM10 Emissions (tons)	**1.83**

BRIDGETON LANDFILL, L.L.C.
HAUL ROAD EMISSIONS

:rnission Point 10: Unpaved Road Traffic - Fugitive Emissions

AP_ Fifth Edition, Volume I Chapter 13: Miscellaneous Sources 13.2.2 Unpaved Roads - Final Section

:or Vehicles traveling on unpaved surfaces at industrial sites, emissions are estimated from the following equation:

:=k(s/12)^a(W/3)^b

Table 13.2.2-2. Constants for Equations 1a and 1b

	PM-2.5*	PM-10	PM-30*
k	0.23	1.5	4.9
a	0.9	0.9	0.7
b	0.45	0.45	0.45

*Assumed equivalent to TSP

/here k, a, b, c and d are empirical constants (Reference 6) given below and
: = size-specific emission factor (lb/VMT)
: = surface material silt content (%) 8.30
V = mean vehicle weight (tons)
A = surface material moisture content (%)
; = mean vehicle speed (mph)
Haul R(0.57 miles

Vehicle Type	Vehicle Weight (lbs)	Number of Wheels	Loaded Mean Vehicle Weight (tons)	Unpaved Haul Road PM10 Emission Factor (lb/VMT)	PM10 Emissions (lbs/Year)
Articulated Dump Trucks	9230	33	48	40.5 3.4726	36,538.87
				PM10 emissions (lbs)	**36,538.87**
				Uncontrolled PM10 emissions (tons)	**18.27**
				Controlled PM10 Emissions (tons)	**1.83**

Form 2.0 EMISSION POINT INFORMATION

Facility Name	County FIPS No.	Plant No.	Year of Data
Bridgeton Landfill, LLC	189	0312	2004

1. POINT IDENTIFICATION

Point No.	SIC Code	Point Description
10	4953	Haul Road, Borrow Area

Source Classification Code (SCC)	Emission Factor Units	Number of SCCs Used with this Point
50100401	lbs/VMT	1

SCC Description

Unpaved Road Traffic: Fugitive Emissions

2. STACK/VENT PARAMETERS

Stack No.	Height (Ft)	Diameter (Ft)	

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

3. Air Pollution Control

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs
CD-002	61			90						

4. OPERATING RATE/SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
4,403	VMT	8	25	25
		Day/week 5		
Maximum Hourly Design Rate	**Units/Hr**	**Week/Year**	**Jul-Sep (%)**	**Oct-Dec (%)**
5.06	VMT/Hr	52	25	25

5. Emission Calculations

	AP 42/Other Reference	List other worksheets
		2.7

Air Pollutant	Source	Emission Factor (Lbs/Unit)	Ash or Sulfur (%)	Control Efficiency (%)	Actual Emissions (Tons/Yr)	Maximum Hourly (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
PM10	2.7	1.03		90	0.23	0.52	2.27	22.72
SOx								
NOx								
VOC								
CO								
Lead								
HAPs								

Form 2.7 HAUL ROAD FUGITIVE EMISSIONS WORKSHEET

Facility Name	FIPS County No.	Plant No.	Year of Data
Bridgeton Landfill, LLC	189	0312	2004

***** PLEASE NOTE *****

If the sum of all Vehicle Miles Traveled (VMT) for all haul roads and trucks is less than 100 VMT, then the PM10 emissions for all the haul roads do not need to be reported on these forms. However, if the emissions are not reported, documentation on the actual annual VMT figures for the facility must be provided.

1] HAUL ROAD INFORMATION

Point No.	AIR ID-Pt	SCC
10		50100401

Length of Road (Miles)	Silt Content (%)	Surface Material of Road
0.57	8.3 (Default = 8.3%)	Rock

Surface Material Moisture Content (%)	Days of Rain with at least 0.01" per Year
0.2 (Default = 0.2%)	105 (Default = 105 Days)

Type of Dust Control (Check One)	Control Eff %
☐ Surfactant Spray	90
☑ Water Spray Documented	> 50
☐ Water Spray	50
☐ No Control	0
☐ Other (Specify)	

2] HAUL TRUCK INFORMATION

Make/Model	Unloaded Truck Wt (Tons)
Articulated dump trucks	33
Average Wt of Material per Load (Ton)	**Average Loaded Truck Wt (Tons)**
15	48
Average Truck Speed (MPH)	
5	

3] MATERIAL HAULED

Type of materials(s) Hauled	List any permit conditions limiting the amount hauled.
Soil Cover	NA
Annual Amount Hauled (Tons)	**Maximum Hourly Amount Hauled (Tons)**
138,456	66.6

4] CALCULATION OF ANNUAL VEHICLE MILES TRAVELED (VMT)

ANNUAL VMT =

2 x {Length of Haul Road} x {Annual Amount Hauled} / {Average Wt of Material per Load}

Annual VMT	Reportable Level = the Sum of all Road VMT > 100	Maximum Hourly VMT
10,523		5.06

5] CALCULATION OF HAUL ROAD EMISSION FACTORS

PM10 EMISSION FACTOR =

2.6 x ({Silt Content (%)} / 12)^0.8[({Unloaded Truck Wt}+{Average Loaded Truck Wt})/6]^0.4 x [(365 - {Days of Rain}) / 365] /[{Surface Material Moisture Content (%)}/0.2]^0.3

*If Average Truck Speed is <15 (MPH), multiply the equation by (Average Truck Speed/15)

5] PM10 Emission Factor

1.30 Lbs PM10 / VMT

The PM10 emission factor for the haul roads can be calculated using the equation from the AP 42 section on Unpaved Haul Roads (Section 13.2.2) provided in Block 5 of this worksheet. When using these equations, PM10 emission factors should be calculated for each separate haul road and type of haul truck. The Stone Quarrying SCC number (3-05-020-11) should be used as the SCC number on Form 2.0. The calculated PM10 emission factor should be entered in the PM10 Box in Block 7 on Form 2.0.

A more detailed discussion on dust control method and the resulting Control Efficiency (%) can be found in the AP 42 Section 13.2.2. The appropriate dust control method should be checked in Block 1 and the control efficiency should be entered in the PM10 box of Block 9 on Form 2.0.

6] ALTERNATE METHODS TO ESTABLISH THE HAUL ROAD PM10 EMISSION FACTOR

[illegible]

MO 780-1445 (8/99) Duplicate this form as needed.

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR – 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-D03.00

1	MUNICIPAL SOLID WASTE LANDFILL
2	3500 SCFM ENCOSED FLARE #1
8	2500 SCFM TEMPORARY OPEN FLARE (TO BE REMOVED IN 2004)
8	3500 SCFM ENCOSED FLARE #2 (TO REPLACE TEMPORARY FLARE IN 2004)

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS: 189 PLANT: 0312 YEAR – 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-D03.00

manufactured by John Zink. Previously, the landfill operated two temporary 1000 SCFM skid mounted flares and one enclosed 2500 SCFM flare. During relocation of the enclosed flare in 2002, the flare experienced severe damage beyond repair. During this period, the landfill was in the process of updating the gas collection and control system design plan. With SLCDOH approval, Bridgeton replaced the 2500 SCFM enclosed flare with a 2000 SCFM skid-mounted flare rental to immediately handle the landfill gas being generated. The 2000 SCFM skid-mounted flare was subsequently replaced with a 2500 SCFM in July 2003 and the rental flare was shutdown and made non-operational.

The 2500 SCFM open flare manufactured by Perennial Energy was installed in December 2002 to temporarily manage landfill gas collected at the site until the permanent gas control system was permitted and constructed. The open flare will be taken off-line upon installation of the second 3500 SCFM enclosed flare. The 2500 SCFM Open Flare is designed for minimum 98 percent destruction efficiency of waste hydrocarbons and organic compounds.

In December 2003 approval was obtained from Tim Froeshner, SLCDOH, to install two-3500 SCFM enclosed flares to effectively control landfill gas within the 52 acre sanitary landfill. The first 3500 SCFM enclosed flare was brought on-line May 2004. Skid-mounted flare #1 taken was offline and decommissioned upon operations of the enclosed flare. Skid-mounted flare #2 was taken offline December 5, 2003 due to limitations of landfill gas collection within the waste mass, the additional flare capacity could not be supported.

The second 3500 SCFM enclosed flare is being constructed and shall commence operations at the landfill in 2004. The existing 2500 SCFM open flare will be taken off-line upon installation of the second enclosed flare. An initial performance test of each enclosed flares will be completed within 180 days of initial startup.

The approved gas control system includes two 3500 SCFM enclosed flares. To date the first enclosed flare was brought on-line in May 2004. The second 3500 SCFM enclosed flare is slated to be installed during the latter part of 2004. The capacity of the two enclosed flares will adequately manage the landfill gas generated within the 52-acre sanitary landfill.

Both flares are manufactured by John Zink, model 11' X 40' ZTOF. Specifications on the two flares are enclosed. The Enclosed Flare System handles a maximum flow rated of 3500 SCFM each with a minimum 98 percent destruction efficiency of waste hydrocarbons and organic compounds. It was assumed the facility's landfill gas composition (by volume) was 50% methane. Emissions from

INSTALLATION: BRIDGETON SANITARY LANDFILL
FIPS : 189 PLANT: 0312 YEAR – 2004

POTENTIAL ESTIMATED EMISSION CALCULATIONS FOR FORM OP-D03.00

the second enclosed flare were estimated utilizing APCP's EIQ landfill spreadsheet (enclosed).

The collection and control system must be operational at all time in accordance with NSPS and MACT. Potential to emit emissions were determined based on the collection and control of 7000 SCFM of landfill gas with an average gas collection efficiency of 75 percent was assumed in accordance with, *Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume I: Chapter 2: Solid Waste Disposal.*

Attached is fugitive landfill gas emissions based on landfill gas generation using AP-42 default values as determined in AP-42, Fifth Edition, *Volume I Chapter 2.4: Municipal Solid Waste Landfills.* Typical landfill gas collection ranges from 60 to 85 percent, the attached calculations assume 75 percent collection based on a landfill generation rate of 7000 SCFM with landfill gas composition (by volume) of 50% methane.

As outlined in the Air Construction Source Notification, dated October 8, 2003, the flares exceed the PTE thresholds for PSD evaluation. Under New Source Review Revisions, promulgated March 3, 2003, the revisions exclude the flares from major new source permitting. The flares are required under NSPS and MACT and meet 40 CFR Part 52.21(b)(32)(iv) specifications as a pollution control project (PCP). The *Notice process for listed projects* in accordance with 40 CFR 51.165(e)(4) was submitted upon Bridgeton Landfill's behalf for the construction of two 3500 SCFM enclosed flares and subsequently approved by the St. Louis County Department of Health.

Attached are the potential to emit calculations for the existing control systems consisting of one 2500 SCFM open flare and one 3500 SCFM enclosed flare and the permitted control system consisting of two 3500 SCFM enclosed flares.

BRIDGETON SANITARY LANDFILL METHANE GENERATION

Model Parameters

Lo : 100.00 m^3 / Mg
k : 0.0400 1/yr
NMOC : 595.00 ppmv
Methane : 50.0000 % volume
Carbon Dioxide : 50.0000 % volume

Landfill Parameters

Landfill type : No Co-Disposal
Year Opened : 1979 Current Year : 2004 Closure Year: 2006
Capacity : 13000000 Mg
Average Acceptance Rate Required from
Current Year to Closure Year : 180681.00 Mg/year

Maximum CH4 GEN:	**37,540,000**
CH4 GEN:	2,523
LFG GEN:	5,045

Model Results

Year	Refuse In Place (Mg)	Methane Emission Rate (Mg/yr)	(Cubic m/yr)
1980	1.423E+05	3.799E+02	5.694E+05
1981	2.850E+05	7.456E+02	1.118E+06
1982	4.267E+05	1.095E+03	1.641E+06
1983	6.738E+05	1.711E+03	2.565E+06
1984	9.208E+05	2.303E+03	3.452E+06
1985	1.168E+06	2.872E+03	4.305E+06
1986	1.415E+06	3.419E+03	5.125E+06
1987	1.925E+06	4.646E+03	6.964E+06
1988	2.435E+06	5.825E+03	8.731E+06
1989	2.945E+06	6.958E+03	1.043E+07
1990	3.350E+06	7.767E+03	1.164E+07
1991	3.979E+06	9.139E+03	1.370E+07
1992	4.422E+06	9.964E+03	1.493E+07
1993	4.880E+06	1.079E+04	1.618E+07
1994	5.337E+06	1.159E+04	1.737E+07
1995	5.799E+06	1.237E+04	1.854E+07
1996	6.460E+06	1.365E+04	2.046E+07
1997	7.200E+06	1.509E+04	2.261E+07
1998	8.027E+06	1.670E+04	2.504E+07
1999	8.856E+06	1.826E+04	2.737E+07
2000	9.800E+06	2.006E+04	3.008E+07
2001	1.079E+07	2.193E+04	3.287E+07
2002	1.194E+07	2.414E+04	3.618E+07
2003	**1.264E+07**	**2.504E+04**	**3.754E+07**
2004	1.282E+07	2.454E+04	3.679E+07
2005	1.300E+07	2.406E+04	3.607E+07
2006	1.300E+07	2.312E+04	3.466E+07
2007	1.300E+07	2.222E+04	3.330E+07
2008	1.300E+07	2.134E+04	3.199E+07
2009	1.300E+07	2.051E+04	3.074E+07

Form 2.0 EMISSION POINT INFORMATION

Facility Name	FIPS County No.	Plant No.	Year of Data
Bridgeton Sanitary Landfill, LLC	189	0312	2004

[1] POINT IDENTIFICATION

Point No.	AIRS ID - P	SIC Code	Point Description
EP1		4953	Municipal Solid Waste Landfill

Source Classification Code (SC	Emission Factor Units	Number of SCCs Used with this Point	Seg. No.
50100402	Acres of Landfill	1	

SCC Description: Fugitive Emissions

[2] STACK/VENT PARAMETERS

Stack No.	AIRS ID - St	Height (Ft)	Diameter (Ft)	For a non-circular stack Diameter = (1.128A)^12 (A = Cross Sectional Area in sq. feet)

Temperature (F)	Velocity (Ft/Min)	Flow Rate (Cu Ft/Min)	List other points sharing this stack.

[3] Air Pollution Control Equipment

Device No.	Device Code	Description of Control Device	Capture Efficiency (%)	Control Device Efficiency (%) PM10	SOx	NOx	VOC	CO	Lead	HAPs
CD1	23	Collection and	75							
		Control System					98			98

[4] OPERATING RATE/SCHEDULE

Annual Throughput	Units	Hours/Day	Jan-Mar (%)	Apr-Jun (%)
52	Acres of Landfill	24	25	25
		Day/week		
Maximum Hourly Design Rate	Units/Hr	7	Jul-Sep (%)	Oct-Dec (%)
52.0000	Acres of Landfill	Week/Year	25	25
		52		

Emission Calculations

Source of Emissions Factor. (List below)	AP 42/Other Reference	[5]List other worksheets
CEM 3. Mass Balance 5. Other	AP-42 Table 2.4-5	2.0L, 2T
Stack Test 4. AP-42 or FIRE 6. Eng Cal	## Worksheet Number	

Air Pollutant	[6] Source	[7] Emission Factor (Lbs/Unit)	[8] Ash or Sulfur (%)	[9] Overall Control Efficiency	[10] Actual Emissions (Tons/Yr)	Maximum Hourly(Lbs/Hr) (Lbs/Hr)	Potential Controlled (Tons/Yr)	Potential Uncontrolled (Tons/Yr)
M10					0.00			
Ox								
Ox					0.00			
OC	2L	647.0			16.82	2.33	10.22	40.87
O					0.00			
ead					0.00			
APs	2T	82.2			2.14	0.296	1.296	5.184

LANDFILL WORKSHEET TYPICAL

This worksheet is for open or closed landfills.

[redacted]

Based on AP-42, 2.4, 11/98. Created 10/03

General Information

Facility Name:		
FIPS No:		
Plant ID:		
Reporting year:		
Years in operation:		(t)
Ave.annual rate of fill (Mg):		(R)
Time since closure (years):		c
Acres of Landfill:		
Collection efficiency (%):		
Gas sent offsite (mmcf):		

Control Device Information

	Control Device 1	Control Device 2
Type		
Destruction efficiency (%)		
% of gas to this control		50.00

Defaults

	Default Value	
L for Qch4=		
k for Qch4=		
Cs (for SOX):		ppmv as S
Ccl (for HCl):		ppmv as Cl
Temp of LF gas °C:		(T)

Ozone Season Information: (Throughput/365)

Emission T	Emission Factor	
Fugitive		acres/day
To control		mmcf/yr

Gas Generation Information

	Throughput m3/yr	mmcf/yr
QCH4 Total	52,091,585	1839.35
QCH4 Uncollected	13,022,896	459.84
QCH4 Collected	39,068,689	1379.52
QCH4 remaining on site	39,068,689	1379.52
QCH4 Collected to CD1	19,534,344	689.76
QCH4 Collected after CD1	390,687	13.80
QCH4 Collected to CD2	19,534,344	689.76
QCH4 Collected after CD2	390,687	13.80

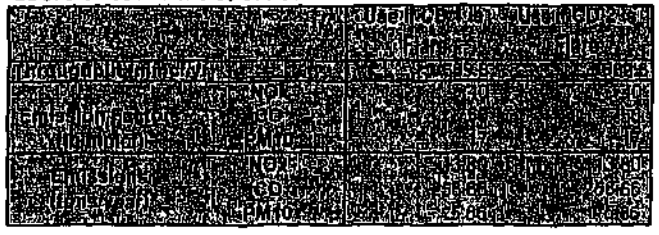
	Equations
QCH4 Total	Qch4=L R (e^-kc - e^-kt)
QCH4 Uncollected	QCH4*(1-CE)
QCH4 Collected	QCH4*(CE)
QCH4 remaining on site	QCH4 Collected - sent off site
QCH4 Collected to CD1	QCH4on site*(CE)
QCH4 Collected after CD1	QCH4on site*(CE)*(1-DE)
QCH4 Collected to CD2	QCH4on site*(CE)
QCH4 Collected after CD2	QCH4on site*(CE)*(1-DE)

Conversion Factors	
mmcf to m3	28,320.6
kg to lb	2.2046

EMISSION DATA for all control devices involving combustion must report SOx and HCl

Emissions Data - Flare

SCC: 5-01-004-10 or 5-03-006-01



Emissions Data - Boiler/Steam Turbine

SCC: 5-01-004-23

		Use if CD 1 is Boiler	Use if CD 2 is Boiler
Throughput (mmcf/yr)		689.8	689.8
Emission Factors (lb/mmcf)	NOx	33	33
	CO	6	6
	PM10	8	8
Emissions (tons/year)	NOx	11.38	11.38
	CO	1.97	1.97
	PM10	2.83	2.83

Emissions Data - Internal Combustion Engine

SCC: 5-01-004-21

		Use if CD 1 is IC Engine	Use if CD 2 is IC Engine
Throughput (mmcf/yr)		689.8	689.8
Emission Factors (lb/mmcf)	NOx	250	250
	CO	470	470
	PM10	48	48
Emissions (tons/year)	NOx	86.22	86.22
	CO	162.09	162.09
	PM10	16.55	16.55

Emissions Data - Gas Turbine

SCC: 5-01-004-20

		Use if CD 1 is Gas Turbine	Use if CD 2 is Gas
Throughput (mmcf/yr)		689.8	689.8
Emission Factors (lb/mmcf)	NOx	87	87
	CO	230	230
	PM10	22	22
Emissions (tons/year)	NOx	30.00	30.00
	CO	79.32	79.32
	PM10	7.59	7.59

Emissions Data

	Fugitives	To Control Device 1	To Control Device 2
Throughput	Acres	mmcf methane/yr	mmcf methane/yr
VOC Emission Factor	lb/acre	lb/mmcf	lb/mmcf
HAP Emission Factor	lb/acre		
HAP Emission Factor for Control Devices (includes HCl)		lb/mmcf	lb/mmcf
SOx Emission Factor for Control Devices		lb/mmcf	lb/mmcf
SOx Emissions		9,622 lbs/yr	9622 lb/yr

VOC and HAP Emissions

		Constants			Fugitive Emissions based on 13,022,896 m3/yr		Collected Emissions to CD 1 based on 19,534,344 m3/yr	
Chemical	CAS #	molec. weight	Default Conc. ppmv	NMOC factor	QNMOC	Fugitive Emissions lb/yr	QNMOC	Collected Uncontrolled lb/yr
HAPS ONLY								
111 Trichloroethane	71556	133.41	0.48	12.02	11.38	[illegible]	17.07	[illegible]
Dichloromethane	75092	84.94	14.3	7.65	338.93	[illegible]	508.40	[illegible]
12 Dichloroethane	107062	98.96	0.41	8.92	9.72	[illegible]	14.58	[illegible]
Chloroform	67663	119.39	0.03	10.76	0.71	[illegible]	1.07	[illegible]
Chloromethane	74873	50.49	1.21	4.55	28.68	[illegible]	43.02	[illegible]
Perchloroethylene	127184	165.83	3.73	14.94	88.41	[illegible]	132.61	[illegible]
Mercury	20133	200.61	0.000292	18.08	0.007	[illegible]	0.010	[illegible]
Hydrochloric Acid	7647010							[illegible]
TOTAL HAPs ONLY (lb/yr)						4275.34	HAP total Includes HCl	11,125.20
TOTAL HAPs ONLY (tons/yr)						[illegible]		5.56
HAPS & VOC								
1122 Tetrachloroethane	79345	167.85	1.11	15.13	26.31	[illegible]	39.46	[illegible]
11 Dichloroethane	75343	98.97	2.35	8.92	55.70	[illegible]	83.55	[illegible]
11 Dichloroethylene	75354	96.94	0.2	8.74	4.74	[illegible]	7.11	[illegible]
12 Dichloropropane	78875	112.99	0.18	10.18	4.27	[illegible]	6.40	[illegible]
Acrylonitrile	107131	53.06	6.33	4.78	150.03	[illegible]	225.05	[illegible]
Carbon disulfide	75150	76.13	0.58	6.86	13.75	[illegible]	20.62	[illegible]
Carbon tetrachloride	56235	153.84	0.004	13.86	0.09	[illegible]	0.14	[illegible]
Carbonyl sulfide	463581	60.07	0.49	5.41	11.61	[illegible]	17.42	[illegible]
Chlorobenzene	108907	112.56	0.25	10.14	5.93	[illegible]	8.89	[illegible]
Chloroethane	75003	64.52	1.25	5.81	29.63	[illegible]	44.44	[illegible]
Dichlorobenzene	106467	147	0.21	13.25	4.98	[illegible]	7.47	[illegible]
Ethyl benzene	100414	106.16	4.61	9.57	109.26	[illegible]	163.90	[illegible]
Ethylene dibromide	106934	187.88	0.001	16.93	0.02	[illegible]	0.04	[illegible]
Hexane	110543	86.18	6.57	7.77	155.72	[illegible]	233.58	[illegible]
Vinyl chloride	75014	62.5	7.34	5.63	173.97	[illegible]	260.96	[illegible]
Methyl ethyl ketone	78933	72.11	7.09	6.5	168.04	[illegible]	252.07	[illegible]
Methyl isobutyl ketone	108101	100.16	1.87	9.03	44.32	[illegible]	66.48	[illegible]
Trichloroethylene	79016	131.4	2.82	11.84	66.84	[illegible]	100.26	[illegible]
Xylene	1330207	106.16	12.1	9.57	286.79	[illegible]	430.19	[illegible]
Benzene	71432	78.11	11.1	7.04	263.09	[illegible]	394.63	[illegible]
Toluene	108883	92.13	39.3	8.3	931.48	[illegible]	1397.21	[illegible]
TOTAL HAPs & VOC (lb/yr)						24,276.19		36,414.28
TOTAL HAPs & VOC (tons/yr)						12.14		18.21
VOC ONLY								
2 Propanol		60.11	50.1	5.42	1167.45	[illegible]	1751.18	[illegible]
Bromodichloromethane		163.83	3.13	14.77	74.19	[illegible]	111.28	[illegible]
Butane		58.12	5.03	5.24	119.22	[illegible]	178.83	[illegible]
Dimethyl sulfide		62.13	7.82	5.6	185.35	[illegible]	278.02	[illegible]
Ethanol		46.08	27.2	4.15	644.69	[illegible]	967.03	[illegible]
Fluorotrichloromethane		137.38	0.76	12.38	18.01	[illegible]	27.02	[illegible]
Pentane		72.15	3.29	6.5	77.98	[illegible]	116.97	[illegible]
Propane		44.09	11.1	3.97	263.09	[illegible]	394.63	[illegible]
TOTAL VOC (lb/yr)		Use this total for VOC emissions reported on Form 2.0 (Includes VOCs and HAPs reported as VOCs)				33,645.00		50,467.49
TOTAL VOC (tons/yr)						16.82		25.23

Collected Controlled by CD 1 Emissions based on 390,667 m3/yr		Collected Emissions to CD 2 based on 19,534,344 m3/yr		Collected Controlled by CD 2 Emissions based on 390,687 m3/yr	
QNMOC	Collected Controlled lb/yr	QNMOC	Collected Uncontrolled lb/yr	QNMOC	Collected Controlled lb/yr
0.34	4.10	17.07	[illegible]	0.34	4.10
10.17	77.79	508.40	[illegible]	10.17	77.79
0.29	2.60	14.58	[illegible]	0.29	2.60
0.02	0.23	1.07	[illegible]	0.02	0.23
0.86	3.91	43.02	[illegible]	0.86	3.91
2.65	39.62	132.61	[illegible]	2.65	39.62
0.0002	0.00	0.01	[illegible]	0.00	0.00
	4,712.19		[illegible]		4,712.19
Use to verify HAP emissions in Form 2T Column10	4,840.45	HAP total includes HCl	11125.20	Use to verify HAP emissions in Form 2T Column10	4840.45
	[illegible]		6.56		[illegible]
0.79	11.94	39.46	[illegible]	0.79	11.94
1.67	14.91	83.55	[illegible]	1.67	14.91
0.14	1.24	7.11	[illegible]	0.14	1.24
0.13	1.30	6.40	[illegible]	0.13	1.30
4.50	21.51	225.05	[illegible]	4.50	21.51
0.41	2.83	20.62	[illegible]	0.41	2.83
0.00	0.04	0.14	[illegible]	0.00	0.04
0.35	1.88	17.42	[illegible]	0.35	1.88
0.18	1.80	8.89	[illegible]	0.18	1.80
0.89	5.16	44.44	[illegible]	0.89	5.16
0.15	1.98	7.47	[illegible]	0.15	1.98
3.28	31.37	163.90	[illegible]	3.28	31.37
0.00	0.01	0.04	[illegible]	0.00	0.01
4.67	36.30	233.58	[illegible]	4.67	36.30
5.22	29.38	260.96	[illegible]	5.22	29.38
5.04	32.77	252.07	[illegible]	5.04	32.77
1.33	12.01	66.48	[illegible]	1.33	12.01
2.01	23.74	100.26	[illegible]	2.01	23.74
8.60	82.34	430.19	[illegible]	8.60	82.34
7.89	55.56	394.63	[illegible]	7.89	55.56
27.94	231.94	1397.21	[illegible]	27.94	231.94
Use to verify HAP emissions in Form 2T Column10	728.29		36,414.28	Use to verify HAP emissions in Form 2T Column10	728.29
	0.36		18.21		0.36
35.62	193.08	1781.18	[illegible]	35.62	193.08
2.23	32.87	111.28	[illegible]	2.23	32.87
3.58	18.74	178.83	[illegible]	3.58	18.74
5.56	31.14	278.02	[illegible]	5.56	31.14
19.34	80.26	967.03	[illegible]	19.34	80.26
0.54	6.69	27.02	[illegible]	0.54	6.69
2.34	15.21	116.97	[illegible]	2.34	15.21
7.89	31.33	394.63	[illegible]	7.89	31.33
Use to verify VOC emissions in Form 2.0 Column10	1,009.35		50,467.49	Use to verify VOC emissions in Form 2.0 Column10	1,009.35
	0.50		25.23		0.50

Form 2.T HAZARDOUS AIR POLLUTANT WORKSHEET

Facility Name	FIPs County No.	Plant No.	Year of Data
BRIDGETON LANDFILL, LLC	189	0312	2004
Point No.	**Source Classification Code (SCC)**		**Seg. No.**
003	5-01-004-02		

[1] HAP Chemical	[2] CAS Number	[3] Amount used or Handled (lb/yr)	[4] Uncontrolled amount emitted (lb/yr)	[5] Uncontrolled Emissions Reported as VOC or PM10 (lb/yr)	[6] Uncontrolled Emissions Reported as HAPs (lb/yr)	[7] HAP Control Device(s)	[8] Control Efficiency (%)	[9] Controlled Emissions Reported as VOC or HAPs (lb/yr)	[10] Controlled Emissions Reported as HAPs (lb/yr)
111 Trichloroethane	71556	136.75	136.75	0	136.75	N/A	0	0	136.75
Dichloromethane	75092	2,592.84	2,592.84	0	2,592.84	N/A	0	0	2592.84
12 Dichloroethane	107062	86.68	86.68	0	86.68	N/A	0	0	86.68
Chloroform	67663	7.65	7.65	0	7.65	N/A	0	0	7.65
Chloromethane	74873	130.49	130.49	0	130.49	N/A	0	0	130.49
Perchloroethylene	127184	1,320.80	1,320.80	0	1,320.80	N/A	0	0	1320.80
Mercury	20133	0.13	0.13	0	0.13	N/A	0	0	0.13
1122 Tetrachloroethane	79345	398.05	398.05	398.05	0	N/A	0	398.05	0
11 Dichloroethane	75343	496.83	496.83	496.83	0	N/A	0	496.83	0
11 Dichloroethylene	75354	41.43	41.43	41.43	0	N/A	0	41.43	0
12 Dichloropropane	78875	43.43	43.43	43.43	0	N/A	0	43.43	0
Acrylonitrile	107131	717.15	717.15	717.15	0	N/A	0	717.15	0
Carbon disulfide	75150	94.30	94.30	94.30	0	N/A	0	94.30	0
Carbon tetrachloride	56235	1.31	1.31	1.31	0	N/A	0	1.31	0
Carbonyl sulfide	463581	62.83	62.83	62.83	0	N/A	0	62.83	0
Chlorobenzene	108907	60.08	60.08	60.08	0	N/A	0	60.08	0
Chloroethane	75003	172.13	172.13	172.13	0	N/A	0	172.13	0
Dichlorobenzene	106467	65.95	65.95	65.95	0	N/A	0	65.95	0
Ethyl benzene	100414	1,045.66	1,045.66	1,045.66	0	N/A	0	1045.66	0
Ethylene dibromide	106934	0.40	0.40	0.40	0	N/A	0	0.40	0
		HAP Emission totals ==>		Sum (lb/yr) 3,199.58	Sum (lb/yr) 4,275.34			Sum (lb/yr) 3,199.58	Sum (lb/yr) 4,275.34

[11] Uncontrolled HAP Emission Factor = Sum of Uncontrolled Emissions Reported as HAPs (total of column 6) / Annual Throughput (Form 2.0)

HAP Emission Factor

Enter the HAP emission factor for all HAP chemicals that are NOT reported as VOCs or PM10 from block 11 above as the HAP Emission Factor on Form 2.0, Emission Point Information for the associated emissions point.

Form 2.T HAZARDOUS AIR POLLUTANT WORKSHEET

Facility Name	FIPs County No.	Plant No.	Year of Data
BRIDGETON LANDFILL, LLC	189	0312	2004
Point No.	**Source Classification Code (SCC)**		**Seg. No.**
003	5-01-004-02		

[1] HAP Chemical	[2] CAS Number	[3] Amount used or Handled (lb/yr)	[4] Uncontrolled amount emitted (lb/yr)	[5] Uncontrolled Emissions Reported as VOC or PM10 (lb/yr)	[6] Uncontrolled Emissions Reported as HAPs (lb/yr)	[7] HAP Control Device(s)	[8] Control Efficiency (%)	[9] Controlled Emissions Reported as VOC or HAPs (lb/yr)	[10] Controlled Emissions Reported as HAPs (lb/yr)
Hexane	110543	1,209.94	1,209.94	1209.94	-	N/A	0	1209.94	0
Vinyl chloride	75014	979.45	979.45	979.45	-	N/A	0	979.45	0
Methyl ethyl ketone	78933	1,092.29	1,092.29	1092.29	-	N/A	0	1092.29	0
Methyl isobutyl ketone	108101	400.23	400.23	400.23	-	N/A	0	400.23	0
Trichloroethylene	79016	791.37	791.37	791.37	-	N/A	0	791.37	0
Xylene	1330207	2,744.58	2,744.58	2744.58	-	N/A	0	2744.58	0
Benzene	71432	1,852.14	1,852.14	1852.14	-	N/A	0	1852.14	0
Toluene	108883	7,731.25	7,731.25	7731.25	-	N/A	0	7731.25	0
		Previous Page Totals	3,199.58	4,275.34			3,199.58	4,275.34	
		HAP Emission totals ==>	Sum (lb/yr) 20,000.84	Sum (lb/yr) 4,275.34			Sum (lb/yr) 20,000.84	Sum (lb/yr) 4,275.34	

[11] Uncontrolled HAP Emission Factor = Sum of Uncontrolled Emissions Reported as HAPs (total of column 6) / Annual Throughput (Form 2.0)

HAP Emission Factor **82.2** lb/acre

Enter the HAP emission factor for all HAP chemicals that are NOT reported as VOCs or PM10 from block 11 above as the HAP Emission Factor on Form 2.0, Emission Point Information for the associated emissions point.

Bridgeton Landfill

11' X 40' ZTOF
Enclosed Flare System

DESIGN CRITERIA

Flare Gas Stream

Type:	landfill
Composition:	50% CH4 (maximum) 50% CO2, air, inerts
Lower Heating Value:	455 BTU/SCF
Temperature:	100 °F
Flow Rate:	3500 SCFM (maximum)
Waste Heat Release:	95,623,000 BTU/hr (maximum)

NOTE: *The minimum flow rate is limited by the particular blower selection and configuration. This flare is capable of potentially achieving a 10:1 turndown based on heat release.*

Mechanical

Design Wind Speed:	110 mph
Ambient Temperature:	-20 °F to 120 °F
Electrical Area Classification:	non-hazardous
Elevation:	sea level

Process

Smokeless Capacity:	100%
Operating Temperature:	1400 °F to 1800 °F (2000 °F shutdown)
Retention Time:	0.7 seconds at 1800 °F (minimum)
Flare Inlet Pressure:	5" H_2O (maximum, excluding flame arrester)
Ambient Pressure:	14.7 psia

NOTE: *Low methane concentrations may require auxiliary fuel to initiate combustion and maintain temperature.*

Blower

Capacity:	3500 SCFM (maximum each)
Quantity:	One
Pressure Requirement:	-40" w.c. blower suction (maximum) +10" w.c. blower discharge (maximum)

Utilities

Pilot Gas (intermittent):	22 SCFH of propane at 7-10 psig
Electricity:	460 V, 3 ph, 60 Hz for blower control, if blower is provided by John Zink, otherwise 120 V, single ph, 60 Hz is only for flare controls

Expected Flue Gas

Operating Temperature	1600°F	1800°F
CO_2 Volume %	7.0	8.1
H_2O Volume %	8.2	9.2
N_2 Volume %	72.6	71.8
O_2 Volume %	12.2	10.9

Expected Emission Range (Design Flow)(1)

Operating Temperature	1600°F	1800°F
Overall Destruction Efficiency(2)	98%	99%
NOx, lb / MMBTU(3)	0.06	0.08
CO, lb / MMBTU(4)	0.20	0.15

(1) Expected emission rates at lower operating temperatures are available upon request.
(2) Typical sulphur containing compounds are expected to have greater than 98% oxidation efficiency.
(3) Excludes NOx from fixed nitrogen.
(4) Excludes CO contribution present in landfill gas.

NOTE: *Expected emissions are based on field tests of operating units and the higher heating value (HHV) of the landfill gas. Destruction efficiency, NOx, and CO emissions shown are valid for combustion of landfill gas only. These expected emissions are the same for the simultaneous combustion of landfill gas and condensate injection within the specified design range for typical municipal solid waste condensate. A condensate composition analysis is required to verify specific expected emission. Expected emissions are not guaranteed unless expressly stated in this proposal.*

SCOPE OF SUPPLY

The following scope of supply is for the base system only. Please refer to sections II and III for options.

- One (1) 11'-0" diameter x 50'-0" overall height, A-36 carbon steel flare stack enclosure.
- Two (2) 1" layers of *A.P. Green* (or equal) ceramic fiber refractory on Inconel pins and keepers providing optimal temperature protection. The 1" surface layer of 8 lb density refractory (2400 °F surface temperature rating) is overlapped horizontally for additional protection. This layer is backed with an additional 1" layer of 6 lb density refractory (2400 °F surface rating temperature).
- One (1) burner manifold assembly with 14" diameter flanged inlet connection.
- Six (6) **V-Mix™** Biogas Burners with stainless steel anti-flashback tips for high temperature corrosion resistance and maximum flame stability through the full range of design flow rates.
- One (1) **Tru-Lite™** ignitor assembly for use during start-up cycles. This externally mounted pilot provides simple operation and can be removed for maintenance without entering the stack.
- Four (4) bolted blade combustion air dampers with opposed blade design, providing air turndown control. Galvanized finish and stainless steel press-fit bearings ensure smooth, long term operation. A special, proprietary lower burner chamber design minimizes direct radiation on the damper for maximum service life.
- Two (2) 4" diameter NPT couplings with plug provided as sample ports at 90° apart located one-half stack diameter from the flare top for accurate emission testing.

NOTE: *These ports can be accessed by use of a temporary device such as power-lift vehicle or permanent ladder and platform equipment (refer to the optional equipment section for ladder and platform selection).*

- One (1) stainless steel rain cap consisting of overlapping tabs to provide weather protection at the refractory and flare shell interface.
- Four (4) thermocouple connections at various elevations for temperature monitoring.
- Exterior protection using SSPC-SP-6 sandblast and *Sherwin Williams* Zinc Clad II primer coating system, gray-green color, 4 mils DFT, for superior corrosion protection at shell temperatures to
- 750 °F.
- One (1) AISC designed, continuous base plate for high wind stability.
- Two (2) lifting lugs to assist in erection.
- Thermocouple conduit mounting brackets.

Item 2, Automatic Ignition and Control Station

Control Station Assembly

- One (1) self-supporting steel rack with electrical panels attached to the front side and pilot gas piping and instrumentation attached to the rear side.
- One (1) operator interface touch screen display for all setpoint changes, status, alarms, and shut down indications.
- One (1) weatherproof Flare Control Panel with a programmable logic controller for safe, overall system operation and control.
- One (1) flame scanner relay.
- One (1) 3/4 HP purge air blower motor starter.

- One (1) Pilot Gas Control System including a pressure regulator, fail-closed shutdown valve, manual block valve, and pressure indicator.
- The control station assembly is completely piped and wired in a *UL* approved shop and functionally tested simulating actual operations.

Stack Mounted Controls

- Four (4) combustion air dampers to control the operating temperature. Two dampers with automatically controlled louvers provided as part of the automatic temperature control feature. The remaining dampers utilize manually positioned louvers.
- One (1) Ignition Panel Assembly including a transformer, pilot spark electrode, and ignition wire. The enclosure is stack mounted for easy access to the pilot assembly.
- One (1) self-checking, ultraviolet flame scanner.
- One (1) purge air blower.
- One (1) high temperature shutdown thermocouple.
- Three (3) temperature monitoring thermocouples with location dependent on specific flow conditions.

Miscellaneous Accessories

- Three (3) operating manuals with essential operating instructions, appropriate vendor literature on instrumentation, and drawings combined in a three ring binder.
- 450 ft of thermocouple extension wire.
- One (1) gallon of field touch-up paint.

Bridgeton Landfill Authority, LLC

GCCS Revisions - New Flare(s) Air Construction Permit Determination

PROPOSED FLARES PTE CALCULATIONS and SCREEN ANALYSIS

[illegible]	Emission Factor [illegible]	Conservative PTE Emissions		Standard Flare AP-42 PTE Emissions	
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CO	0.15	29.45	129.00	28.69	[illegible]
NO_x	0.08	15.71	68.80	15.30	[illegible]
PM_{10}	0.042	8.25	36.12	8.03	[illegible]

Screen Model Variables					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3.6216	12.192	13,386,213	[illegible]	10,000	8 hour
1.9315	12.192	13,386,213	[illegible]	100❶	annual
1.0141	12.192	13,386,213	[illegible]	150	24 hour

[illegible]	
Maximum Flow Rate (SCFM)	7000
Maximum Hourly Design Rate (MMBtu/hr)	196.34
Annual Hours of Operation	8760
Annual Waste Heat Release (MMBtu/yr)	1,719,967

[illegible]	
Maximum Flow Rate (SCFM)	7000
Maximum Hourly Design Rate (MMBtu/hr)	191.24
Annual Hours of Operation	8760
Annual Waste Heat Release (MMBtu/yr)	1,675,262

Emission Assumptions	
Methane Contribution to GCCS	50%
GCCS inert air - non regulated	50%
Flare Heating Value (Btu/SCF)	467.48

[illegible]	
Averaging Period	EPA Multipling Factor
8 hour	0.7
24 hour	0.4
annual	0.08

[illegible]	
Heating Value (Btu/SCF)	
H_2O Vapor Saturated	1003.40
Dry	1020.00
Methane (CH_4) Component	
Mol%	93.18%
Mass%	86.99%

❶ NOTE: Federal standard for NOx pollutant is specifically for NO_2. Most of the emissison from combustion sources are emitted in the form of nitric oxide (NO), not NO_2. While some of the NO is converted to NO_2 by thermal reaction casued by relatively high temperatures during the combustion process, it is usually assumed that about 90% of the NOx is emitted to the atmosphere as NO where it can be transformed to NO_2. When the plume mixes with ambient air, atmospheric chemical reactions occur. For example, NO reacts with ozone (O_3) to form NO_2. This is usually the primary mechanism for converting NO to NO_2 in rural areas such as the location for the Butler County Landfill. In urban areas, other reactions such as those with hydrocarbon oxidation products (e.g. HO_2) and RO_2 radicals can be important. In either event, U.S. EPA recommends using a national default NO_2:NOx ratio of 0.75 - this is only valid for "screening" models, other methods are allowed by EPA but these are for "refined"-level modeling.

NOTE: emission calculations based on flare combustion and does not consider, non regulated, inert constitutents.

Bridgeton Landfill Authority, LLC

GCCS Revisions - New Flare(s) Air Construction Permit Determination

EXISTING FLARE SYSTEMS PTE and SCREEN ANALYSIS RESULTS

Pollutant	Emission Factor (lb/MMBtu)	Conservative LFG Emissions (lb/hr)	Conservative LFG Emissions (tpy)	Manufacturer AF-42 Emissions (lb/hr)	Manufacturer AF-42 Emissions (tpy)
CO	0.37	51.89	227.28	45.45	[illegible]
NO_x	0.068	9.54	41.77	8.35	[illegible]
PM_{10}	0.042	5.89	25.80	5.16	[illegible]

Screen Model Variables					
Emission Rate	Stack Height (m)	Heat Release	Screen Results	Standard	Duration
5.7386	9.144	8,599,123	[illegible]	10,000	8 hour
1.0547	9.144	8,599,123	[illegible]	100❶	annual
0.6514	9.144	8,599,123	[illegible]	150	24 hour

HHV Conservative Emission Variables Parameters (natural gas combustion)	
Maximum Flow Rate (SCFM)	5000
Maximum Hourly Design Rate (MMBtu/hr)	140.25
Annual Hours of Operation	8760
Annual Waste Heat Release (MMBtu/yr)	1,228,548

Manufacturer AF-42 Emission Variables Parameters	
Maximum Flow Rate (SCFM)	4500
Maximum Hourly Design Rate (MMBtu/hr)	122.85
Annual Hours of Operation	8760
Annual Waste Heat Release (MMBtu/yr)	1,076,166

Emission Assumptions	
Methane Contribution to GCCS	50%
GCCS inert air - non regulated	50%
Flare Heating Value (Btu/SCF)	467.48

Screen Model Multiplying Factors	
Averaging Period	EPA Multipling Facto
8 hour	0.7
24 hour	0.4
annual	0.08

Analytical Reference Pipeline Natural Gas	
Heating Value (Btu/SCF)	
H_2O Vapor Saturated	1003.40
Dry	1020.00
Methane (CH_4) Component	
Mol%	93.18%
Mass%	86.99%

❶ NOTE: Federal standard for NOx pollutant is specifically for NO_2. Most of the emissison from combustion sources are emitted in the form of nitric oxide (NO), not NO_2. While some of the NO is converted to NO_2 by thermal reaction casued by relatively high temperatures during the combustion process, it is usually assumed that about 90% of the NOx is emitted to the atmosphere as NO where it can be transformed to NO_2. When the plume mixes with ambient air, atmospheric chemical reactions occur. For example, NO reacts with ozone (O_3) to form NO_2. This is usually the primary mechanism for converting NO to NO_2 in rural areas such as the location for the Butler County Landfill. In urban areas, other reactions such as those with hydrocarbon oxidation products (e.g. HO_2) and RO_2 radicals can be important. In either event, U.S. EPA recommends using a national default NO_2:NOx ratio of 0.75 - this is only valid for "screening" models, other methods are allowed by EPA but these are for "refined"-level modeling.

Bridgeton Landfill Auth0rity, LLC
GCCS Revisions - Proposed Flare(s) Air Construction Permit Determination
SO_2 Calculations

SO_2 Emissions	[redacted]	lbs/hr	[redacted]	operating hrs per yr	
	0.32	tons/year			
Temperature	1256.27	Kelvin	[redacted]	°C	[redacted] °F
Flow Rate =	[redacted]	dscfm (dry standard cubic feet per minute)			

0.0353	cf/l	(cubic feet per liter)
907184.74	g/ton	(grams per ton)
525600	min/year	(minutes per year)
		(based on variable hrs)

Since $PV=nRT$ and $P = nRT/V$ and $n/V=P/RT$, Hence Density = $mw.n/V=P/RT$

SO_2 mw =	64	g/mol	(grams per mole)
R =	0.08206	l-atm/K-mol	(universal gas constant)
P =	1	atm	

[redacted]

then	(molar mass)	P/RT =	0.0097	mol/l	(moles per liter)
		density =	0.6208	g/l	(grams per liter)
		in tons /cf =	1.94E-05	ton/cf	(tons per cubic feet)
		volume of SO_2 =	0.0309	cf/min	(cubic feet per minute)

[redacted]

Computations for compliance with 10 CSR 10-6.260 *"Missouri Air Sulfur Rule"*
Regulatory threshold = 500 ppm_{vd}

8/5/2004

STATE OF MISSOURI

Bob Holden, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

P.O. Box 176 Jefferson City, MO 65102-0176

FEB 23 2001

Mr. Gregory R. Ribaudo
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

Re: Bridgeton Landfill, LLC
Earth City, MO 63045, Permit Number: OP2001009

Dear Mr. Ribaudo:

Enclosed with this letter is your operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Randy E. Raymond
Permit Section Chief

RER:ayc

Enclosures

c: US EPA Region VII
St. Louis Regional Office
PATs File: 2000-03-035

Bob Holden, Governor • Stephen M. Mahfood, Director
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
P.O. Box 176 Jefferson City, MO 65102-0176

PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: OP2001009
Expiration Date: February 7, 2005
Project Number: 2000-03-035

Installation Name and Mailing Address:
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044
Saint Louis County

Parent Company's Name and Address
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

Bridgeton Landfill, LLC is a solid waste landfill.

FEB 7 2001
Effective Date

Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Bridgeton Landfill, LLC is a solid waste landfill. The landfill has a design capacity of approximately 10 million-Mg of waste. The facility has both an active and a passive gas recovery system. The active portion of the system has an enclosed ground flare and two (2) portable flares located over active gas wells. The passive system consists of four (4) open flares, which are portable. The permitted facility has a design capacity greater than one (1.0) million cubic meters and has an uncontrolled Non-Methane Organic Compounds (NMOC) emission rate of greater than twenty-five (25) megagrams per year. The permittee operates both an active gas collection system and a passive gas collection system.

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation, which emit air pollutants and which are identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0020	Two Skid Flares
EU0080	Ground Flare

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

Description of Emission Source

Diesel Fuel Storage (1000 gallons mobile field tank, 1981; 4000 gallons stationary tank, April 1994)
Borrow Area Haul Road
Borrow Area Stock Pile
Borrow Area Stock Pile Haul Road
Haul Road, Packers
Haul Road, Trailers

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

1) None.

II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

Permit Condition PW001
10 CSR 10-6.170 **Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**
Emission Limitation: No person may cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter to go beyond the premises of origin in quantities that the particulate matter: • Remains visible in the ambient air beyond the property line of origin; or • May be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter on these surfaces shall be determined to a reasonable degree by a technique proven to be accurate and approved by the Director.
Monitoring: The permittee shall conduct inspections of its installation sufficient to determine compliance with this regulation. If a violation of this regulation is discovered, the source shall undertake corrective action to eliminate the violation. The following monitoring schedule must be maintained: Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then- • Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then- • Observations must be made once per month. If a violation is noted, monitoring reverts to weekly. If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

Record keeping:

A log must be maintained noting the following:

- Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- Whether the visible emissions were normal for the installation.
- Equipment malfunctions that could cause an exceedance of 10 CSR 10-6.170.
- Any violations of 10 CSR 10-6.170 and any corrective actions undertaken to correct the violation.

Attachment A contains a log including these record keeping requirements. This log, or an equivalent created by the permittee, must be used to certify compliance with this requirement.

Reporting:

The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO, 63105 and the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

Permit Condition PW002

10 CSR 10-6.250

Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

Emission Limitation:

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250.

- An individual must receive certification from the department before that individual participates in an asbestos abatement project operating in Missouri according to Section (3). This certification is annually renewable. Certification as an AHERA inspector, AHERA management planner and AHERA project designer apply to AHERA-related projects.
- To be a training provider for the purpose of this rule a school shall apply for accreditation to the department and comply with the United States Environmental Protection Agency AHERA Model Accreditation plan 40 CFR part 763 Appendix C, subpart E. Details of the requirements for accreditation are found in Section (4).

Monitoring:

Any appropriate monitoring to demonstrate compliance with Certification and Accreditation standards.

Record keeping:

Any appropriate record keeping to demonstrate compliance with Certification and Accreditation standards.

Reporting:

Any appropriate reporting to demonstrate compliance with Certification and Accreditation standards.

Permit Condition PW003
10 CSR 10-6.080 **Emission Standards for Hazardous Air Pollutants** 40 CFR Part 61 Subpart M **National Emission Standard for Asbestos**
Emission Limitation:
The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, *National Emission Standard for Asbestos.*
Monitoring:
Any appropriate monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.
Record keeping:
Any appropriate record keeping as specified in 40 CFR Part 61, Subpart M.
Reporting:
Any appropriate reporting as specified in 40 CFR Part 61, Subpart M.

Permit Condition PW004
10 CSR 10-5.040 **Use of Hand-fired Equipment Prohibited**
Emission Limitation:
The permittee shall not operate any hand-fired fuel burning equipment.
Monitoring:
None.
Record keeping:
None.
Reporting:
The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO 63105, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation.

Permit Condition PW005
10 CSR 10-5.180 **Emission of Visible Air Contaminants From Internal Combustion Engine**
Emission Limitation:
No person shall cause or permit the emission of visible air contaminants from any internal combustion engine for more than ten (10) consecutive seconds at any one (1) time.
Monitoring:
None
Record keeping:
None
Reporting:
The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO, 63105 no later than ten (10) days after any exceedance of 10 CSR 10-5.050.

Permit Condition PW006
10 CSR 10-5.490 **Municipal Solid Waste Landfills**
Emission Limitation:
The permittee shall operate: 1. The active collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control; collect gas from each area cell or group of cells in the landfill in which the initial solid waste has been placed for a period of five (5) years or more, if active, or two (2) years or more, if closed or at final grade; collect gas at a sufficient extraction rate; and be designed to minimize offsite migration of subsurface gas. 2. The passive collection system shall be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control; collect gas from each area cell or group of cells in the landfill in which the initial solid waste has been placed for a period of five (5) years or more, if active, or two (2) years or more, if closed or at final grade; be designed to minimize offsite migration of subsurface gas; be installed with liners on the bottom and all sides in all areas in which gas is to be collected. 3. The operator of the gas collection and control system shall operate the collection system with negative pressure at each well head; operate each interior well head in the collection system with a landfill gas temperature less than fifty-five degrees Celsius and with either a nitrogen level less than twenty percent (20%) or an oxygen level less than five percent (5%); and operate the collection system so that the methane concentration is less than five hundred (500) parts per million above background at the surface of the landfill. 4. Route all the collected gas to a control system as described in required collection and control system design plan. 5. The collection and control system may be capped or removed provided these conditions are met the landfill shall be no longer accepting solid waste and be permanently closed; the collection and control system has been in operation a minimum of fifteen (15) years; and the calculated NMOC gas produced by the landfill is less then twenty-five (25) megagrams per year on three (3) successive test dates. 6. Test in accordance with 10 CSR 10-5.249(4) 7. Any reading of five hundred parts per million (500 PPM) or more above background at any location shall be recorded as an exceedance.

Monitoring:

1. Surface concentrations of methane along the entire perimeter of the collection area and in a serpentine pattern every thirty (30) meters for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specification provided in Method 21 of Appendix A, 40 CFR part 60, except that "methane" shall replace all referenced to VOC.
2. The permittee shall install a sampling port and a thermometer or other temperature measuring device at each wellhead and measure the gauge pressure in the gas collection header on a monthly basis, monitor the nitrogen or oxygen concentration in the landfill gas on a monthly basis and monitor the temperature of the landfill gas on a monthly basis.
3. When an enclosed combustion device is used the permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: a temperature monitoring device equipped with a continuous recorder and having an accuracy or +/- 1 percent of the temperature being measured expressed in degrees Celsius or +/- 0.5 degrees Celsius whichever is greater; and a gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control device, shall either install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to control device at least every fifteen (15) minutes; or secure the bypass line valve in the closed position with a car-seal or a lock and key type configuration.
4. When an open flare combustion device is used the permittee shall calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: a heat sensing device at the pilot light or the flame itself to indicate the continuous presence of a flame; and a device that records flow to or bypass of the flare. The permittee shall either install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every fifteen (15) minutes; or secure the bypass line valve in the closed position with a car-seal or a lock and key type configuration.

Record keeping:

The permittee keep up to date records, readily accessible on-site records of maximum design capacity; control equipment compliance monitoring; a plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector; and collection and control system exceedances of the operation standards and the location of each exceedance (Attachment A).

Reporting:

1. The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 S. Meramec Ave., Clayton, MO 63105 and the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65101, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation.
2. Submit an initial design capacity report and an NMOC emission rate report within 90 days of the rule effective date.
3. Submit an amended design capacity report providing notification of any increase in the design capacity of the landfill.
4. Submit a collection and control system design plan prepared by a professional engineer within one (1) year of the NMOC emission rate report.
5. Submit closure report within thirty (30) days of the date the landfill ceases accepting solid waste.
6. Submit an equipment removal report thirty (30) days prior to removal or cessation of operation of the control equipment.
7. The permittee using an active collection system designed shall submit an annual report of recorded information in paragraphs (7)(H) 1-6 of this rule, within one hundred and eighty (180) days of installation an start-up of the gas collection and control system and shall be included in the initial performance test report.
8. The permittee submit with the initial performance test report the information in paragraph (7)(I) 1-6 of this rule.

Permit Condition PW007

40 CFR Part 60 Subpart CC

Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills

Emission Limitation:

The permittee shall provide the calculation of the landfill NMOC emission rate to determinate whether the landfill meets the operational standards, the compliance provisions and the monitoring provisions as specified in 40 CFR Part 60 Subpart WWW.

Monitoring:

None

Record keeping:

- The permittee shall keep for at least 5 years up-to-date, really accessible, on site records of the maximum design capacity, the current amount of solid waste in place, and the year-to-year waste acceptance rate.

Reporting:

The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO, 63105 no later than the earliest day from the following:

1. 90 days of the issuance of construction or operation permit; or
2. 30 days of the date of construction or reconstruction; or
3. 30 days of the initial acceptance of solid waste.

III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

EU0020 Skid Flares

General Description:	Landfill Gas Collection System, 1000 SCFM
Manufacturer/Model #:	IT-McGill 9x40W/5, 1994

Permit Condition EU0020-001
10 CSR 10-5.090 Restriction of Emission of Visible Air Contaminants
Emission Limitation:
No person may discharge into the ambient air from any single source of emission whatsoever, any air contaminant: • of a shade or density equal to or darker than that designated as No. 2 on the Ringlemann Chart (40% opacity) for existing installations, other than incinerators, emitting 25 lb/hr or less of particulate matter or No. 1 on the Ringlemann Chart (20% opacity) for all others; or • of an opacity as to obscure an observer's view to a degree equal to or greater than does smoke designated as No. 2 on the Ringlemann Chart (40% opacity) for existing installations, other than incinerators, emitting 25 lb/hr or less of particulate matter or No. 1 on the Ringlemann Chart (20% opacity) for all others.

Monitoring:

- The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed by a Method 22 reading, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- The following monitoring schedule must be maintained:

1. Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
2. Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

- If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- The permittee shall conduct an annual opacity measurement on the emission unit by USEPA Test Method 9 with a certified Method 9 observer.

Record keeping:

- The permittee shall maintain records of all Method 22 results (see Attachments C&D), noting:

1. Whether any air emissions (except for water vapor) were visible from the emission units,
2. All emission units from which visible emissions occurred, and
3. Whether the visible emissions were normal for the process.

- The permittee shall maintain records of any equipment malfunctions.
- The permittee shall maintain records of the annual USEPA Method 9 opacity test and any other Method 9 test performed in accordance with this permit condition.

Reporting:

The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO, 63105 no later than ten (10) days after any exceedance of the opacity limit established by 10 CSR 10-5.090, or any malfunction which could cause an opacity exceedance.

EU0080 Ground Flares	
General Description:	Landfill Gas Collection System, 2500 SCFM
Manufacturer/Model #:	IT-McGill 9x40W/6, 1993
EIQ Reference # (1998):	EP#8

Permit Condition EU0080-001

10 CSR 10-5.090
Restriction of Emission of Visible Air Contaminants

Emission Limitation:

No person may discharge into the ambient air from any single source of emission whatsoever, any air contaminant:

- of a shade or density equal to or darker than that designated as No. 2 on the Ringlemann Chart (40% opacity) for existing installations, other than incinerators, emitting 25 lb/hr or less of particulate matter or No. 1 on the Ringlemann Chart (20% opacity) for all others; or
- of an opacity as to obscure an observer's view to a degree equal to or greater than does smoke designated as No. 2 on the Ringlemann Chart (40% opacity) for existing installations, other than incinerators, emitting 25 lb/hr or less of particulate matter or No. 1 on the Ringlemann Chart (20% opacity) for all others.

Monitoring:

- The permittee shall conduct opacity readings on this emission unit using the procedures contained in USEPA Test Method 22. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed by a Method 22 reading, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- The following monitoring schedule must be maintained:

1. Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
2. Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
3. Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

- If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.
- The permittee shall conduct an annual opacity measurement on the emission unit by USEPA Test Method 9 with a certified Method 9 observer.

Record keeping:
• The permittee shall maintain records of all Method 22 results (see Attachments C&D), noting: 4. Whether any air emissions (except for water vapor) were visible from the emission units, 5. All emission units from which visible emissions occurred, and 6. Whether the visible emissions were normal for the process. • The permittee shall maintain records of any equipment malfunctions. • The permittee shall maintain records of the annual USEPA Method 9 opacity test and any other Method 9 test performed in accordance with this permit condition.
Reporting:
The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO, 63105 no later than ten (10) days after any exceedance of the opacity limit established by 10 CSR 10-5.090, or any malfunction which could cause an opacity exceedance.

IV. Core Permit Requirements

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the St. Louis County Air Pollution Control Code, the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements.

ST. LOUIS COUNTY AIR POLLUTION CONTROL CODE REQUIEREREMENTS

The following requirements are none Federally enforceable and are only enforced by the St. Louis County Air Pollution Control Program.

1. The St. Louis County Air Pollution Control Code, Section 612.040, *Air Quality Standards and Air Pollution Control Regulations*

   (1) Emission Standards: Saint Louis County Air Pollution Control shall enforce Missouri Code of State Regulations as adopted and promulgate by the Air Conservation Commission of the State of Missouri consisting of Title 10, Division 10, Chapter 5 and 6.

   (2) Record Keeping Requirements: None
   (3) Monitoring Requirements: None.
   (4) Reporting Requirements: None.

2. The St. Louis County Air Pollution Control Code, Section 612.100, *Emergency Abatement of Violation*

   (1) Emission Standards: By written approval of the County Executive, any facility indirectly or directly discharge any air contaminant in violation of The St. Louis County Air Pollution Control Code where it is the opinion of the Director that the discharge creates an emergency which requires immediate action to protect the public health, shall order the person in writing to discontinue immediately.

   (2) Record Keeping Requirements: None.
   (3) Monitoring Requirements: None.
   (4) Reporting Requirements: None.

3. The St. Louis County Air Pollution Control Code, Section 612.110, *Permits Required*

   (1) Emission Standards: The Permittee shall obtain St. Louis County Department of Health (DOH) operating permits for its installation. The Permittee shall not commence construction, modification, or major modification of any installation subject to this rule without obtaining a permit from St. Louis County DOH.

(2) Record Keeping Requirements: None.
(3) Monitoring Requirements: None.
(4) Reporting Requirements: None.

4. The St. Louis County Air Pollution Control Code, Section 612.120, *Permits to be Visibly Affixed or Placed*

(1) Emission Standards: The Permittee shall Visibly affix St. Louis County DOH Permit on or near permitted equipment.

(2) Record Keeping Requirements: None.
(3) Monitoring Requirements: Visual inspection performed during periodic St. Louis County inspections.
(4) Reporting Requirements: None.

5. The St. Louis County Air Pollution Control Code, Section 612.200, *Testing Prior to Granting of Operating Permit*

(1) Emission Standards: Before an authority to construct or permit to operate is granted, the Director may require the applicant to conduct tests to determine the kind or amount of the air contaminant emitted from the equipment. Such tests shall be conducted, reviewed and certified by a licensed engineer. The permittee shall notify the County of the time and place of testing for the purpose of witnessing the test.

(2) Record Keeping Requirements: Records shall be kept during testing as approved in a test protocol submitted to the County prior to testing.

(3) Monitoring Requirements: Monitoring during testing shall be as approved in a test protocol submitted to the County prior to testing.

(4) Reporting Requirements: The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO 63105, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any condition which could possibly cause an exceedance of this regulation.

6. The St. Louis County Air Pollution Control Code, Section 612.220, *Suspension or Revocation of Permits*

(1) Emission Standards: The Director may suspend or revoke a permit to operate or authority to construct for willful or continued violation of The St. Louis County Air Pollution Control Code

(2) Record Keeping Requirements: None.
(3) Monitoring Requirements: None.
(4) Reporting Requirements: None.

7. The St. Louis County Air Pollution Control Code, Section 612.260, *Schedules*

   (1) Emission Standards: The Permittee shall pay St. Louis County DOH Construction Permit fees when applicable and annual Operating Permit fees in accordance with the rule.

   (2) Record Keeping Requirements: None.
   (3) Monitoring Requirements: None.
   (4) Reporting Requirements: None.

8. The St. Louis County Air Pollution Control Code, Section 612.280, *Testing by Order of the Board*

   (1) Emission Standards: If any article, machine, equipment or other contrivance is in violation of The St. Louis County Air Pollution Control Code, the Director may file with the Board for its approval an order directing the permittee of such equipment to conduct such tests as are necessary in the opinion of the Director and approved by the Board to determine whether the equipment is in violation of this Code.
   (2) Record Keeping Requirements: None.
   (3) Monitoring Requirements: The entire test results shall be reviewed and certified by an engineer licensed under Chapter 327, R.S.Mo 1959. The engineer shall be selected by the permittee and approved by the Board.
   (4) Reporting Requirements: The permittee shall give at least seven (7) days notice prior to the commencement of the test. The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO 63105.

9. The St. Louis County Air Pollution Control Code, Section 612.290, *Right of Entry; Inspections; Samples*

   (1) Emission Standards: The Permittee shall allow the Director or His agent to enter at all times with reasonable notice, inspect any equipment, control apparatus, fuel, matter or things which affect or may affect the emission of air contaminants, inspect any records relating to the use of any equipment or control apparatus which affect or may affect the emission of air contaminants, and sample any equipment, control apparatus, fuel, matter or things which affect or may affect the emission of air contaminants.
   (2) Record Keeping Requirements: None.
   (3) Monitoring Requirements: None.
   (4) Reporting Requirements: None.

10. The St. Louis County Air Pollution Control Code, Section 612.310, *Upset Conditions, Breakdown or Scheduled Maintenance*

    (1) Emission Standards: None.
    (2) Record Keeping Requirements: None.
    (3) Monitoring Requirements: None.
    (4) Reporting Requirements: The permittee shall report to the Air Pollution Control Section of the SLCDOH, 111 South Meramec, Clayton, MO 63105 within 24 hours of occurrence of any unavoidable upset in or breakdown of equipment and in case of shutdown for necessary scheduled maintenance, the intent to be shutdown shall be reported to Air Pollution Control Section 24 hours prior to shutdown.

11. The St. Louis County Air Pollution Control Code, Section 612.340, *Air Pollution Nuisances Prohibited*

    (1) Emission Standards: It is unlawful for the Permittee to cause of such quantities of soot, cinders, noxious acids, fumes and gases or other particulate matter from whatever source in such place or matter as to be detrimental to any person or the public or to endanger the health, comfort and safety of any person or the public, injury or damage to property or business.
    (2) Record Keeping Requirements: None.
    (3) Monitoring Requirements: None.
    (4) Reporting Requirements: None.

12. The St. Louis County Air Pollution Control Code, Section 612.380, *Interfering with or Obstructing Division Personnel*

    (1) Emission Standards: No Person shall hinder, resist, interfere with or obstruct the Director or any Division employee in carrying out any duty for the Director or the Board.
    (2) Record Keeping Requirements: None.
    (3) Monitoring Requirements: None.
    (4) Reporting Requirements: None.

The following requirements are none Federally enforceable and are only enforced by the St. Louis County Air Pollution Control Program.

13. 10 CSR 10-6.050, *Start-up, Shutdown and Malfunction Conditions*
    The permittee shall submit the following information to the director not later than fifteen (15) days after receipt of the notice of excess emissions.
    (a.) Name and location of installation;
    (b.) Name and telephone number of person responsible for the installation;
    (c.) The identity of the equipment causing the excess emissions;
    (d.) The time and duration of the period of excess emissions;

(e.) The cause of the excess emissions;
(f.) The type of air contaminant involved;
(g.) A best estimate of the magnitude of the excess emissions expressed in the units of the applicable emission control regulation and the operating data and calculations used in estimating the magnitude;
(h.) The measures taken to mitigate the extent and duration of the excess emissions;
(i.) The measures taken to remedy the situation which caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.

14. 10 CSR 10-6.060, *Construction Permits Required*
The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five (5) years without first obtaining a permit from the permitting authority.

15. 10 CSR 10-6.070, *New Source Performance Regulations*
The permittee shall apply the more restrictive of each emission limitation and more accurate test procedure when emission limitation, test procedure or other requirements found in both subsection (1)(A) of this role.

16. 10 CSR 10-6.110, *Submission of Emission Data, Emission Fees and Process Information*
The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.

17. 10 CSR 10-6.130, *Controlling Emissions During Episodes of High Air Pollution Potential*
This rule specifies the conditions that establish an air pollution alert (yellow/red), watch or emergency and the associated procedures and emissions reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

18. 10 CSR 10-6.150, *Circumvention*
The permittee shall not cause or permit the installation through the use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

19. 10 CSR 10-5.070, *Open Burning Restrictions*
(a.) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.

(b.) Exception - Open burning of vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.

(c.) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:

(1.) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of vegetation and expected composition and amount of air contaminants to be released to the atmosphere where known;

(2.) The schedule of burning operations;

(3.) The exact location where open burning will be used to dispose of the trade wastes;

(4.) Reasons why no method other than open burning is feasible;

(5.) Evidence that the proposed open burning has been approved by the fire control authority, which has jurisdiction.

(d.) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Beltservice Corporation from the provisions of any other law, ordinance or regulation.

(e.) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

20. 10 CSR 10-5.160, *Restriction of Emission of Odors*

(a.) No person shall emit odorous matter as to cause an objectionable odor on or adjacent to:

(1) Residential, recreational, institutional, retail sales, hotel or educational premises.

(2) Industrial premises when air containing odorous matter is diluted with twenty (20) or more volumes of odor-free air; or

(3) Premises other than those in paragraph (1) A.1. And (2) of the rule when air containing odorous matter is diluted with four (4) or more volumes of odor-free air.

(b.) The previously mentioned requirement shall apply only to objectionable odors. An odor will be deemed objectionable when thirty percent (30%) or more of a sample of the people exposed to it believe it to be objectionable in usual places of occupancy; the sample size to be at least twenty (20) people or seventy-five percent (75%) of those exposed if fewer than twenty (20) people are exposed.

This requirement is not federally enforceable.

21. 10 CSR 10-5.250, *Time Schedule for Compliance*
Except as otherwise specified, compliance with the provisions of this regulation shall be according to the following time schedule:
(a) All existing installations shall be in compliance unless the owner or person responsible for the operation of the installation shall have submitted to the director for achieving compliance;
(b) All new installations shall comply as of going into operation.

V. General Permit Requirements

Permit Duration
10 CSR 10-6.065(6)© 1.B.
This permit is issued for a term of five (5) years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

1 **General Record Keeping and Reporting Requirements**
10 CSR 10-6.065(6)© 1.C

I) Record Keeping
- A) All required monitoring data and support information shall be retained for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application.
- B) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any St. Louis County or Missouri Department of Natural Resources' personnel upon request.

II) Reporting
- A) The permittee shall submit a report of all required monitoring by:
  1) October 1st for monitoring which covers the January through June time period, and
  2) April 1st for monitoring which covers the July through December time period.
  3) Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
- B) Each report must identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit.
- C) All reports shall be submitted to the St. Louis County Department of Health, Air Pollution Control Program, Operating Permit Unit, 111 South Meramec, Clayton, MO 63105.
- D) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten (10) days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
  1) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)© 7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that

exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

2) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
3) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.

E) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten (10) days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten (10) days after that, together with any corrected or supplemental information required concerning the deviation.

F) The permittee may request confidential treatment of information submitted in any report of deviation.

G) These supplemental reports shall be submitted to the St. Louis County Department of Health, Air Pollution Control Program, Operating Permit Unit, 111 South Meramec, Clayton, MO 63105 no later than ten (10) days after any exceedance of any applicable rule, regulation, or other restriction.

7 **Risk Management Plans Under Section 112®**

10 CSR 10-6.065(6)© 1.D.

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

1) June 21, 1999;
2) Three (3) years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
3) The date on which a regulated substance is first present above a threshold quantity in a process.

3 **Severability Clause**

10 CSR 10-6.065(6)© 1.F.

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force.

4 **General Requirements**

10 CSR 10-6.065(6)© 1.G

1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.

2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and re-issuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, will not stay any permit condition.
4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
5) The permittee shall furnish to the permitting authority, upon receipt of a written request and within a reasonable time, any information that the permitting authority reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the permitting authority copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)© 1.

5 **Incentive Programs Not Requiring Permit Revisions**
10 CSR 10-6.065(6)© 1.H.
No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

6 **Compliance Requirements**
10 CSR 10-6.065(6)© 3.
I) Any document (including reports) required to be submitted under this permit should contain a certification signed by the responsible official.
II) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the St. Louis County Air Pollution Control Section or the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the SLCDOH):
   A) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this 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 and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
   D) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.

III) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
A) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
B) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.

IV) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually unless the applicable requirement specifies more frequent submission. The compliance certification shall include the following:
A) The identification of each term or condition of the permit that is the basis of the certification,
B) The current compliance status, as shown by monitoring data and other information reasonably available to the installation,
C) Whether compliance was continuous or intermittent,
D) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period, and
E) Such other facts as the St. Louis County Air Pollution Control Section will require in order to determine the compliance status of this installation.

Permit Shield

10 CSR 10-6.065(6)© 6.

I) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
A) The applicable requirements are included and specifically identified in this permit; or
B) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.

II) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
A) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
B) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
C) The applicable requirements of the acid rain program,
D) The administrator's authority to obtain information, or
E) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

Emergency Provisions
10 CSR 10-6.065(6)© 7.

I) An emergency or upset as defined in 10 CSR 10-6.065(6)© 7. Shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, you must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
   A) That an emergency or upset occurred and that you can identify the source of the emergency or upset,
   B) That the installation was being operated properly,
   C) That you took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
   D) That you submitted notice of the emergency to the SLCDOH within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.

II) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Operational Flexibility
10 CSR 10-6.065(6)© 8.

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the St. Louis County Air Pollution Control Section and the Administrator of the EPA at least seven (7) days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that established an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

I) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
   A) Before making a change under this provision, The permittee shall provide advance written notice to the St. Louis County Air Pollution Control Section and to the Administrator of the EPA, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and this agency shall place a copy with the permit in the public file. Written notice shall be provided to the Administrator of the EPA and

the St. Louis County Air Pollution Control Section at least seven (7) days before the change is to be made. If less than seven (7) days notice is provided because of a need to respond more quickly to these unanticipated conditions, The permittee shall provide notice to the Administrator of the EPA and the St. Louis County Air Pollution Control Section as soon as possible after learning of the need to make the change.

B) The permit shield shall not apply to these changes.

10 **Off-Permit Changes**

10 CSR 10-6.065(6)© 9.

I) Except as noted below, The permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:

A) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;

B) The permittee must provide written notice of the change to the St. Louis County Air Pollution Control Section and to the Administrator of the EPA no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under paragraph (6)(B) 3. Of this rule. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

C) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and

D) The permit shield shall not apply to these changes.

11 **Responsible Official**

10 CSR 10-6.020(2)® 12.

The application that was utilized in the preparation of this permit is dated July 14, 1997; and was signed by Gregory R. Ribaudo, District Manager. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the St. Louis County Air Pollution Control Section of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the

installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

[Z] **Statement of Basis**
10 CSR 10-6.065(6)(E) 1.C..
A statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions) accompanies this permit. This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

Attachment A
This record keeping sheet may be used to meet the record keeping requirements for Permit Condition PW001

Date	Observer	Description of Exceedance (Location, duration, type of exceedance and other information)	Description of Malfunction (Emission unit, nature of malfunction, duration and other information)

Attachment B

This record keeping sheet may be used for the record keeping requirements of the opacity limitations within the permit.

Date	Method 22 Test (initials)	Visible Emissions (yes/no)	If Visible emissions, was a method 9 done? (yes/no)

Date	Method 22 Test (initials)	Visible Emissions (yes/no)	If Visible emissions, was a method 9 done? (yes/no)

Attachment C
Method 22 (Outdoor) Observation Log

Responsible Installation
Operator: _____

Date: _____

Sky Conditions: _____

Precipitation: _____

Wind Direction: _____

Wind Speed: _____

Process Unit: _____

Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing points.

Observations	**Clock Time**	**Observation Period Duration, min:sec**	**Accumulated Emission Time, min:sec**
Begin Observation	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

STATEMENT OF BASIS

Permit Reference Documents
These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

1) Part 70 Operating Permit Application, dated July 14, 1997;
2) 1998 Emissions Inventory Questionnaire, received April 01, 1999;
4) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition;
5) Construction permit CP 5454;
6) Construction permit CP 5924.

Applicable Requirements Included in the Operating Permit but not in the Application
In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants,
40 CFR Part 61 Subpart M, National Standards for Asbestos; and
10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements

The installation must comply with the requirements of these regulations if they undertake any projects that deal with or involve any asbestos containing materials. Although at the time of the application there were no projects underway involving asbestos, the requirements are cited for such a time when an asbestos project may be undertaken.

St. Louis County Air Pollution Control Code, Section 612.040, *Air Quality Standards and Air Pollution Control Regulations*;
St. Louis County Air Pollution Control Code, Section 612.100, *Emergency Abatement of Violation;*
St. Louis County Air Pollution Control Code, Section 612.200, Testing to Granting of Operation Permit;
St. Louis County Air Pollution Control Code, Section 612.220, *Suspension or Revocation of Permits;*
St. Louis County Air Pollution Control Code, Section 612.260, *Schedules;*
St. Louis County Air Pollution Control Code, Section 612.290, *Right of Entry; Inspections; Samples*; and
St. Louis County Air Pollution Control Code, Section 612.380, *Interfering with or Obstruction Division Personnel.*

These rules have been included in the operating permit as being an obligatory requirement applicable to all facilities.

10 CSR 10-5.050, *Restriction of Emission of Particulate Matter from Industrial Processes*

This rule has been included in the operating permit as being a requirement applicable to all facilities. Facility's equipment (burning operations) does not include to the exception of this rule.

Other Air Regulations Determined Not to Apply to the Operating Permit
The Air Pollution Control Program (APCP) and SLCDOH has determined the following requirements to not be applicable to this installation at this time for the reasons stated.
10 CSR 10-5.300, Control of Emissions from Solvent Metal Cleaning
This rule is not included because the installation does not clean any metal surfaces.
10 CSR 10-5.050 Restriction of Emission of Particulate Matter from Industrial Processes, doesn't apply to EU-0020 and EU0080 because the rule excludes liquids and gases used solely as fuels.
St. Louis County Air Pollution Control Code, Section 612.140, *Transfer;*
St. Louis County Air Pollution Control Code, Section 612.150, *Permit to Operate – When Required;*
St. Louis County Air Pollution Control Code, Section 612.160, *General Requirements for Applications for Authority to construct and Operating Permits;* and
St. Louis County Air Pollution Control Code, Section 612.170, *Information Required for Application for Permits.*
These rules are not included because no changes have been made at the facility that would trigger these procedural requirements.
10 CSR 10-6.260, Restriction of Emission of Sulfur Compounds
This rule is not included because the installation does apply to rule 10 CSR 10-6.070. This is not necessary to apply to both rules.

Construction Permit Revisions
The following revisions were made to construction permits for this installation:
None.

NSPS Applicability
40 CFR Part 60 Subpart Cc "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills", does not apply because 40 CFR Part 60 Subpart WWW, "Standards of Performance for Municipal Solid Waste Landfills", applies. Subpart WWW applies to Municipal Solid Waste Landfills that have constructed, reconstructed or modified the facility after May 30, 1991. Bridgeton Landfill applied and received a vertical expansion in March of 1998.
40 CFR Part 60 Subpart Kb "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984", does not apply because the facility individual tank capacity is not greater than or equal to 40 cubic meters (10,567 gallons).

MACT Applicability
None.

NESHAP Applicability
40 CSR Part 61, Subpart M, *National Emission Standards for Asbestos*

Other Regulatory Determinations

1. 10 CSR 10-5.050 Restriction of Emission of Particulate Matter from Industrial Processes.

   Particulate matter is emitted from the landfill gas collection system (EU0020), when flares burn landfill gas. For the purpose of determining compliance with this regulation, the following calculations were performed.

   $$E = 60 * V * C$$

Where:

E = rate of emission in pounds/hr;

V = gas volume in cubic foot per minute;

C = concentration in pounds per cubic foot; and

60 = minutes in hour.

According Table II 10 CSR 10-5.050

C = 0.1 grain per cubic foot * 0.065 gram per grain / 453.6 gram per pound = 0.000014 pounds per cubic foot

E = 60 * 1000 * 0.000014 =

=0.84 pounds/hour of particulate matter

The same particulate matter is emitted from the landfill gas collection system (EU0080), when flares burn landfill gas. For the purpose of determining compliance with this regulation, the following calculations were performed.

According Table II 10 CSR 10-5.050

C = 0.1 grain per cubic foot * 0.065 gram per grain / 453.6 gram per pound = 0.000014 pounds per cubic foot

E = 60 * 2500 * 0.000014 =

=2.10 pounds/hour of particulate matter

2. All St. Louis County Air Pollution Control Code Rules are included to Core Permit Requirements because the SLCDOH felt that they needed to have covered by the permit.
3. The following emission sources as Borrow Area, Haul Road; Borrow Area Stock Pile; Borrow Area Stock Pile, Haul Road; Haul Road, Packers and Haul Road, Trailers are included to "Emission Unit Without Limitation" because there is the fugitive emission of particular matter in an each source.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one (1) or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;

4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one (1) or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the satisfaction of the SLCDOH, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation, which was not previously cited, the installation shall submit to the SLCDOH a schedule for achieving compliance for that regulation(s).

Prepared by:

Jim Hines for Ariy Yarovinskiy

Ariy Yarovinskiy
Permit Engineer, SLCDOH

Metropolitan St. Louis Sewer District
Industrial Wastewater Discharge Permit
Permit No. 05115598-02

Metropolitan
St. Louis Sewer
District

Division of Environmental Compliance
10 East Grand Avenue
St. Louis, MO 63147-2913
(314) 436-8710
FAX (314) 436-8753

October 3, 2005

Allen Steinkamp
Environmental Manager
BRIDGETON LANDFILL, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

RE: Discharge Permit No: 05115598-02
For premise at: 13570 St Charles Rock Road

Dear Mr. Steinkamp:

Enclosed is the Metropolitan St. Louis Sewer District Industrial Wastewater Discharge Permit for the premise identified above. This permit is issued pursuant to the federal pretreatment regulations in 40 CFR 403 as amended October 3, 2001. This permit has been prepared based on information that you supplied in the District's Industrial User Questionnaire, on results from previous wastewater samplings and inspections and on requirements contained in existing MSD ordinances and state and federal regulations.

Except as noted in this paragraph, the terms and conditions of this permit are substantially the same as in the previous permit. The monitoring frequencies for Chromium and Mercury at sampling points 006 and 007 have been revised from quarterly to annually. Additionally, Section I of the permit conditions has been reorganized and includes additional clarifying language but does not contain any new requirements. Other minor changes may have been made to improve the overall clarity of the document.

The previous permit, effective December 1, 2000, is voided as of the effective date of the enclosed permit.

Monitoring reports required by the conditions of this permit must be submitted quarterly for the life of the permit. The first report due date, for this reissued permit, is based on a complete calendar quarter monitoring period. The permittee remains responsible for reporting for the preceding calendar quarter under the previous permit. Copies of the necessary report forms are enclosed.

If you disagree with any of the terms or conditions of this permit please inform us, in writing, within 15 working days of receipt. Absence of a response within this time frame will be deemed acceptance, by you, of the provisions of this permit.

You may contact us at 436-8756 at any time if you have any question about your permit.

Sincerely,
METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

Enclosures

cc: Permit file

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

PERMIT NO: 05115598-02

EFFECTIVE DATE: December 01, 2005
EXPIRATION DATE: November 30, 2010

ISSUED TO: BRIDGETON LANDFILL, LLC
13570 ST. CHARLES ROCK ROAD
BRIDGETON, MO 63044

SIC NUMBER(S): 4953

TOTAL NUMBER OF PERMITTED DISCHARGE POINTS: TWO
SAMPLING PT. REF NUMBER(S): 006, 007

In accordance with the provisions of the Federal Pretreatment Regulations (40 CFR 403) and Metropolitan St. Louis Sewer District Ordinance No. 8472, the permittee is hereby authorized to discharge wastewater into the Metropolitan St. Louis Sewer District's sanitary or combined sewer system. All discharges so authorized shall be limited and controlled pursuant to the terms and conditions of this permit.

Noncompliance with any term or condition of this permit shall constitute an ordinance violation. If formal enforcement action is required to gain compliance, the permittee who is found guilty of a violation shall be subject to fine or imprisonment, or both such fine and imprisonment, for each violation. Each day in which any such violation shall continue shall be deemed a separate offense.

Compliance with the terms and conditions of this permit does not relieve the permittee of the obligation to comply with all other applicable pretreatment regulations, standards, or requirements under local, State and Federal laws, including any such regulation, standard, legal requirement, or law that may become effective during the life of this permit.

This permit only authorizes wastewater discharges identified herein. It does not apply to any other discharge.

METROPOLITAN ST. LOUIS SEWER DISTRICT

Fabian T. Grabski
Assistant Engineer

Douglas M. Mendoza, P.E.
Industrial Waste Engineer

Permit No.: 05115598-02
Page No.: 2
Effective Date: December 01, 2005

DISCHARGE DESCRIPTION

SAMPLING POINT REFERENCE NUMBER: 006*****

SAMPLING POINT LOCATION: 1/2" blue spigot in leachate pump vault, 21' NE of NE SW Bell building corner

AVERAGE WASTEWATER FLOW (GPD): 250,000

WASTEWATER SOURCE AND CATEGORY: Landfill leachate

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Ammonia (as N) [mg/L]	****	Daily Avg	Once/3 mo
Arsenic (Total) [mg/L]	.4	Daily Avg	Once/year
Cadmium (Total) [mg/L]	.7	Daily Avg	Once/year
Chromium (Total) [mg/L]	5	Daily Avg	Once/year
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Lead (Total) [mg/L]	.4	Daily Avg	Once/year
Mercury (Total) [mg/L]	.01	Daily Avg	Once/year
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.52	Instant	Once/year

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.11 of the permit conditions.

***** See Section II.C.1 of the permit conditions.

Permit No.: 05115598-02
Page No.: 3
Effective Date: December 01, 2005

DISCHARGE DESCRIPTION

SAMPLING POINT REFERENCE NUMBER: 007*****

SAMPLING POINT LOCATION: 14" pipe into Westlink Pump Station Wetwell, on S side

AVERAGE WASTEWATER FLOW (GPD): 250,000

WASTEWATER SOURCE AND CATEGORY: Landfill leachate

DISCHARGE LIMITATIONS AND SELF-MONITORING REQUIREMENTS

Parameter	Limit *	Limit Type **	Sampling Frequency
Flow [GPD]	***	Daily Avg	***
Biochemical Oxygen Demand (5 Day) [mg/L]	****	Daily Avg	Once/3 mo
Chemical Oxygen Demand [mg/L]	****	Daily Avg	Once/3 mo
Oil and Grease (Total) [mg/L]	200	Instant	Once/3 mo
pH [SU]	11.5	Instant	Once/3 mo
pH [SU]	5.5	Instant	Once/3 mo
Temperature [Deg C]	60	Instant	Once/3 mo
Total Suspended Solids [mg/L]	****	Daily Avg	Once/3 mo
Ammonia (as N) [mg/L]	****	Daily Avg	Once/3 mo
Arsenic (Total) [mg/L]	.4	Daily Avg	Once/year
Cadmium (Total) [mg/L]	.7	Daily Avg	Once/year
Chromium (Total) [mg/L]	5	Daily Avg	Once/year
Copper (Total) [mg/L]	2.7	Daily Avg	Once/3 mo
Lead (Total) [mg/L]	.4	Daily Avg	Once/year
Mercury (Total) [mg/L]	.01	Daily Avg	Once/year
Nickel (Total) [mg/L]	2.3	Daily Avg	Once/3 mo
Zinc (Total) [mg/L]	3	Daily Avg	Once/3 mo
Total Toxic Organics [mg/L]	5.52	Instant	Once/year

* Limits are based on MSD Ordinance 8472 and applicable federal categorical standards. See Section II of the permit conditions for explanation of any adjustments to the published limits made pursuant to Article V, Section 2.A of the Ordinance.

** See Section I.A.2 of the permit conditions.

*** Report a measured or estimated average daily flow for at least one representative operating day per quarter. If additional flow measurements or estimates are made, all must be reported.

**** See Section I.A.1.1 of the permit conditions.

***** See Section II.C.1 of the permit conditions.

Permit No.: 05115598-02
Page No.: 4
Effective Date: December 01, 2005

PERMIT CONDITIONS

SECTION I - GENERAL CONDITIONS:

A. MONITORING AND REPORTING REQUIREMENTS:

1. From the effective date of this permit, the permittee shall sample and analyze the discharge, at each of the identified sampling points. The pollutants to be monitored, the limitations, limitation types and minimum sampling frequencies are specified individually for each sampling point. The results of sample analyses and the results of all other self-monitoring activities specified in this permit shall be reported to the District as per paragraph A.9 below.

2. The limitation types, which may be specified in this permit, are defined as follows:

An **INSTANT** limitation is the maximum allowable concentration or mass of the pollutant in a grab sample for all pollutants except pH and temperature. For pH, the INSTANT limitations are the minimum and maximum allowable instantaneous pH values in standard units. For temperature, the INSTANT limitation is the maximum allowable instantaneous temperature in degrees Celsius (centigrade).

A **DAILY AVG** limitation is the maximum allowable concentration or mass of the pollutant in a composite sample collected within a 24-hour period.

A **DAILY MAX** limitation is the maximum allowable concentration or mass of the pollutant in any sample collected within a 24-hour period.

A **MONTHLY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in all daily samples collected within a calendar month.

A **4-DAY AVG** limitation is the maximum allowable average concentration or mass of the pollutant determined by calculating the arithmetic average of the concentrations or masses found in the daily samples collected on four consecutive sampling days. Sampling days are not necessarily consecutive calendar days.

Note: A daily sample is any sample collected within a 24-hour period.

3. Unless specified otherwise in Section II of these conditions all samples, collected to satisfy the monitoring and reporting requirements of this permit, shall be of the following types:

a. Temperature, pH and chlorine residual measurements, when required, **shall be made on-site at the points of discharge** and those measurements reported as grab sample results except, if continuous monitoring is employed for pH and/or temperature, reporting shall be as per paragraph A.7 below.

b. For oil and grease, total phenols, cyanide, sulfide and volatile organics, when required, samples shall be **Grab Samples**.

c. For all other pollutants, samples shall be **COMPOSITE SAMPLES** made up by combining a minimum of four individual grab samples within a 24-hour period. The individual grabs must be adequately flow or time proportioned to ensure a composite sample that is representative of that day's discharge.

4. When monitoring is required for Total Toxic Organics (TTO), the TTO result shall be determined by summing all quantifiable values greater than 0.01 mg/l for the applicable toxic organics.

a. For a discharge subject to a categorical pretreatment standard, the applicable toxic organics are listed in the standard. The standards are contained in 40 CFR 405 through 40 CFR 471.

b. For all other discharges the applicable toxic organics are all of those, from the list in 40 CFR 401.15, which are or may be present in the discharge.

In addition to reporting the summed TTO result, the permittee shall include, with the self-monitoring report, the analytical value obtained for each toxic organic analyzed.

5. Sampling of all discharges shall be conducted in such a manner as to ensure that the results of individual samples (whether grab or composite) are representative of normal operations and that the results of all samples during the reporting period are representative of the conditions during the reporting period.

6. All sampling and analyses performed to satisfy the monitoring and reporting requirements of this permit shall be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed, within this permit, for specific parameters.

7. If the permittee employs continuous monitoring techniques for pH and/or temperature at any sampling point identified in this permit, unintentional and temporary excursions outside the limitations are allowed subject to the provisions of Article X, Subsection Two-C of District Ordinance 8472. The permittee shall include, with each self-monitoring report, a summary of the continuous temperature and/or pH monitoring data. For each month, the summary shall show all excursions outside the permitted limitations, the elapsed time for each excursion, the total time for all excursions for temperature and the total time for all excursions for pH.

8. If the permittee monitors any of the listed pollutants, using the methods specified in this permit, more often than required by this permit, the results of all such additional monitoring and any additional flow measurements shall be included in the self-monitoring reports.

9. A self-monitoring report (on forms supplied by the District) shall be submitted to the District's Department of Environmental Compliance for each calendar quarter. Each report shall include:

a. All facility and sample description information required on the District's reporting form.

b. Analytical results, with dates and times, for all analyzed samples collected within the quarter.

c. Daily flows, with dates, for all measurements or estimates made within the quarter.
d. Any certification statements required pursuant to the Special Conditions in Section II.
e. Any other data or attachments required pursuant to the Special Conditions in Section II.

Each self-monitoring report shall be certified and signed by an individual authorized in accordance with the provisions of Article X, Section Three of District Ordinance 8472. The reports shall be submitted to the District as soon as possible after all required data are available, but no later than 28 days after the end of each quarter.

For the calendar quarter of:	The report must be postmarked no later than:
January 1 through March 31	April 28
April 1 through June 30	July 28
July 1 through September 30	October 28
October 1 through December 31	January 28

A report must be submitted for each calendar quarter even if, for any reason, sampling was not required or was not performed during the quarter. **The first report, under the terms of this permit, is due by January 28, 2006.**

10. If any sampling performed by the permittee, using the methods specified in this permit, indicates a violation of any permit limitation, the permittee shall notify the District's Department of Environmental Compliance within one business day of becoming aware of the violation. The permittee shall resample the discharge and shall submit the results of the resampling within thirty (30) days of becoming aware of the violation.

11. Unless specified elsewhere in this permit, discharges of Biochemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS) are not limited under the terms of this permit. However, the monitoring values reported will be used by the District to assess the applicability of extra-strength surcharges under the provisions of the District's Wastewater User Charge Ordinances. Extra-strength surcharges may be applicable when measured values exceed 300 mg/l for BOD, 600 mg/l for COD and/or 300 mg/l for TSS. If the permittee is currently subject to extra-strength surcharge, the BOD, COD and TSS values used for billing, as of the permit effective date, are listed in Section II of the permit conditions. These values are updated periodically and may change during the life of this permit.

B. CHANGE IN DISCHARGE:

1. The permittee shall not significantly increase the average daily volume, or flow rate of discharge or add any significant new pollutants or significantly increase the discharge of existing pollutants set forth in this permit without first having secured an amendment to the permit unless the permit conditions authorize such increase or additions without an amendment.

2. The permittee shall notify the District's Department of Environmental Compliance of any proposed significant new or increased discharge. The permittee shall make the notification at least ten (10) business days prior to the date of the planned increase or addition.

3. As defined in Article II of District Ordinance 8472, significant new or increased discharge means:
   a. Any discharge from a new process or facility or a new source.
   b. Any increase in volume or rate of discharge from an existing process or facility when the new long term average daily volume or rate of discharge will exceed the previous long term average by 20% or more.
   c. Any addition of a priority pollutant or toxic pollutant not previously present or suspected present in the permittee's discharge.
   d. Any addition of a hazardous waste subject to, but not previously reported under the reporting requirements in Article VIII, Section Nine of District Ordinance 8472.
   e. Any increase in mass of an existing regulated pollutant when the new long term average daily mass discharge of that pollutant will exceed the previous long term average by 20% or more.
   f. Any addition of a new pollutant or any increase in mass of an existing pollutant when the discharge of such pollutant may cause or contribute to interference or pass-through as these terms are defined in Article II of District Ordinance 8472.
   g. Any new batch discharges when previous discharges from an existing source at the permitted facility occurred on a continuous basis.

C. PROBLEM DISCHARGE:

1. Problem discharge means any upset, slug discharge, bypass, spill or accident which does or may result in a discharge into the District's system of a prohibited substance; or of a regulated substance in excess of limitations established in this permit and which may: (a) cause interference or pass through; or (b) contribute to a violation of any requirement of the District's NPDES permit; or (c) cause violation of any State or Federal water quality standard.

2. In the event of any problem discharge into the District's system, the permittee shall immediately notify the District, by telephone, of the incident and shall provide such information as may be required at that time in order to assess the impact of the incident on the District's system or on water quality. Within five (5) business days following any such incident, the permittee shall submit to the District's Department of Environmental Compliance a detailed written report which contains a description of the incident and its cause, location within the permittee's facility, exact dates and times of the period of problem discharge and, if not yet corrected, the anticipated time the incident is expected to continue, and steps taken or planned to correct the current incident and to reduce, eliminate and prevent occurrences of future such incidents.

D. BYPASSING PROHIBITED:

The permittee may not bypass any portion of its pretreatment facilities except when necessary to perform essential maintenance and then only if the bypass will not result in a violation of applicable pretreatment standards or requirements. Any other pretreatment facility bypass is prohibited unless:

a. The bypass is unavoidable to prevent loss of life, personal injury or severe property damage;
b. There are no feasible alternatives to the bypass; and
c. In the event of an anticipated bypass, advance notice is provided to the District's Department of Environmental Compliance.

E. PERMIT REVOCATION:

This permit may be revoked after thirty (30) days notice to the permittee for cause including, but not limited to, the following causes:

a. A violation of any term or condition of this permit.
b. A misrepresentation or failure to fully disclose all relevant facts in obtaining this permit.

F. PERMIT TERMINATION OR MODIFICATION:

1. This permit may be modified, after thirty (30) days notice to the permittee following promulgation of new State, Federal or local regulations to ensure compliance with the effective dates contained in any such new regulations.

2. Whenever any discharge covered by this permit is permanently eliminated, or when the circumstances upon which the permit was based pursuant to MSD Ordinance 8472 Article VI, Subsection 3.A, change, this permit will be terminated or modified upon verification of the changes by the District's Department of Environmental Compliance.

G. PERMIT RENEWAL:

The permittee shall apply for renewal of this permit at least one hundred eighty (180) days prior to the expiration date contained herein.

H. PERMIT TRANSFER:

This permit may not be transferred or reassigned. If the premise covered by this permit is sold or otherwise transferred to a new owner, the new owner shall apply for a new permit at least ten (10) days prior to the transfer and shall abide by all of the provisions of District Ordinance 8472 until the District issues a new permit or denies the application.

I. RIGHT OF ENTRY:

In order to ensure compliance with the provisions of this permit, District Ordinances and applicable State and Federal regulations, District representatives may inspect a permittee's treatment, pretreatment or discharge control facilities, or any process or any area of the permittee's premise which may be a source of any discharge or a source of any pollutants contained in any discharge into the District's wastewater system; conduct sampling of such facilities, processes or areas; and examine or copy any permittee's records related to such discharges. Any duly authorized representative of the District, upon presentation of proper credentials and after execution of appropriate confidentiality agreements, shall be permitted access to appropriate areas of the permittee's premises without prior notice for these purposes. A representative of the permittee shall, if appropriate, accompany the District representative while the work is being performed and shall assure that all applicable safety rules are being observed by the District's representative.

J. RECORDS RETENTION:

The permittee shall retain and preserve, for not less than three (3) years, all records, books, documents, memoranda, reports, sample analysis results, correspondence and any and all summaries thereof relating to the monitoring, sampling and chemical analyses of the permittee's discharge made by or on the permittee's behalf.

K. DEFINITIONS:

Unless the context specifically indicates otherwise, the meaning of terms used in this permit shall be as defined in Article II of District Ordinance 8472.

L. SEWER USE ORDINANCE:

Unless the context specifically indicates otherwise, the permittee is subject to all provisions of District Sewer Use Ordinance 8472.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

M. NOTIFICATION AND REPORTING:

1. All notifications and reports required by this permit shall be directed to:

Metropolitan St. Louis Sewer District
Department of Environmental Compliance
10 East Grand Avenue
St. Louis, Missouri 63147-2913

2. Emergency notifications may be made 24-hours a day, 7 days a week by calling the District's dispatcher at (314) 768-6260.

3. During normal business hours, notifications may be made by calling the District's Department of Environmental Compliance at (314) 436-8710.

SECTION II - SPECIAL CONDITIONS:

These Special Conditions may supplement and/or amend the standard terms of this permit or the General Conditions in Section I. Where there is any perceived conflict between a Special Condition and either the standard permit terms or the General Conditions of Section I, the Special Condition shall govern.

A. Special Certification and Reporting Requirements:

1. This permit does not regulate discharges at MSD sampling points **002, 003, and 004**. These discharges are subject to State regulation under NPDES permit number **MO-0112771**. Should the permittee plan to reroute any portion of the flow currently discharged under the NPDES permit to District sewers, the permittee shall notify the District's Department of Environmental Compliance at least ten (10) days prior to the date of the planned change.

B. Special Billing Reporting Requirements:

1. For billing purposes, the permittee shall submit monthly reports of the volume of leachate discharged through sampling points **006** and **007**. These reports shall be sent to:

Toni McGarry
MSD Finance Department
2350 Market Street
St. Louis, MO 63103

The reports shall be sent within 15 days of the end of each month. Copies of the monthly volume reports shall also be included with the routine quarterly self-monitoring reports required pursuant to General Condition I.A.

C. Special Sampling and Analytical Procedures:

1. Due to low discharge rates at sampling point **006**, samples may also be collected at sampling point **007** by the District and the permittee. Both sampling points convey the same discharge. Results from either sampling point are considered equivalent for compliance monitoring.

THIS IS THE LAST PAGE OF THIS PERMIT

METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE

INSTRUCTIONS FOR COMPLETING INDUSTRIAL USER SELF MONITORING REPORT

1. Monitoring reports are to be submitted to MSD on a quarterly basis. Samples must be collected within the calendar quarter and the results submitted to the MSD Department of Environmental Compliance within 28 days after the end of the quarter. You must submit a report for each quarter even if you had no discharge during the quarter.

2. You must use the reporting forms provided by MSD unless you obtain approval from the District to use a company designed form. Any non-MSD form must include all of the information and certifications included in the MSD form.

3. The MSD form, properly filled out & signed, constitutes your complete monitoring report. Please do not include a cover letter or any attachments unless they are absolutely essential to explain information on the form or to explain reporting deficiencies or problems. When you sign the report form you will certify that all information contained therein is true, complete and accurate.

4. Print or type all information. Fill in all blanks. Use additional copies of the form if more space is needed.

5. All analyses must be performed in accordance with the techniques prescribed in 40 CFR 136 and amendments thereto unless other techniques are prescribed for specific parameters. Provide the name of the laboratory that performed the analyses. If the analyses were performed in-house, provide the name and title of the individual responsible for the analyses.

6. Provide the MSD sample point reference numbers for which the data is being submitted. These numbers are contained in your permit. You must use the MSD sample point reference numbers to ensure accurate evaluation of your company's compliance status.

7. You must report analytical results for all the parameters listed in your permit. If you monitor your discharges more often than required by the permit, using approved methods, the results of all such monitoring and any additional flow measurements must be included in the report.

8. For Total Toxic Organics analysis, record the "Total" on the MSD form. Attach a list of the individual toxic organics analyzed and their individual results.

9. In the blanks provided, print or type the parameters and limits listed in your permit. Record the date and time each sample was collected. If a composite sample spans two days, record the dates the compositing period started and ended and record the times the compositing period started and ended. Record the type of sample (use G for grab, C for composite and for flow measurement use M for measured flow, E for estimated flow) and enter the results in the appropriate space. The following example has been provided to show you how to fill in the data.

MSD SAMPLE POINT REFERENCE NUMBERS ——>		001		002				
DATES ON WHICH SAMPLES WERE COLLECTED ——>		7-8-93		7-8 to 7-9-93				
TIMES AT WHICH SAMPLES WERE COLLECTED ——>		8:30 AM - 5:00 PM		4:00 AM - 8:00 AM				
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW (SEE INSTRUCTIONS)						UNITS
FLOW		E	4000	E	35000			GPD
CHEMICAL OXYGEN DEMAND	—	C	350	C	790			MG/L
CADMIUM	.69	C	.50	C	.46			MG/L

10. Report only the results of your analyses. Do not attach copies of laboratory sheets, QA/QC information or other documents unless MSD has specifically requested them or you believe they are essential to the report. However, please note that you must retain all lab sheets and material pertinent to the sampling and analyses for a period of at least 3 years and that MSD may inspect or request copies of these materials during this period.

11. If you have no discharge from a sample point during the reporting quarter, write "No Discharge" across the line marked "Flow".

12. Review the certification statements in Part III and initial those that apply to your facility.

13. Review certification statement A in Part IV and initial it if it applies to your facility.

14. Complete the information under certification statement B in Part IV. Sign and date the report. You must be authorized to sign reporting documents in accordance with MSD CRD, 8472, Article X, Section Three, Paragraph B.

15. Attach any additional reports required (See page two of instructions).

16. Mail completed report to: METROPOLITAN ST. LOUIS SEWER DISTRICT
DEPARTMENT OF ENVIRONMENTAL COMPLIANCE
10 E. GRAND AVE
ST. LOUIS, MO 63147

If there is any question concerning these reporting requirements, please contact us for clarification or assistance at 436-8710.

SELF MONITORING REPORT INSTRUCTIONS PAGE 2

ADDITIONAL REPORTS

In addition to quarterly self monitoring reports, the General and Special Conditions of your permit require that MSD be advised of certain events or changes at your facility. This is a reminder of those reporting requirements. Please review your permit carefully for the specifics of any of these requirements which may apply to you.

I. GENERAL CONDITION REPORTING REQUIREMENTS

1. If you monitor pH or temperature continuously at any discharge point, you must include, with each quarterly self monitoring report, a summary of pH or temperature excursions for each month in the quarter. See General Condition I.A.7 in your permit.

2. If any sampling, using approved methods, indicates a violation of any permit limitation, MSD must be notified within one business day of your becoming aware of the violation. In addition you must resample the discharge and the results of resampling must be submitted to MSD within 30 days of your becoming aware of the violation. See General Condition I.A.10 in your permit.

3. Any significant new or increased discharge must be reported at least 10 business days prior to the planned increase or addition. See General Condition I.B.2 in your permit.

4. Any problem discharge must be reported to MSD immediately by telephone and a written report submitted within 5 business days. See General Condition I.C.2 in your permit.

5. Any anticipated bypass of pretreatment facilities must be reported to MSD in advance. See General Condition I.D in your permit.

II. SPECIAL CONDITION REPORTING REQUIREMENTS

1. If any of the categorical limitations in your permit are based on production rates, a report on the production rates for each regulated process must accompany each quarterly self monitoring report.

2. If any of the categorical limitations in your permit have been calculated using the Combined Wastestream Formula (CWF), any conditions which may change the calculated limitations must be reported to MSD at least 10 business days prior to the change.

3. If you have been granted a credit for used water which does not enter the sewer, any conditions which may change the amount of that credit must be reported to MSD within 10 business days of your becoming aware of those changes.

4. If your permit contains a schedule of compliance, reports under that schedule must be submitted no later than 14 business days after each date in the schedule.

5. If you plan to divert any wastewater from an existing NPDES discharge point to the District's system, you must notify MSD at least 10 business days prior to the planned change.

III. OTHER INFORMATION REQUIREMENTS

1. If your permit waives monitoring at any sample point specified in your permit, or at any connection point not specified as a sample point in your permit, you must advise MSD any time the character of the waste discharge at any such point changes.

2. If your permit waives monitoring at any inactive connection points, you must advise MSD prior to activating any such point.

METROPOLITAN ST. LOUIS SEWER DISTRICT
INDUSTRIAL USER SELF MONITORING REPORT

PLEASE READ THE INSTRUCTIONS BEFORE COMPLETING THIS REPORT

PART I: IDENTIFYING INFORMATION

Company Name: _____

Permit No: _____

Premise Address: _____

Monitoring Period: ☐(JAN-MAR) ☐(APR-JUNE) ☐(JULY-SEPT) ☐(OCT-DEC)

Samples Collected By: _____

Analyses Performed By: _____

PART II: ANALYTICAL RESULTS OF SELF MONITORING

MSD SAMPLE POINT REFERENCE NUMBERS ——>					
DATES ON WHICH SAMPLES WERE COLLECTED ——>					
TIMES AT WHICH SAMPLES WERE COLLECTED ——>					
PARAMETER	LIMIT	RECORD SAMPLE TYPES (G, C, M OR E) AND RESULTS BELOW G=grab, C=composite, M=measured flow, E=estimated flow			UNITS
FLOW					

You must complete and sign the certification statements on the reverse side.

INDUSTRIAL USER SELF MONITORING REPORT PAGE 2

PART III: SPECIAL CERTIFICATION STATEMENTS

Based on the special conditions contained in your discharge permit you may be required to certify one or more of the following. Please review your permit and PLACE YOUR INITIALS IN THE BOXES NEXT TO THOSE CERTIFICATIONS WHICH ARE APPLICABLE TO YOUR FACILITY. If your permit contains no Special Conditions, then none of the certifications in PART III apply to you. GO ON TO PART IV.

A. If your permit special conditions waive monitoring at any sample point(s) specified in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of the wastes discharged at sampling point(s) _____ .

B. If your permit special conditions waive monitoring at active connection points which are not specified as sample points in your permit, you are required to make the following certification:

☐ I certify, since the last discharge monitoring report, there has been no change in the character of wastes discharged at those active connection points which are not specified in my permit .

C. If your permit special conditions waive monitoring at inactive connection points, you are required to make the following certification:

☐ I certify, since the permit issue date, there has been no change in the status of connection points identified as inactive. These points remain inactive and no discharge occurred during the period covered by this report.

D. If your permit special conditions authorize grab sample collection in lieu of composite sampling at any sample point(s), you are required to make the following certification:

☐ I certify the grab sample results in this report accurately represent our average daily discharge at sample point(s) _____ .

E. If your permit special conditions prohibit discharge of wastes which are subject to certain categorical pretreatment standards, you are required to make the following certification :

☐ I certify, since the last discharge monitoring report, there has been no discharge of wastes which are subject to pretreatment standards in 40 CFR _____ .

F. Discharges subject to Pharmaceutical Categorical Standards (40 CFR 439) can be exempted from limitations and monitoring for Total Cyanide at the Pharmaceutical sample point(s) subject to the following certification:

☐ I certify, since the last discharge monitoring report, cyanide has not been used or generated in any pharmaceutical manufacturing process subject to Categorical Standards in 40 CFR 439.

G. Discharges Subject to Categorical Standards for Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) or Electrical & Electronic Components (40 CFR 469) can be exempted from TTO monitoring only at the Electroplating, Metal Finishing or Electrical & Electronic Components sample point(s) subject to the following certification:

☐ Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the toxic organic management plan submitted to MSD.

PART IV: GENERAL CERTIFICATION STATEMENTS

Initial the box for statement A if it applies to you. Everyone must complete the information under statement B and sign this report.

A. Discharges at sample points subject only to MSD Ordinance limits can be exempted from TTO monitoring subject to the following certification:

☐ In lieu of monitoring for TTO at sample point(s) _____ , I certify that to the best of my knowledge and belief, no toxic organics have been used at this premise or discharged into the wastewaters since filing of the last discharge monitoring report.

B. DISCHARGE MONITORING REPORT CERTIFICATION

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

Print or type name of signing official: _____

Title: _____ Telephone: _____

Signature: _____ Date: _____

Missouri Department of Natural Resources
NPDES Permit No. MO-0112771

Bridgeton Landfill Authority
MO-0112771, St. Louis County

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

May 20, 2005

RECEIVED
MAY 2 3 2005
BY:

Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, MO 63044

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing your State Operating Permit to discharge from Bridgeton Landfill Authority.

Please read your permit and attached Standard Conditions. They contain important information on monitoring requirements, effluent limitations, sampling frequencies and reporting requirements.

Monitoring reports required by the special conditions must be submitted on a periodic basis. Copies of the necessary report forms are enclosed and should be mailed to the regional office listed below. Please contact that office for additional forms.

This permit is both your Federal Discharge Permit and your new State Operating Permit and replaces all previous State Operating Permits issued for this facility under this permit number. In all future correspondence regarding this facility, please refer to your State Operating Permit number and facility name as shown on page one of the permit.

If you have any questions concerning this permit, please do not hesitate to contact the St. Louis Regional Office at 7545 S. Lindbergh, Suite 210, St. Louis, MO 63125 (314) 416-2960.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Mohamad Alhalabi, P.E.
Regional Director

MA:

Enclosure

c: Water Pollution Control Program

Recycled Paper

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-0112771
Owner:	Bridgeton Landfill, LLC
Address:	13570 St. Charles Rock Road, Bridgeton, MO 63088
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Bridgeton Landfill Authority
Facility Address:	13570 St. Charles Rock Road, Bridgeton, MO 63088
Legal Description:	See page 2
Latitude/Longitude:	See page 2
Receiving Stream:	Unnamed Tributary to Fee Fee Creek (U)
First Classified Stream and ID:	Fee Fee Creek (P) (01705)
USGS Basin & Sub-watershed No.:	(10300200-180001)

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

FACILITY DESCRIPTION

See page 2

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

March 22, 2002
Effective Date

May 20, 2005
Revised

March 21, 2007
Expiration Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

Mohamad Alhabbo, P.E., Director, St. Louis Regional Office

FACILITY DESCRIPTION (continued)

Outfall #001 – Landfill (Demolition)/Transfer Station - SIC #4953
Storm water runoff.
Actual flow is dependent upon precipitation.
Legal Description: SW ¼, NE ¼, SW ¼, Sec. 34 (proj.), T47N, R5E, St. Louis County
Latitude/Longitude: +3846164/-09026372

Outfall #002 – Landfill (Sanitary) - SIC #4953
Eliminated
Legal Description: SE ¼, NE ¼, SW ¼, Sec. 34 (proj.), T47N, R5E, St. Louis County
Latitude/Longitude: +3846141/-09026280

Outfall #003 – Landfill (Sanitary & Demolition)/Concrete Plant/transfer station-SIC #4953
Storm water runoff/retention basin.
Actual flow is dependent upon precipitation.
Legal Description: SE ¼, NW ¼, NE ¼, Sec. 3 (proj.), T46N, R5E, St. Louis County
Latitude/Longitude: +3845520/-09026534

Outfall #004 – Landfill (Sanitary & Demolition)/Concrete Plant - SIC #4953
Storm water runoff/retention basin.
Actual flow is dependent upon precipitation.
Legal Description: NW ¼, NE ¼, Sec. 3 (proj.), T46N, R5E, St. Louis County
Latitude/Longitude: +3846165/-09026313

Outfall #005 – Landfill (Sanitary & Demolition)/Concrete Plant - SIC #4953
Storm water runoff.
Actual flow is dependent upon precipitation.
Legal Description: SE ¼, NW ¼, Sec. 3 (proj.), T46N, R5E, St. Louis County
Latitude/Longitude: +3845563/-09027140

Outfall #006 – Landfill (Sanitary & Demolition)/Concrete Plant - SIC #4953
Storm water runoff.
Actual flow is dependent upon precipitation.
Legal Description: SW ¼, SE ¼, Sec. 34 (proj.), T47N, R5E, St. Louis County
Latitude/Longitude: +3846320/-09026539

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PERMIT NUMBER MO-0112771

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

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001, #003, #004, #005, #006						
Flow	MGD	*		*	once/quarter**	instantaneous estimate
Rainfall	inches	*		*	daily measurement	***
BETX	mg/L	0.75		0.75	once/quarter**	grab
Biochemical Oxygen Demand5	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 October 28, 2005. 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 Part I STANDARD CONDITIONS DATED October 1, 1980 AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

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:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfalls #001, #003, #004, #005, #006						
Calcium	mg/L	*		*	once/year******	grab
Fluoride	µg/L	*		*	once/year******	grab
Total Hardness	µg/L	*		*	once/year******	grab
Barium, Total Recoverable	µg/L	*		*	once/year******	grab
Boron, Total Recoverable	µg/L	*		*	once/year******	grab
Cadmium, Total Recoverable	µg/L	*		*	once/year******	grab
Chromium, Total Recoverable	µg/L	*		*	once/year******	grab
Cobalt, Total Recoverable	µg/L	*		*	once/year******	grab
Sodium, Total Recoverable	µg/L	*		*	once/year******	grab
Ammonia as N	mg/L	*****		*****	once/year******	grab
Nitrate & Nitrite as N	mg/L	*		*	once/year******	grab
Phosphorus, Total Recoverable	mg/L	*		*	once/year******	grab
Mercury, Total Recoverable	µg/L	*		*	once/year******	grab
Arsenic, Total Recoverable	µg/L	*		*	once/year******	grab
Lead, Total Recoverable	µg/L	*		*	once/year******	grab
Selenium, Total Recoverable	µg/L	*		*	once/year******	grab
Silver, Total Recoverable	µg/L	*		*	once/year******	grab
Manganese, Total Recoverable	µg/L	*		*	once/year******	grab
Magnesium, Total Recoverable	µg/L	*		*	once/year******	grab
Zinc, Total Recoverable	µg/L	*		*	once/year******	grab
Antimony, Total Recoverable	µg/L	*		*	once/year******	grab
Beryllium, Total Recoverable	µg/L	*		*	once/year******	grab
Nickel, Total Recoverable	µg/L	*		*	once/year******	grab
Sulfate	mg/L	*		*	once/year******	grab
Thallium, Total Recoverable	µg/L	*		*	once/year******	grab
Total Organic Carbon	mg/L	*		*	once/year******	grab
Vanadium, Total Recoverable	µg/L	*		*	once/year******	grab
Oil & Grease	mg/L	15		10	once/year******	grab

MONITORING REPORTS SHALL BE SUBMITTED ANNUALLY; THE FIRST REPORT IS DUE October 28, 2005 . 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 Part I STANDARD CONDITIONS DATED October 1, 1980 AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only.
** Sample once per quarter in the months of March, May, September & November.
*** Grab samples shall be collected during a rainfall event, when there is runoff from the landfill site. The sample shall be collected no later than one hour after runoff begins.
**** 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.
***** The discharge shall not exceed the appropriate values in Table B 10 CSR 20, 7.031.
****** Samples to be taken in September.

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

3. Changes in Discharges of Toxic Substances

   The permittee shall notify the Director as soon as it knows or has reason to believe:
   (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      (1) One hundred micrograms per liter (100 µg/L);
      (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
      (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
      (4) The level established in Part A of the permit by the Director.
   (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.

4. All design and operating specifications and all 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.

C. SPECIAL CONDITIONS (continued)

5. 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 Solid Waste Disposal Area Operating Permit, Report of Approval of Plans and Specifications (with conditions).

6. All discharges shall comply with the Missouri Water Quality Standards, 10 CSR 20, 7.031, Section (3)(C), which states "Waters shall be free from substance in sufficient amounts to cause unsightly color or turbidity…", and Section (4)(G), which states "Water contaminants shall not cause or contribute to turbidity or color that will cause substantial visible contact with the natural appearance of the stream…".

7. 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.

8. Provide sediment and erosion control sufficient to prevent or control pollution of storm water runoff.

9. If truck emptying or dumping and washing concrete materials is done on site, provide sediment control for dumping of residual concrete and washdown waters in such a way as to meet the limitations of this permit. A construction permit would need to be obtained from the department before beginning construction of treatment structures. Concrete or untreated washdown water shall not be introduced directly into waters of the state.

10. Prevent the spillage or loss of fluids, oil, grease, gasoline, etc. from vehicle and equipment maintenance and repair activities and thereby prevent the contamination of storm water from these substances.

11. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.

12. Store all paint, paint solvent, 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 the storm water. Provide spill prevention, control, and/or management sufficient to prevent any spills of these pollutants from entering a water 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.

STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
Revised
October 1, 1980

PART I - GENERAL CONDITIONS
SECTION A - MONITORING AND REPORTING

1 **Representative Sampling**

a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.

b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.

2 **Schedule of Compliance**

No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.

3. **Definitions**

Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR 20-2.010 shall apply to terms used herein.

4. **Test Procedures**

Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7.015.

5. **Recording of Results**

a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
   (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. 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 this permit 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 both.

c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

6. **Additional Monitoring by Permittee**

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7 **Records Retention**

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this 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.

SECTION B - MANAGEMENT REQUIREMENTS

1. **Change in Discharge**

a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such changes, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.

2. **Noncompliance Notification**

a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions.
   (i) a description of the discharge and cause of noncompliance, and
   (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

3. **Facilities Operation**

Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

4. **Adverse Impact**

The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. **Bypassing**
   a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
      (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
      (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
      (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance
   b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.

6. **Removed Substances**
Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law, and a permanent record of the date and time, volume and methods of removal and disposal of such substances shall be maintained by the permittee.

7. **Power Failures**
In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
   a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
   b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

8. **Right of Entry**
For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
   a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
   b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
   c. to inspect any monitoring equipment or method required in the permit;
   d. to inspect any collection, treatment, or discharge facility covered under the permit; and
   e. to sample any wastewater at any point in the collection system or treatment process.

9. **Permits Transferable**
   a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transfered, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.

10. **Availability of Reports**
Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.

11. **Permit Modification**
   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) violation 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 and 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.

12. **Permit Modification - Less Stringent Requirements**
If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.

13. **Civil and Criminal Liability**
Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

14. **Oil and Hazardous Substance Liability**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.

15. **State Laws**
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations

16. **Property Rights**
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.

17. **Duty to Reapply**
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.

18. **Toxic Pollutants**
If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.

19. **Signatory Requirement**
All reports, or information submitted to the Director shall be signed (see 40 CFR-122.6).

20. **Rights Not Affected**
Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.

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

MISSOURI DEPARTMENT OF NATURAL RESOURCES
WATER POLLUTION CONTROL PROGRAM

MONTHLY MONITORING RECORD FOR WASTEWATER TREATMENT FACILITIES

NAME OF FACILITY	CITY	COUNTY/REGION

FOR THE MONTH OF	OUTFALL NUMBER	PERMIT NUMBER	TYPE TREATMENT FACILITY

	INFLUENT						EFFLUENT									
DAY	FLOW: MGD ☐ GPD ☐ INF. OR EFF.	PH UNITS	BOD mg/L	SUSP. SOLIDS mg/L	TEMP °F - °C	PH UNITS	BOD mg/L	SUS. SOLIDS mg/L	OTHER	OTHER	OTHER	OTHER	RAIN	WEATHER	TIME
1															
2															
3															
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28															
29															
30															
31															
No. of Samp.															
Tot. of Samp.															
Monthly Avg.															
Daily Max.															
Daily Min.															
Max 7/Avg.															

NOTE: SEE INSTRUCTIONS ON REVERSE SIDE OF THIS FORM.

MO 780-1306 (8-02)

OPERATIONAL CONTROL PARAMETERS

DATE	PH UNITS	ALK. mM	DO mg/l	SET SOLIDS RAW ml/l	SUSP. SOLIDS MIXED LIQUOR mg/l	SETTLEABILITY MIXED LIQUOR ml/l	SLUDGE DISP. (LBS. DRY WT.)	TEMP °F . °C	RAIN AND WEATHER
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
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1. Fill out one copy of report each month and mail in monthly for each treatment facility.
2. Mail one copy of report to the appropriate **DNR regional office** as noted in your permit and keep one copy in your files.
3. Reports must be signed by whoever performed tests and by an appropriate official.
4. In the weather column, use the following symbols: R-rain, S-snow, C-clear, P.C.-partly cloudy and O-overcast.
5. Use grab sample for pH, Temp. and D.O. Use grab samples for all operational control test.
6. Use 24 hr. composite (proportional) samples for B.O.D. 5, and Suspended Solids tests unless NPDES permit indicates otherwise. Use "Standard Methods" or an approved equal for all parameters.
7. Treatment plant flow measurements may be made on either influent or effluent. Lagoon influent flow measurements need be only at the time of composite sampling of the influent. All tests must be performed in accordance with NPDES Permit Conditions and Operational Control Regulation 10 CSR 20-9.010. Review your permit for specific requirements.
8. Unusual conditions, significantly affecting operations must be reported immediately to the Department of Natural Resources.
9. Representative sludge samples should be taken either before entering digesters and/or holding tanks or after removal from digesters or holding tanks.

COMMENTS

TEST'S PERFORMED BY	TITLE	PHONE #	DATE

REPORT APPROVED BY	TITLE	PHONE #	DATE

MO 780-1306 (8-02)

Missouri Department of Natural Resources
NPDES Permit No. MO-R103310

St. Louis County (WP)
Bridgeton Land fill Stockpile
MO-R103310

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
St. Louis Regional Office
9200 Watson Road, Suite 201 St. Louis, MO 63126
(314) 301-7600
FAX (314) 301-7616

August 28, 2002

Matt Kingsley, General Mngr.
Bridgeton Landfill, L.L.C.
13570 St. Charles Rock Road
Bridgeton, MO 63044

Dear Permittee:

Pursuant to the Federal Water Pollution Control Act, under the authority granted to the State of Missouri and in compliance with the Missouri Clean Water Law, we have issued and are enclosing a General State Operating Permit to discharge from Bridgeton Landfill Stockpile.

Monitoring reports that may be required by the special conditions must be submitted on a periodic basis. Copies of the necessary report forms, if required, are enclosed and should be mailed to the St. Louis Regional Office. Please contact this office for additional forms.

This General Permit is both your federal discharge permit and your new state operating permit and replaces all previous state operating permits issued for this facility under the same permit number. In all future correspondence regarding this facility, please refer to your general permit number as shown on page one of your permit.

If you have questions concerning this permit, please do not hesitate to call the St. Louis Regional Office at (314)301-7600, 9200 Watson Road, Suite 201, St. Louis, Missouri 63126.

Sincerely,

ST. LOUIS REGIONAL OFFICE

Mohamad Alhalabi, P.E.
Regional Director

MA:CB:ka

Enclosure

c: WPCP - Permits

STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

MISSOURI CLEAN WATER COMMISSION

MISSOURI STATE OPERATING PERMIT

GENERAL PERMIT

[illegible]

Permit No. :	MO-R103310
Owner:	Bridgeton Landfill, L.L.C.
Owner's Address:	13570 St. Charles Rock Road Bridgeton, MO 63044
Operating Authority:	Same
Operating Authority Address:	Same
Facility Name:	Bridgeton Landfill Stockpile
Facility Address:	12830 St. Charles Rock Road Bridgeton, MO 63044
Legal Description:	SW ¼, SE ¼, Sec. 34, T47N, R5E St. Louis County
Receiving Stream:	Trib. to Cowmire Creek (U)
First Class. & ID#:	Missouri River (P) #1604
USGS & Sub Water ID#:	10300200-180-001

[illegible]

[illegible]

All Outfalls

Construction or land disturbance activity (e.g., clearing, grubbing, excavating, grading, and other activity that results in the destruction of the root zone).

[illegible]

February 8, 2002

August 28, 2002

February 7, 2007

APPLICABILITY

1. This general permit authorizes the discharge of storm water and certain non-storm water discharges from land disturbance sites that disturb one (1) or more acres over the life of the project or which is part of a larger common plan of development or sale that will disturb one or more acres over the life of the project. This general permit also authorizes the discharge of storm water and certain non-storm water discharges from smaller projects where the department has exercised its discretion to require a permit [10 CSR 20-6.200 (1)(B)].

   A Missouri State Operating Permit that specifically identifies the project must be issued before any site vegetation is removed or the site disturbed.

   Any site owner/operator subject to these requirements for storm water discharges and who disturbs land prior to permit issuance from MDNR is in violation of both State and Federal laws.

2. This permit authorizes non-storm water discharges from the following activities provided that these discharges are addressed in the permittee's specific Storm Water Pollution Prevention Plan (SWPPP) required by this general permit:
   a. De-watering activities if there are no contaminants other than sediment present in the discharge,
   b. Flushing water hydrants and potable water lines,
   c. Water only (i.e., without detergents or additives) rinsing of streets and buildings, and,
   d. Site watering to establish vegetation.

3. This permit does not apply to storm water discharges within 1000 feet of:
   a. Streams identified as a losing stream*,
   b. Streams or lakes listed as an outstanding national or state resource water*,
   c. Reservoirs or lakes used for public drinking water supplies (class L1)*, or
   d. Streams, lakes or reservoirs identified as critical habitat for endangered species.

4. This permit does not apply to storm water discharges:
   a. Within 100 feet of a permanent stream (class P) or major reservoir (class L2)*, or
   b. Within two stream miles upstream of biocriteria reference locations*.

5. This permit does not apply to storm water discharges where:
   a. Any of the disturbed area is defined as a wetland (Class W)*, or
   b. The storm water discharges to a sinkhole or other direct conduit to groundwater.

6. This general permit does not authorize the placement of fill materials in flood plains, the obstruction of stream flow, directing storm waters across private property not owned or operated by the permittee, or changing the channel of a defined drainage course. This general permit is intended to address only the quality of the storm water runoff and minimize off-site migration of sediments and other water contaminants.

7. This general permit does not authorize any discharge to waters of the state of sewage, wastewaters, or pollutants such as:
   a. Hazardous substances o
   b. r petroleum products from an on-site spill or improper handling and disposal practices,
   b. Wash and/or rinse waters from concrete mixing equipment including ready mix concrete trucks unless such discharges are adequately treated and addressed in the Storm Water Pollution Prevention Plan, or
   c. Wastewater generated from air pollution control equipment or the containment of scrubber water in lined ponds, or
   d. Domestic wastewaters, including gray waters.

* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR by calling the Water Pollution Control Program.

APPLICABILITY (continued)

8. MDNR reserves the right to deny coverage under this general permit to applicants for storm water discharges from land disturbance activities at sites that have contaminated soils that will be disturbed by the land disturbance activity or where such materials are brought to the site to use as fill or borrow. Such activities are normally covered by a site specific permit.

9. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of the permitted site to apply for a site specific permit, the department may require any person to obtain a site specific operating permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(5)].

   The department may require the permittee to apply for and obtain a site specific or different general permit if:

   a. The permittee is not in compliance with the conditions of this general permit;
   b. The discharge no longer qualifies for this general permit due to changed site conditions and regulations; or
   c. Information becomes available that indicates water quality standards have been or may be violated.

   The permittee will be notified in writing of the need to apply for a site specific permit or a different general permit. When a site specific permit or different general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be. The permittee shall submit the appropriate Forms to the department to terminate the permit that has been replaced.

10. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site specific permit [10 CSR 20-6.010 (13) and 10 CSR 20-6.200(5)].

11. This permit is not transferable to other owners or operators unless all of the conditions listed in the "Transfer of Ownership" section are met.

EXEMPTIONS FROM PERMIT REQUIREMENTS

1. Facilities that discharge all storm water runoff directly to a combined sewer system are exempt from storm water permit requirements.

2. Linear, strip or ribbon construction, or maintenance operations as identified in 10 CSR 20-6.200 (1)(B), where water quality standards are not exceeded.

3. Sites that disturb less than one acre of total land area that are not part of a common plan or sale and that do not cause any violations of water quality standards and are not otherwise designated by the department as requiring a permit.

4. Agricultural storm water discharges and irrigation return flows. For purposes of this permit, land disturbance activities from Animal Feeding Operations (AFO) are not considered an agricultural activity and therefore not included in this exemption.

REQUIREMENTS AND GUIDELINES

Note: These requirements do not supersede nor remove liability for compliance with county and other local ordinances.

1. The discharge of storm water from these facilities shall not cause a violation of the state water quality standards, 10 CSR 20-7.031, which states, in part, that no water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:

   a. 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;
   b. Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
   c. Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
   d. Waters shall be free from substances or conditions in sufficient amounts to have a harmful effect on human, animal or aquatic life.
   e. There shall be no significant human health hazard from incidental contact with the water;
   f. There shall be no acute toxicity to livestock or wildlife watering;
   g. Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
   h. 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.

2. Good housekeeping practices shall be maintained on the site to keep solid waste from entry into waters of the state.

3. All fueling facilities present on the site shall adhere to applicable federal and state regulations concerning underground storage, above ground storage, and dispensers, including spill prevention, control and counter measures.

4. Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) that are transported, stored, or used for maintenance, cleaning or repair shall be managed according to the provisions of RCRA and CERCLA.

5. An individual shall be designated by the permittee as responsible for environmental matters. Staff of the permitted facility shall inspect any structures that function to prevent pollution of storm water or to remove pollutants from storm water and of the facility in general to ensure that any Best Management Practices are continually implemented and effective.

6. All paint, solvents, petroleum products and petroleum waste products (except fuels), and storage containers (such as drums, cans, or cartons) shall be stored so that these materials are not exposed to storm water. Sufficient practices of spill prevention, control, and/or management shall be provided to prevent any spills of these pollutants from entering a water 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.

REQUIREMENTS AND GUIDELINES (continued)

7. The primary requirement of this permit is the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that

   a. Incorporates required practices identified below,
   b. Incorporates erosion control practices specific to site conditions, and
   c. Provides for maintenance and adherence to the plan.

   For new applicants, before removing any site vegetation, disturbing earth, or submitting an application, the permittee shall develop a SWPPP that is specific to the land disturbance activities at the site. This plan must be developed before a permit can be issued and made available as specified under RECORDS. However, the plan should not be submitted to the department unless specifically requested.

   The permittee shall fully implement the provisions of the SWPPP required under this part as a condition of this general permit throughout the term of the land disturbance project.

   The purpose of the SWPPP is to ensure the design, implementation, management, and maintenance of Best Management Practices (BMPs) in order to reduce the amount of sediment and other pollutants in storm water discharges associated with the land disturbance activities; comply with the Missouri Water Quality Standards; and ensure compliance with the terms and conditions of this general permit.

   The permittee shall select, install, use, operate, and maintain the BMPs in accordance with the concepts and methods described in the following documents:

   a. ***Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices***, (Document number EPA 832-R-92-005) published by the United States Environmental Protection Agency (USEPA) in 1992. **This manual is available at The USEPA internet site:** http://cfpubl.epa.gov/npdes/home.cfm?program_id=6m **(searching under Publications/Policy and Guidance Documents).**

   b. ***Protecting Water Quality: A field guide to erosion, sediment and storm water best management practices for development sites in Missouri,*** published by the Missouri Department of Natural Resources in November 1995.

   The permittee is not limited to the use of these guidance manuals. Other commonly accepted publications may be used for guidance and must be referenced in the SWPPP if used. In addition, the permittee is not limited to the use of BMP identified in these manuals. However, any alternative BMPs should be justified by site conditions and described in the SWPPP.

8. SWPPP Requirements: The following information and practices shall be provided for in the SWPPP.
   a. Site Description. In order to identify the site, the SWPPP shall include the facility and outfall information provided in the Application Form. The SWPPP shall have sufficient information to be of practical use to contractors and site construction workers to guide the installation and maintenance of BMPs.
   b. Drainage areas: The following guidelines are for protection of drainage areas and shall be addressed in the SWPPP.
      i. Clearing and grubbing within 50 feet of a defined drainage course should be avoided.
      ii. Where changes to defined drainage courses occur as part of the project, clearing and grubbing within 50 feet of the defined drainage course should be delayed until all materials and equipment necessary to protect and complete the drainage change are on site.
      iii. Changes to defined drainage courses shall be completed as quickly as possible once the work has been initiated. The area impacted by the land disturbance of the drainage course change is to be revegetated or protected from erosion as soon as possible. Areas within 50 feet of defined drainage
      ways should be recontoured as needed and revegetated, seeded, or otherwise protected within five (5) working days after grading has ceased.

REQUIREMENTS AND GUIDELINES (continued)

8. SWPPP Requirements (continued)

b. Drainage areas (continued)

iv. Work in defined drainages or water courses may require a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the federal Clean Water Act.

c. Description of Best Management Practices: The SWPPP shall include a description of the BMPs that will be used at the site. The SWPPP shall provide the following general information for each BMP which will be used one or more times at the site:

i. Physical description of the BMP,
ii. Site and physical conditions that must be met for effective use of the BMP,
iii. BMP installation/construction procedures, including typical drawings, and
iv. Operation and maintenance procedures for the BMP.

The SWPPP shall provide the following information for each specific instance where a BMP is to be installed:

i. Whether the BMP is temporary or permanent,
ii. Where, in relation to other site features, the BMP is to be located,
iii. When the BMP will be installed in relation to each phase of the land disturbance procedures to complete the project, and
iv. What site conditions must be met before removal of the BMP if the BMP is not a permanent BMP.

d. Disturbed Areas: Slopes for disturbed areas must be defined in the SWPPP. Where soil disturbing activities cease in an area for more than 14 days, the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs. If the slope of the area is greater than 3:1 or if the slope is greater than 3% and greater than 150 feet in length, then the disturbed areas shall be protected from erosion by stabilizing the area with mulch or other similarly effective erosion control BMPs if activities cease for more than seven days. These requirements do not apply to the slopes of a sedimentation basin or the areas that clearly drain thereto.

e. Installation: The permittee shall ensure the BMPs are properly installed at the locations and relative times specified in the SWPPP. Peripheral or border BMPs to control runoff from disturbed areas shall be installed or marked for preservation before general site clearing is started. Storm water discharges from disturbed areas, which leave the site, shall pass through an appropriate impediment to sediment movement, such as a sedimentation basin, sediment traps, silt fences, etc. prior to leaving the land disturbance site. Bench marks shall be referenced for proper installation and operation and maintenance of drainage course changes.

f. Temporary and Permanent Non-Structural BMPs: The SWPPP shall require existing vegetation to be preserved where practical. The time period for disturbed areas to be without vegetative cover is to be minimized to the extent practical.

Examples of non-structural BMPs which the permittee should consider specifying in the SWPPP include: preservation of trees and mature vegetation, protection of existing vegetation for use as buffer strips (especially along drainage courses), mulching, sodding, temporary seeding, final seeding, geotextiles, stabilization of disturbed areas, preserving existing stream channels as overflow areas when channel straightening or shortening is allowed, soil stabilizing emulsions and tackifiers, mulch tackifiers, stabilized site entrances/exits, and other appropriate BMPs.

REQUIREMENTS AND GUIDELINES (continued)

8. SWPPP Requirements (continued)

g. Temporary and Permanent Structural BMPs: Examples of structural BMPs that the permittee should consider specifying in the SWPPP include: diverting flows from undisturbed areas away from disturbed areas, silt (filter fabric or straw bale) fences, earthen diversion dikes, drainage swales, sediment traps, rock check dams, subsurface drains (to gather or transport water for surface discharge elsewhere), pipe slope drains (to carry concentrated flow down a slope face), level spreaders (to distribute concentrated flow into sheet flow), storm drain inlet protection and outlet protection, reinforced soil retaining systems, gabions, temporary or permanent sediment basins, and other appropriate BMPs.

h. Sedimentation Basins: The SWPPP shall require a sedimentation basin for each drainage area with 10 or more acres disturbed at one time. The sediment basin shall be sized to contain 0.5 inch of sediment from the drainage area and to be able to contain a 2-year, 24-hour storm. The sediment shall be cleaned out of the basin and otherwise maintained as needed until the drainage area is stabilized. This requirement does not apply to flows from areas where such flows are properly diverted around both the disturbed areas and the sediment basin. Discharges from the basin shall not cause scouring of the banks or bottom of the receiving stream.

Where use of a sediment basin of this size is impractical, the SWPPP shall evaluate and specify other similarly effective BMPs to be employed to control erosion and sediment delivery. The SWPPP shall require the basin be maintained until final stabilization of the area served by the basin.

The SWPPP shall require both temporary and permanent sedimentation basins to have a stabilized spillway to minimize the potential for erosion of the spillway or basin embankment.

i. Additional Site Management BMPs: The SWPPP shall address other BMPs, as required by site activities, to prevent contamination of storm water runoff. Such BMPs include:

i. Solid and hazardous waste management including: providing trash containers and regular site clean up for proper disposal of solid waste such as scrap building material, product/material shipping waste, food containers, and cups; and providing containers and proper disposal of waste paints, solvents, and cleaning compounds, etc.;
ii. Provision of portable toilets for proper disposal of sanitary sewage;
iii. Storage of construction materials away from drainage courses and low areas; and
iv. Installation of containment berms and use of drip pans at petroleum product and liquid storage tanks and containers.

j. Permanent Storm Water Management: The SWPPP shall include a description of the measures that will be installed during land disturbance to control pollutants in storm water discharges that will occur after land disturbance activity has been completed. These could include drainage channels or systems; outlet control devices, detention basins, oil water separators, catch basins, etc. This general permit does not require the permittee or the permittee's contractors to operate or maintain these measures beyond the date of MDNR's Letter of Termination.

9. Amending/Updating the SWPPP: The permittee shall amend and update the SWPPP as appropriate during the term of the land disturbance activity. The permittee shall amend the SWPPP, at a minimum, whenever the:

a. Design, operation, or maintenance of BMPs is changed;
b. Design of the construction project is changed that could significantly affect the quality of the storm water discharges;
c. Permittee's inspections indicate deficiencies in the SWPPP or any BMP;
d. MDNR notifies the permittee of deficiencies in the SWPPP;
e. SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., there is visual evidence, such as excessive site erosion or excessive sediment deposits in streams or lakes);
f. Total Settleable Solids from a storm water outfall exceed 2.5 ml/L/hr.; or
g. MDNR determines violations of Water Quality Standards may occur or have occurred.

REQUIREMENTS AND GUIDELINES (continued)

10. Site Inspections Reports: The permittee shall ensure the land disturbance site is inspected on a regular schedule and within a reasonable time period (not to exceed 72 hours) following heavy rains. Regularly scheduled inspections shall be at a minimum once per week. For disturbed areas that have not been finally stabilized, all installed BMPs and other pollution control measures shall be inspected for proper installation, operation and maintenance. Locations where storm water leaves the site shall be inspected for evidence of erosion or sediment deposition. Any deficiencies shall be noted in a weekly report of the inspection(s) and corrected within seven calendar days of the inspection report. The permittee shall promptly notify the site contractors responsible for operation and maintenance of BMPs of deficiencies.

A log of each inspection shall be kept. The inspection report is to include the following minimum information: inspector's name, date of inspection, observations relative to the effectiveness of the BMPs, actions taken or necessary to correct deficiencies, and listing of areas where land disturbance operations have permanently or temporarily stopped. The inspection report shall be signed by the permittee or by the person performing the inspection if duly authorized to do so.

11. Proper Operation and Maintenance: The permittee shall at all times maintain all pollution control measures and systems in good order to achieve compliance with the terms of this general permit.

The need to halt or reduce the permitted activity in order to maintain compliance with general permit conditions shall not be a defense to the permittee in an enforcement action.

12. Notification to All Contractors: The permittee shall notify each contractor or entity (including utility crews and city employees or their agents) who will perform work at the site of the existence of the SWPPP and what action or precautions shall be taken while on site to minimize the potential for erosion and the potential for damaging any BMP. If additional land is disturbed or any BMP damaged, then the permittee shall cause to have the disturbance or damage repaired.

OTHER DISCHARGES

1. Hazardous Substance and Oil Spill Reporting: Refer to Section B, #14 of Part I of the Standard Conditions that accompany this permit.

2. Removed substances: Refer to Section B, #6 of Part I of the Standard Conditions that accompany this permit.

3. Change in discharge: In the event soil contamination or hazardous substances are discovered at the site during land disturbance activities, the permittee shall notify MDNR in writing.

SAMPLING REQUIREMENTS AND EFFLUENT LIMITATIONS

1. Discharges shall not violate General Water Quality Standards 10 CSR 20-7.031(3). Settleable Solids shall not exceed a maximum of 2.5 ml/L/hr. for each storm water outfall.

2. There are no regular sampling requirements in this permit. However, the department may require sampling and reporting as a result of illegal discharges, compliance issues, complaint investigations, or other such evidence of off-site contamination from activities at the site. If such an action is needed, the department will specify in writing any additional sampling requirements, including such information as location, extent, and parameters.

RECORDS

1. The permittee shall retain copies of this general permit, the SWPPP and all amendments for the site named in the State Operating Permit, results of any monitoring and analysis, and all site inspection records required by this general permit. The permittee shall retain these records at a site which is readily available from the permitted site until final stabilization of a site is achieved. The local office of the permittee, their contractor or consultant is considered to be readily available from the project site if it is located in the same county as the project site. The records shall be accessible during normal business hours. After final stabilization the records may be maintained at the location of the permittee's main office. The records shall be retained for a period of at least three years from the date of the Letter of Termination.

2. The permittee shall provide a copy of the SWPPP to MDNR, USEPA, or any local agency or government representative if they request a copy in the performance of their official duties.

3. The permittee shall provide those who are responsible for installation, operation, or maintenance of any BMP a copy of the SWPPP.

4. The permittee, their representative, and/or the contractor(s) responsible for installation, operation, and maintenance of the BMPs shall have a current copy of the SWPPP with them when on the project site.

TRANSFER OF OWNERSHIP

1. Individual Lot or Lots: Federal and Missouri storm water regulations (10 CSR 20-6.200) require a storm water permit and erosion control for one acre or more disturbed as part of a common plan or sale. When individual lots (commercial, industrial, or residential) are sold to an entity for construction (unless sold to an individual for purposes of building their own private residence) are also subject to storm water regulations because they are part of the common sale.

   The existing permittee who intends to transfer ownership of a lot or parcel of the overall permitted area is still responsible for the terms of this permit and erosion control on that site unless the new owner applies for and receives a separate Missouri State Operating Permit for storm water discharges from land disturbance activities. If the current permittee is to retain the permit and responsibility for control of sediment and other pollutants at the site, then the owner should obtain a copy of an Individual Lot Certification (ILC) from the lot owner(s).. The ILC should be properly completed and signed and retained with the SWPPP.

2. Entire Tract: If the entire tract is sold to a single entity, then this permit shall be terminated and the new owner shall submit an application for a new permit immediately.

TERMINATION

This permit may be terminated when the project is stabilized. The project is considered to be stabilized when either perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. With respect to areas that have been vegetated, vegetative cover shall be at least 70% of fully established plant density over 100% of the disturbed area.

In order to terminate the permit, the permittee shall notify MDNR by submitting Form H, included with the State Operating Permit. The permittee shall complete Form H and mail it to MDNR at the address noted in the cover letter of this permit.

This general permit will expire five years from the effective date of the permit (see page 1). The issue date is the date the State Operating Permit is issued to the applicant. The expiration date may or may not coincide with the date the authorized project or development is scheduled for completion.

TERMINATION (continued)

If the project or development completion date will be after the expiration date of this general permit, then the permittee must reapply to the department for the permit to be re-issued. The permittee will receive notification of the expiration date of the permit before the expiration date listed on page 1 of this permit. In order for the permit to be re-issued, the permittee should submit the appropriate application form(s) at least 180 days before the expiration of the permit if land disturbance activity is expected to continue past the expiration date of this general permit.

If the permittee does not apply for the renewal of this permit, this permit will automatically terminate on the expiration date. Continued discharges from a site that has not been fully stabilized are prohibited beyond the expiration date; unless the permit is reissued or the permittee has filed a timely application for the reissuance of this permit.

DUTY TO COMPLY

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

MAILING ADDRESS

The permittee shall send all written correspondence and forms, which are to be submitted to MDNR to the address listed in the cover letter that accompanies this permit.

STANDARD CONDITIONS FOR NPDES PERMITS
ISSUED BY
THE MISSOURI DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION
Revised
October 1, 1980

PART I - GENERAL CONDITIONS
SECTION A - MONITORING AND REPORTING

1. Representative Sampling
   a. Samples and measurements taken as required herein shall be representative of the nature and volume, respectively, of the monitored discharge. All samples shall be taken at the outfall(s), and unless specified, before the effluent joins or is diluted by any other body of water or substance.
   b. Monitoring results shall be recorded and reported on forms provided by the Department, postmarked no later than the 28th day of the month following the completed reporting period. Signed copies of these, and all other reports required herein, shall be submitted to the respective Department Regional Office, the Regional Office address is indicated in the cover letter transmitting the permit.

2. Schedule of Compliance
   No later than fourteen (14) calendar days following each date identified in the "Schedule of Compliance", the permittee shall submit to the respective Department Regional Office as required therein, either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirements, or if there are no more scheduled requirements, when such noncompliance will be corrected. The Regional Office address is indicated in the cover letter transmitting the permit.

3. Definitions
   Definitions as set forth in the Missouri Clean Water Law and Missouri Clean Water Commission Definition Regulation 10 CSR-20-2.010 shall apply to terms used herein.

4. Test Procedures
   Test procedures for the analysis of pollutant shall be in accordance with the Missouri Clean Water Commission Effluent Regulation 10 CSR 20-7015.

5. Recording of Results
   a. For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:
      (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. 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 this permit 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 both.
   c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

6. Additional Monitoring by Permittee
   If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Monitoring Report Form. Such increased frequency shall also be indicated.

7. Records Retention
   The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recording for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this 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.

SECTION B - MANAGEMENT REQUIREMENTS

1. Change in Discharge
   a. All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant not authorized by this permit or any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.
   b. Any facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants shall be reported by submission of a new NPDES application at least sixty (60) days before each such changes, or, if they will not violate the effluent limitations specified in the permit, by notice to the Department at least thirty (30) days before such changes.

2. Noncompliance Notification
   a. If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Department with the following information, in writing within five (5) days of becoming aware of such conditions:
      (i) a description of the discharge and cause of noncompliance, and
      (ii) the period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
   b. Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally with 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided with five (5) days of the time the permittee becomes aware of the circumstances. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

3. Facilities Operation
   Permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions. Operators or supervisors of operations at publicly owned or publicly regulated wastewater treatment facilities shall be certified in accordance with 10 CSR 209.020(2) and any other applicable law or regulation. Operators of other wastewater treatment facilities, water contaminant source or point sources, shall, upon request by the Department, demonstrate that wastewater treatment equipment and facilities are effectively operated and maintained by competent personnel.

4. Adverse Impact
   The permittee shall take all necessary steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit or set forth in the Missouri Clean Water Law and Regulations (hereinafter the Law and Regulations), including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing
   a. Any bypass or shut down of a wastewater treatment facility and tributary sewer system or any part of such a facility and sewer system that results in a violation of permit limits or conditions is prohibited except:
      (i) where unavoidable to prevent loss of life, personal injury, or severe property damages; and
      (ii) where unavoidable excessive storm drainage or runoff would catastrophically damage any facilities or processes necessary for compliance with the effluent limitations and conditions of this permit;
      (iii) where maintenance is necessary to ensure efficient operation and alternative measures have been taken to maintain effluent quality during the period of maintenance.
   b. The permittee shall notify the Department in writing of all bypasses or shut down that result in a violation of permit limits or conditions. This section does not excuse any person from liability, unless such relief is otherwise provided by the statute.

6. Removed Substances
   Solids, sludges, filter backwash, or any other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutants from entering waters of the state unless permitted by the Law; and a permanent record of the date and time; volume and methods of removal and disposal of such substances shall be maintained by the permittee.

7. Power Failures
   In order to maintain compliance with the effluent limitations and other provisions of this permit, the permittee shall either:
   a. in accordance with the "Schedule of Compliance", provide an alternative power source sufficient to operate the wastewater control facilities; or,
   b. if such alternative power source is not in existence, and no date for its implementation appears in the Compliance Schedule, halt or otherwise control production and all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

8. Right of Entry
   For the purpose of inspecting, monitoring, or sampling the point source, water contaminant source, or wastewater treatment facility for compliance with the Clean Water Law and these regulations, authorized representatives of the Department, shall be allowed by the permittee, upon presentation of credentials and at reasonable times;
   a. to enter upon permittee's premises in which a point source, water contaminant source, or wastewater treatment facility is located or in which any records are required to be kept under terms and conditions of the permit;
   b. to have access to, or copy, any records required to be kept under terms and conditions of the permit;
   c. to inspect any monitoring equipment or method required in the permit;
   d. to inspect any collection, treatment, or discharge facility covered under the permit; and
   e. to sample any wastewater at any point in the collection system or treatment process.

9. Permits Transferable
   a. Subject to Section (3) of 10 CSR 20-6.010 an operating permit may be transferred upon submission to the Department of an application to transfer signed by a new owner. Until such time as the permit is officially transferred, the original permittee remains responsible for complying with the terms and conditions of the existing permit.
   b. The Department, within thirty (30) days of receipt of the application shall notify the new permittee of its intent to revoke and reissue or transfer the permit.

10. Availability of Reports
    Except for data determined to be confidential under Section 308 of the Act, and the Law and Missouri Clean Water Commission Regulation for Public Participation, Hearings and Notice to Governmental Agencies 10 CSR 20-6.020, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by statute, effluent data shall not be considered confidential. Knowingly making any false statement on any such report shall be subject to the imposition of criminal penalties as provided in Section 204.076 of the Law.

11. Permit Modification
    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) violation 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 and 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.

12. Permit Modification - Less Stringent Requirements
    If any permit provisions are based on legal requirements which are lessened or removed, and should no other basis exist for such permit provisions, the permit shall be modified after notice and opportunity for a hearing.

13. Civil and Criminal Liability
    Except as authorized by statute and provided in permit conditions on "Bypassing" (Standard Condition B-5) and "Power Failures" (Standard Condition B-7) nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

14. Oil and Hazardous Substance Liability
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act, and the Law and Regulations. Oil and hazardous materials discharges must be reported in compliance with the requirements of the Federal Clean Water Act.

15. State Laws
    Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state statute or regulations.

16. Property Rights
    The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of or violation of federal, state or local laws or regulations.

17. Duty to Reapply
    If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit 180 days prior to expiration of this permit.

18. Toxic Pollutants
    If a toxic effluent standard, prohibition, or schedule of compliance is established, under Section 307(a) of the Federal Clean Water Act for a toxic pollutant in the discharge of permittee's facility and such standard is more stringent than the limitations in the permit, then the more stringent standard, prohibition, or schedule shall be incorporated into the permit as one of its conditions, upon notice to the permittee.

19. Signatory Requirement
    All reports, or information submitted to the Director shall be signed (see 40 CFR 122.6)

20. Rights Not Affected
    Nothing in this permit shall affect the permittee's right to appeal or seek a variance from applicable laws or regulations as allowed by law.

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

MISSOURI DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL QUALITY
WATER POLLUTION CONTROL PROGRAM
P.O. BOX 176 JEFFERSON CITY, MO 65102

FORM H - REQUEST FOR TERMINATION OF A GENERAL PERMIT

UNDER MISSOURI CLEAN WATER LAW

1.00 TYPE OF GENERAL PERMIT REQUESTED TO BE TERMINATED

1.10 PERMIT NUMBER

MO —

2.00 NAME OF FACILITY

2.10 ADDRESS

2.20 OWNER

NAME		PHONE	
		FAX	
ADDRESS	CITY	STATE	ZIP

2.30 CONTINUING AUTHORITY

NAME		PHONE	
		FAX	
ADDRESS	CITY	STATE	ZIP

3.00 REASON FOR TERMINATION REQUEST: (CHECK ONE)

☐ For land disturbance sites, area is stabilized by seeding, mulching, sodding, paving, or other means, no further land disturbance activities are planned, and construction equipment removed.

☐ For industrial facilities, site activities have ceased and site closed and no significant materials remain exposed to storm water.

☐ For any type of site, a site specific permit was obtained.

☐ Other reason (specify) _____

4.00 I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION CONTAINED IN THE TERMINATION REQUEST, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE AND ACCURATE.

NAME AND OFFICIAL TITLE (TYPE OR PRINT)	TELEPHONE NO ( ) (AREA CODE)
SIGNATURE	DATE SIGNED

St. Louis County Department of Health
License #418
Bridgeton Sanitary Landfill

Charlie A. Dooley
County Executive

Saint Louis
COUNTY
HEALTH

Dolores J. Gunn, MD
Director

June 21, 2005

CERTIFIED MAIL #7003 1010 0003 3204 6622

Mr. Rick Walker
Operations Manager
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, Missouri 63044

RE: Annual Renewal of Bridgeton Sanitary Landfill, LLC, 13570 St. Charles Rock Road, Bridgeton, Missouri 63044, License # 418 issued by the Saint Louis County Health Department.

Dear Ms. Douma;

The Saint Louis County Health Department (HD), Solid Waste Management Program has received your license renewal application and payment of the annual licensing fee for the Bridgeton Sanitary Landfill, LLC, Bridgeton, Missouri 63044.

Please find enclosed your renewed Operating License No. 418. This license will expire on June 22, 2006. This renewal contains the following condition as it relates to monthly gas and leachate monitoring:

CONDITIONS:

1. Within thirty (30) days of sampling, HD shall receive in writing, the results of the monthly perimeter gas monitoring system.

2. Within thirty (30) days of sampling, HD shall receive in writing, the results of the monthly leachate level monitoring.

3. All monthly leachate head readings shall be taken on the same day after the sumps have been shut off and wells have recharged, and shall be recorded in Mean Sea Level (MSL).

Should you have any questions regarding the renewal of your sanitary landfill operating license, please contact Nicole Stiles at 314-615-7329 or Susan Taylor at 314-615-4116.

Sincerely,

Dolores J. Gunn, MD
Director

Enclosure

DJG:SRT:cp

c: Allen Steinkamp, Environmental Manager, Bridgeton Landfill, LLC ✓
Richard Houchin, City of Bridgeton
Jim Bell, Chief of Engineering, MDNR-SWMP
Joe Trunko, Chief, Solid Waste Unit, MDNR-SLRO
Janet Williams, Director, Division of Environmental Protection
John Haasis, P.E., Manager, Solid Waste Management Program
Susan Taylor, Supervisor, Solid Waste Management Program
Nicole Stiles, Waste Specialist, Solid Waste Management Program

Saint Louis COUNTY HEALTH

ENVIRONMENTAL PROTECTION DIVISION

SANITARY LANDFILL LICENSE

License No. **0418** Date: 06-21-2005

Owner: **Bridgeton Landfill, LLC**
Facility Name: **Bridgeton Sanitary Landfill**

is hereby granted permission to operate a **sanitary landfill** located at **13570 St. Charles Rock Road, Bridgeton, Missouri, 63044** under and in accordance with Chapter No. 607 of Saint Louis County and subject to the rules and regulations of the HEALTH DEPARTMENT.

Expiration Date: June 22, 2006

Issued at Clayton, Missouri
This twenty-first day of June, 2005

Division Director

Director

This license is issued subject to conditions in the Application and the conditions set forth in the department's letter of 06-21-2005 (attached) and is valid until suspended or revoked by the HEALTH DEPARTMENT. It must be kept posted in a conspicuous place on the premises for which it was issued.

St. Louis County Department of Health
License #419
Bridgeton Demolition Landfill

Charlie A. Dooley
County Executive

Saint Louis
COUNTY
HEALTH

Dolores J. Gunn, MD
Director

June 21, 2005

CERTIFIED MAIL #7003 1010 0003 3204 6639

Mr. Rick Walker
Operations Manager
Bridgeton Landfill, LLC
13570 St. Charles Rock Road
Bridgeton, Missouri 63044

RE: Annual Renewal of Bridgeton Demolition Landfill, LLC, 13570 St. Charles Rock Road, Bridgeton, Missouri 63044, License #419 issued by the Saint Louis County Health Department.

Dear Mr. Walker:

The Saint Louis County Health Department (HD), Solid Waste Management Program has received your license renewal application and payment of the annual licensing fee for the Bridgeton Demolition Landfill, LLC, Bridgeton, Missouri 63044.

Please find enclosed your renewed Operating License No. 419. This license will expire on June 22, 2006. This renewal contains the following condition as it relates to monthly gas monitoring:

> *Within thirty* (30) days of sampling, HD shall receive in writing, the results of the monthly perimeter gas system monitoring.

This renewal contains no additional restrictions. Operational standards shall comply with provisions of the Saint Louis County Waste Management Code, Chapter 607. Renewal of this license does not constitute any Federal, State, or local approvals that may be required to operate your facility.

Should you have any questions regarding the renewal of your demolition landfill operating license, please contact Nicole Stiles at 314-615-7329 or Susan Taylor at 314-615-4116.

Sincerely,

Dolores J. Gunn, MD
Director

Enclosure

DJG:SRT:cp

c: Allen Steinkamp, Environmental Mgr., Bridgeton Landfill, LLC ✓
Richard Houchin, City of Bridgeton
Jim Bell, Chief of Engineering, MDNR-SWMP
Joe Trunko, Chief, Solid Waste Unit, MDNR-SLRO
Janet Williams, Director, Division of Environmental Protection
John Haasis, P.E., Manager, Solid Waste Management Program
Susan Taylor, Supervisor, Solid Waste Management Program
Nicole Stiles, Waste Specialist, Solid Waste Management Program

Saint Louis COUNTY HEALTH

ENVIRONMENTAL PROTECTION DIVISION

DEMOLITION LANDFILL LICENSE

License No. **0419** Date: 06-21-2005

Owner: **Bridgeton Landfill, LLC**
Facility Name: **Bridgeton Demolition Landfill**

is hereby granted permission to operate a **demolition landfill** located at **13570 St. Charles Rock Road, Bridgeton, Missouri, 63044** under and in accordance with Chapter No. 607 of Saint Louis County and subject to the rules and regulations of the HEALTH DEPARTMENT.

Expiration Date: June 22, 2006

Issued at Clayton, Missouri
This twenty-first day of June, 2005

Division Director

Director

This license is issued subject to conditions in the Application and the conditions set forth in the department's letter of 06-21-2005 (attached) and is valid until suspended or revoked by the HEALTH DEPARTMENT. It must be kept posted in a conspicuous place on the premises for which it was issued.