ANDREWS
ENGINEERING, INC.

US EPA RECORDS CENTER REGION 5
463208

March 14, 2012

Stephen F. Nightingale
Manager, Permit Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

Re: 2018080001 – Winnebago County
Winnebago Landfill – Northern and Southern Units
Biennial Well Surveys

Dear Agency Representative:

Pursuant to Condition VIII.19 of Permit No. 1991-138 (Modification No. 53), and consistent with the proposed Compliance Commitment Agreement (March 2, 2012) for Violation Notice L-2012-01007, enclosed are the biennial well surveys completed for years 2009 and 2011 at Winnebago Landfill.

Please contact Tom Hilbert at (815) 963-7516 if you have any questions or require additional information.

Sincerely,

Teresa N. Sharp

Teresa N. Sharp
Environmental Scientist

TNS:tns:slm

Enclosure

cc: Tom Hilbert – Rock River Environmental Services
Bernie Shorle – US EPA Region 5

J:\1990\90-114 (Winnebago)\DOC\2012\WNS Biennial Well Surveys (2009 and 2011) DOC

3300 Ginger Creek Drive, Springfield, Illinois 62711 ◆ 217.787.2334 fax 217.787.9495 www.andrews-eng.com

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
SOLID WASTE REPORTING FORM

This form must be used as a cover for the following list of notices and reports required by the Illinois EPA's Bureau of Land, Permit Section. All reports must be submitted to the Illinois EPA's Bureau of Land Permit Section. This form must be used for Solid Waste facilities only. Reporting for Hazardous Waste facilities should be submitted on a separate Hazardous Waste Reporting Form. All reports submitted to the Illinois EPA's Bureau of Land Permit Section must contain an original, plus a minimum of two copies.

Note: This form may NOT be used for any request to modify the permit, sampling or operating procedures. Modification requests must be submitted separately in the form of a permit application.

This form is not to be used with permit applications. Your permit will state whether the document you are submitting is required as a report or an application.

Facility Name: Winnebago Landfill - Northern and Southern Units Site ID#: 2018080001

Check one of the following, identifying the contents of your submittal:

- ☐ LPC-160 Forms
  - ☐ Quarterly Groundwater Data
  - ☐ Quarterly Leachate Data
  - ☐ Annual Groundwater Data
  - ☐ Annual Leachate Data
  - ☐ Semi-Annual Groundwater Data
  - ☐ Semi-Annual Leachate Data
  - ☐ Biennial Groundwater Data
  - ☐ Biennial Leachate Data
- ☐ Annual Groundwater Flow Evaluation
- ☒ Well Survey Data
- ☐ Well Construction Forms and Boring Logs
- ☐ Well Abandonment Forms
- ☐ Notice of Observed Increase in Groundwater
  Notice of Intent to Perform Confirmation Procedures (Re-sampling) in Groundwater
- ☐ Notice of Confirmed Increase of Groundwater Exceedence from Re-sample
- ☐ Notice of Methane Exceedences
- ☐ Annual Facility Report (per 35 Ill. Adm. Code 813.504) and Gas Monitoring Report
- ☐ Annual Certifications per 35 Ill. Adm. Code 813.501
- ☐ Other (identify): Not to be used for Permit Applications

LPC-591

2009 Survey

WINNEBAGO LANDFILL

MONITOR WELL CERTIFICATION
OCTOBER, 2009

MONITOR WELLS

			ELEVATION		
NAME	NORTHING	EASTING	GROUND	LID	TOIC
G39S	2002339.8	799536.9	733.4	736.4	736.16
G51S	2002419.3	800545.7	738.7	740.7	740.43
G40S	2002432.9	800087.7	733.9	736.4	735.70
G18D	2002787.2	799607.6	716.9	719.6	719.55
G18S	2002788.0	799600.2	717.1	718.7	718.47
G17S	2002550.1	799202.7	722.6	723.6	723.24
G41D	2002073.3	799383.5	727.3	728.0	727.64
G41S	2002056.3	799343.7	725.2	728.1	727.65
G41M	2002065.9	799325.7	724.7	727.5	725.83
R11S	2000991.8	801792.3	739.0	740.8	740.60
G11D	2000984.7	801789.6	738.8	741.3	740.56
R05S	2001636.6	801757.4	760.0	761.8	761.36
G09D	2001645.2	801760.6	760.0	760.7	760.60
G09M	2001650.4	801762.6	760.1	761.2	760.85
G20D	2001608.8	802388.1	755.5	758.7	758.41
G22D	2000408.9	801793.0	735.2	737.0	736.81
R22S	2000416.3	801782.7	736.0	737.4	737.26
G13S	2001424.1	801721.3	754.9	757.4	756.93
13D	2001430.3	801715.6	754.9	757.1	756.78
G29D	2000003.7	801207.7	722.3	725.4	725.13
G29S-R	1999998.1	801195.1	721.4	724.5	724.31
G23	2000211.1	800817.7	722.8	724.6	724.56
R24D	2000399.3	800814.1	721.6	723.2	723.16
R25D	2000591.1	800808.4	722.0	724.5	724.41
G26S	2000689.0	800703.3	716.1	719.5	719.26
G26D	2000679.4	800710.6	716.2	719.5	719.21
R27D	2000803.2	800653.6	722.7	724.6	724.62
R28D	2000898.9	800549.4	726.5	729.2	729.14
G49D	2001031.8	800396.0	738.1	741.0	740.77
P4R	2001885.3	799555.7	748.7	749.8	749.58
P3R	2001899.2	799551.8	748.1	751.0	750.91
G50S	2003083.3	799259.2	736.1	737.4	737.07
G72	2003642.8	798780.4	729.4	732.0	731.74
G73	2003751.1	798676.3	729.6	732.1	731.75
G74	2003859.2	798644.9	729.9	732.6	732.21
G75	2003980.8	798651.2	727.1	732.9	732.54
G76	2004091.5	798755.4	730.8	733.8	733.55
G77	2004190.7	798858.9	732.6	735.5	735.10
G78	2004316.5	798907.4	735.4	738.1	737.77
G79	2004403.9	799072.8	730.5	733.6	733.31
G80	2004464.2	799189.3	733.4	736.0	735.73
G81	2004503.7	799497.3	733.6	736.7	736.53
G82	2004542.2	799797.8	735.9	738.5	738.13
G83	2004046.7	800713.0	742.7	745.9	745.60
G84	2002849.2	800674.9	741.5	744.3	743.95
G16M	2002021.6	798806.7	710.9	714.7	713.95
G16D	2002016.9	798808.6	711.3	712.8	712.80
G34D	2002433.0	798707.6	709.8	713.8	713.58
G34S	2002425.9	798714.2	709.7	713.1	712.43
G35D	2002036.9	799089.3	711.6	714.9	714.40
G35S	2002039.1	799084.4	711.7	714.3	714.08
G33D	2001702.7	798774.2	711.4	714.6	714.40
G33S	2001707.3	798773.1	711.7	714.3	713.54
G37S	2002691.5	798732.9	708.8	711.2	710.85
G37D	2002691.5	798738.3	708.5	711.1	710.95
R42S	2001217.0	799998.3	722.4	724.8	724.71
G36S	2001360.0	799423.3	711.7	713.5	713.40
G13D	2001198.7	799381.7	712.2	715.6	715.22
G38S	2001674.8	799522.5	714.3	718.1	718.05

DANIEL L. KASTEN
3133
PROFESSIONAL
LAND
SURVEYOR
STATE OF
ILLINOIS
ROCKFORD, ILLINOIS

Fri Oct 02 09:46:06 2009
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2011 Survey

2011 Winnebago Landfill Monitor Wells

North Unit Wells

NAME	NORTH. (TOIC)	EAST. (TOIC)	GROUND ELEV	LID ELEV	TOIC ELEV
Upgradient Wells - 5					
GO9M	2001650.40	801762.60	760.1	761.20	760.85
GO9D	2001645.20	801760.80	760.0	760.70	760.60
G13D	2001430.30	801715.60	754.9	757.10	756.78
G13S	2001424.10	801721.30	754.9	757.40	756.93
G20D	2001608.80	802388.10	755.5	758.70	758.41
Groundwater Zone of Attentuation Wells - 14					
G03M(P4R)	2001885.30	799555.70	748.7	749.80	749.58
G16M	2002021.60	798806.70	710.9	714.70	713.95
G17S	2002550.10	799202.70	722.6	723.60	723.24
G33D	2001702.70	798774.20	711.4	714.60	714.40
G34D	2002433.00	798707.60	709.8	713.80	713.58
G35D	2002036.90	799089.30	711.6	714.90	714.40
G37S	2002691.50	798732.90	708.8	711.20	710.85
G38S	2001674.80	799522.50	714.3	718.10	718.05
G40S	2002432.90	800087.70	729.1	733.20	732.67
G41M	2002065.90	799325.70	724.7	727.50	725.83
G41S	2002056.30	799343.70	725.2	728.10	727.65
G41D	2002073.30	799383.50	727.3	728.00	727.64
R42S	2001217.00	799998.30	722.4	724.80	724.71
G51S	2002419.30	800545.70	738.7	740.70	740.43
Compliance Boundary Wells - 1					
G39S	2002339.80	799536.90	733.4	736.40	736.16
GroundWater Managenment Zone Wells (bedrock) - 7					
GO9M	2001650.40	801762.60	760.1	761.20	760.85
GO9D	2001645.20	801760.80	760.0	760.70	760.60
G13D	2001430.30	801715.60	754.9	757.10	756.78
G13S	2001424.10	801721.30	754.9	757.40	756.93
G16D	2002016.90	798808.60	711.3	712.80	712.80
G20D	2001608.80	802388.10	755.5	758.70	758.41
G41D	2002073.30	799383.50	727.3	728.00	727.64
GroundWater Managenment Zone Wells (unconcolidated) - 17					
R03S	2001899.20	799551.80	748.1	751.00	750.91
G03M(P4R)	2001885.30	799555.70	748.7	749.80	749.58
G16M	2002021.60	798806.70	710.9	714.70	713.95
G33S	2001707.30	798773.10	711.7	714.30	713.54
G34S	2002425.90	798714.20	709.7	713.10	712.43
G35S	2002039.10	799084.40	711.7	714.30	714.08
G35D	2002036.90	799089.30	711.6	714.90	714.40
G37S	2002691.50	798732.90	708.8	711.20	710.85

DANIEL L. KASTEN
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PROFESSIONAL
LAND
SURVEYOR
STATE OF
ILLINOIS
ROCKFORD, ILLINOIS

Arnold Lundgren Associates
803 N. Church Street
Rockford, IL
815 968-8881

G37D	2002691.60	798738.30	708.5	711.10	710.95
G38S	2001674.80	799522.50	714.3	718.10	718.05
G40S	2002432.90	800087.70	729.1	733.20	732.67
G41S	2002056.30	799343.70	725.2	728.10	727.65
G41M	2002065.90	799325.70	724.7	727.50	725.83
R42S	2001217.00	799998.30	722.4	724.80	724.71
G50S	2003083.68	799251.42	736.7	739.23	738.90
G51S	2002419.30	800545.70	738.7	740.70	740.43
G130	2001198.70	799381.70	712.2	715.60	715.22
GroundWater Managenment Zone Boundary Wells (unconcolidated) - 8					
G17S	2002550.10	799202.70	722.6	723.60	723.24
G33D	2001702.70	798774.20	711.4	714.60	714.40
G34D	2002433.00	798707.60	709.8	713.80	713.58
G36S	2001360.00	799423.30	711.7	713.50	713.40
G52S (T4U)	2002955.40	798215.20	711.4	713.60	713.46
G52M (T4L)	2002961.30	798210.00	711.7	713.70	713.46
G54M(T1L-A)	2002031.60	798376.20	710.8	713.70	713.40
G54S(T1U-A)	2002033.10	798368.80	710.8	713.70	713.35

South Unit Wells

NAME	NORTH. (TOIC)	EAST. (TOIC)	GROUND ELEV	LID ELEV	TOIC ELEV
Upgradient Wells -4/6					
R11S	2000991.80	801792.30	739.0	740.80	740.60
G11D	2000984.70	801789.60	738.8	741.30	740.56
G13S	2001424.10	801721.30	754.9	757.40	756.93
G13D	2001430.30	801715.60	754.9	757.10	756.78
R22S	2000416.30	801782.70	736.0	737.40	737.26
G22D	2000408.90	801793.00	735.2	737.00	736.81
Zone of Attenuation Wells - 11					
RO5S	2001636.60	801757.40	760.0	761.80	761.36
G23D	2000211.25	800818.74	723.7	725.66	725.33
R24D	2000399.55	800813.76	721.8	723.99	723.69
R25D	2000591.10	800808.40	722.0	724.50	724.41
G26S	2000688.17	800703.12	717.9	719.37	719.24
G26D	2000679.50	800710.71	718.3	719.38	719.04
R27D	2000805.53	800652.19	724.3	726.36	726.01
A28D	2000898.99	800549.44	726.5	729.16	728.73
G29S	1999998.10	801195.10	721.4	724.50	724.31
G29D	2000003.70	801207.70	722.3	725.40	725.13
G49D	2001031.80	800396.00	738.1	741.00	740.77

DANIEL L. KASTEN
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ANDREWS
ENGINEERING, INC.

March 14, 2012

Stephen F. Nightingale
Manager, Permit Section
Bureau of Land
Illinois Environmental Protection Agency
1021 North Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276

Re: 2018080001 – Winnebago County
Winnebago Landfill – North Expansion Unit
Biennial Well Surveys

Dear Agency Representative:

Pursuant to Condition VIII.19 of Permit No. 2006-221 (Modification No. 18), and consistent with the proposed Compliance Commitment Agreement (March 2, 2012) for Violation Notice L-2012-01007, enclosed are the biennial well surveys completed for years 2009 and 2011 at Winnebago Landfill.

Please contact Tom Hilbert at (815) 963-7516 if you have any questions or require additional information.

Sincerely,

Teresa N. Sharp

Teresa N. Sharp
Environmental Scientist

TNS:tns:slm

Enclosure

cc: Tom Hilbert – Rock River Environmental Services
Bernie Shorle – US EPA Region 5

J:\1990\90-114 (Winnebago)\DOC\2012\WNExp Biennial Well Surveys (2009 and 2011).DOC

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Facility Name: Winnebago Landfill - North Expansion Unit Site ID#: 2018080001

Check one of the following, identifying the contents of your submittal:

- ☐ LPC-160 Forms
  - ☐ Quarterly Groundwater Data
  - ☐ Quarterly Leachate Data
  - ☐ Annual Groundwater Data
  - ☐ Annual Leachate Data
  - ☐ Semi-Annual Groundwater Data
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- ☒ Well Survey Data
- ☐ Well Construction Forms and Boring Logs
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- ☐ Notice of Observed Increase in Groundwater
  Notice of Intent to Perform Confirmation Procedures (Re-sampling) in Groundwater
- ☐ Notice of Confirmed Increase of Groundwater Exceedence from Re-sample
- ☐ Notice of Methane Exceedences
- ☐ Annual Facility Report (per 35 Ill. Adm. Code 813.504) and Gas Monitoring Report
- ☐ Annual Certifications per 35 Ill. Adm. Code 813.501
- ☐ Other (identify): Not to be used for Permit Applications

LPC-591

2009 Survey

WINNEBAGO LANDFILL

MONITOR WELL CERTIFICATION
OCTOBER, 2009

MONITOR WELLS

			ELEVATION		
NAME	NORTHING	EASTING	GROUND	LID	TOIC
G39S	2002339.8	799536.9	733.4	736.4	736.16
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G41D	2002073.3	799383.5	727.3	728.0	727.64
G41S	2002056.3	799343.7	725.2	728.1	727.65
G41M	2002065.9	799325.7	724.7	727.5	725.83
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R05S	2001636.6	801757.4	760.0	761.8	761.36
G09D	2001645.2	801760.8	760.0	760.7	760.60
G09M	2001650.4	801762.6	760.1	761.2	760.85
G20D	2001608.8	802388.1	755.5	758.7	758.41
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13D	2001430.3	801715.6	754.9	757.1	756.78
G29D	2000003.7	801207.7	722.3	725.4	725.13
G29S-R	1999998.1	801195.1	721.4	724.5	724.31
G23	2000211.1	800817.7	722.8	724.6	724.56
R24D	2000399.3	800814.1	721.6	723.2	723.16
R25D	2000591.1	800808.4	722.0	724.5	724.41
G26S	2000689.0	800703.3	716.1	719.5	719.26
G26D	2000679.4	800710.6	716.2	719.5	719.21
R27D	2000803.2	800653.6	722.7	724.6	724.62
R28D	2000898.9	800549.4	726.5	729.2	729.14
G49D	2001031.8	800396.0	738.1	741.0	740.77
P4R	2001885.3	799555.7	748.7	749.8	749.58
P3R	2001899.2	799551.8	748.1	751.0	750.91
G50S	2003083.3	799259.2	736.1	737.4	737.07
G72	2003542.8	798780.4	729.4	732.0	731.74
G73	2003751.1	798676.3	729.6	732.1	731.75
G74	2003859.2	798644.9	729.9	732.6	732.21
G75	2003960.8	798651.2	727.1	732.9	732.54
G76	2004091.5	798755.4	730.8	733.8	733.55
G77	2004190.7	798858.9	732.6	735.5	735.10
G78	2004316.5	798907.4	735.4	738.1	737.77
G79	2004403.9	799072.8	730.5	733.6	733.31
G80	2004464.2	799189.3	733.4	736.0	735.73
G81	2004503.7	799497.3	733.6	736.7	736.53
G82	2004542.2	799797.8	735.9	738.5	738.13
G83	2004046.7	800713.0	742.7	745.9	745.60
G84	2002849.2	800674.9	741.5	744.3	743.95
G16M	2002021.6	798806.7	710.9	714.7	713.95
G16D	2002016.9	798808.6	711.3	712.8	712.80
G34D	2002433.0	798707.6	709.8	713.8	713.58
G34S	2002425.9	798714.2	709.7	713.1	712.43
G35D	2002036.9	799089.3	711.6	714.9	714.40
G35S	2002039.1	799084.4	711.7	714.3	714.08
G33D	2001702.7	798774.2	711.4	714.6	714.40
G33S	2001707.3	798773.1	711.7	714.3	713.54
G37S	2002691.5	798732.9	708.8	711.2	710.85
G37D	2002691.5	798738.3	708.5	711.1	710.95
R42S	2001217.0	799998.3	722.4	724.8	724.71
G36S	2001360.0	799423.3	711.7	713.5	713.40
G13D	2001198.7	799381.7	712.2	715.6	715.22
G38S	2001674.8	799522.5	714.3	718.1	718.05

DANIEL L. KASTEN
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STATE OF
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ROCKFORD, ILLINOIS

Fri Oct 02 09:46:06 2009
X:\22001-23000\22019 PAGEL\22019 Master.pro

2011 Survey

North Expansion Unit Wells					
NAME	NORTH. (TOIC)	EAST. (TOIC)	GROUND ELEV	LID ELEV	TOIC ELEV
Upgradient Wells - 2					
G183	2004046.70	800713.00	ABANDONED		
R183	2004045.92	800720.29	748.1	750.86	750.52
G184	2002849.20	800674.90	735.8	738.60	738.52
Wells Within Zone of Attenuation - 20					
G161	2002558.84	800165.63	737.2	739.63	739.30
G162	2002552.00	799865.94	735.5	737.89	737.56
G163	2002625.80	799609.54	732.3	734.60	734.26
G164	2002758.55	799548.07	732.4	734.94	734.56
G165	2002883.68	799500.86	735.5	737.91	737.57
G166	2002999.51	799408.92	734.8	737.31	736.97
G167	2003104.07	799301.44	734.3	737.07	736.71
G168	2003211.01	799196.30	734.6	737.02	736.65
G169	2003321.23	799089.01	734.0	736.57	736.21
G170	2003425.43	798987.34	733.1	735.75	735.32
G171	2003535.87	798878.63	732.8	735.73	735.37
G172	2003642.69	798780.64	729.4	732.06	731.78
G173	2003751.10	798676.30	729.5	732.14	731.83
G174	2003859.20	798644.90	730.0	732.70	732.28
G175	2003980.80	798651.20	730.4	733.01	732.58
G176	2004091.50	798755.40	731.0	733.85	733.55
G177	2004190.70	798858.90	732.6	735.59	735.18
G179	2004403.90	799072.80	731.3	733.61	733.39
G180	2004464.20	799189.30	733.5	736.08	735.83
G181	2004503	799497	ABANDONED		
G182	2004542.20	799797.80	735.9	738.50	738.13
Compliance Boundary Wells - 2					
G178	2004316.50	798907.40	735.5	738.16	737.85
G185	2004552.95	799487.17	743.2	745.57	745.19

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