



## Countywide Recycling & Disposal Facility

Division of Republic Waste Services of Ohio  
3619 Gracemont Street S.W.  
East Sparta, Ohio 44626  
Phone: 330-874-3855  
Fax: 330-874-2426

January 29, 2008

Ohio Environmental Protection Agency, Central Office  
Division of Solid and Infectious Waste Management  
Attn: Mr. Ed Gortner  
PO Box 1049  
Columbus, Ohio 43216-1049

RE: WRITTEN DEMONSTRATION FOR GAS WELLS WITH OXYGEN EXCEEDANCES  
INITIAL EXCEEDANCE PERIOD WEEK OF JANUARY 14, 2008  
ORDER 4.B.2, DIRECTOR'S FINAL FINDINGS AND ORDERS OF MARCH 28, 2007  
COUNTYWIDE RECYCLING AND DISPOSAL FACILITY

Dear Mr. Gortner:

During the week of January 14, 2008, one (1) landfill gas (LFG) extraction well had an initial oxygen exceedance over 1.5% which was not able to be brought into the target range within 14 days. However, compliance was achieved within 15 days. Therefore, Countywide hereby submits this written demonstration for landfill gas extraction well exceedances as required by Order 4.B.2, which states:

*"If corrective measures undertaken by Respondent fail to lower the oxygen levels within the gas extraction well to 1.5% oxygen by volume, Respondent shall submit a written demonstration to Ohio EPA not later than 14 days after Respondent's initial discovery of the landfill gas extraction well exceedance which explains why a given landfill gas extraction well or wells cannot meet the 1.5% oxygen by volume target goal. The demonstration shall further document in detail all of the corrective measures undertaken by Respondent to achieve the 1.5% by volume level since the exceedance. Respondent's written demonstration may further request an alternative oxygen concentration."*

The one LFG well identified during this time period is noted in Table 1, below.

**Table 1**  
**LFG Wells with Greater than 1.5% Oxygen Week of January 14, 2008**  
**For Which Written Demonstration is Required**

Well ID	Date of Initial Exceedance	Initial Oxygen Content	Oxygen Content As Of January 28, 2008
PW-14R(3)	1/14/2008	4.2%	2.8%

Required corrective actions were taken as described in Table 2, however this LFG well did not achieve compliance within 14 days.

**Table 2**  
**Corrective Actions Taken During the Week of January 14, 2008**  
**and Reason Mandated Oxygen Content Not Achieved**

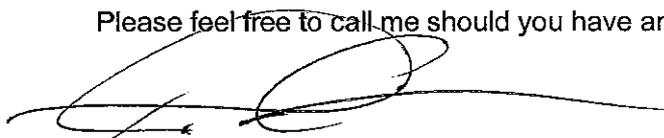
Well ID	Corrective Actions Taken	Reason 1.5% Level Not Achieved
PW-14R(3)	Nominal vacuum adjustments, assessed well integrity and made repairs as appropriate. Performed de-watering pump assessment.	Well integrity investigation showed no apparent integrity issues with the well casing or wellhead. Due to freezing weather conditions, the liquid pump installed in this well was inoperable and unable to lower liquid levels below screen interval.

A complete historical record of the corrective actions taken by Countywide for this LFG well is provided in Attachment A. Chronological listing of oxygen content readings taken on this LFG well is provided in Attachment B.

At this time Countywide is not requesting or proposing an alternative timeline or corrective action. As previously stated this LFG well achieved compliance 15 days from the initial exceedance due to thawing and dewatering the airline to the pump. The compliant oxygen reading is shown in Attachment B.

Countywide does not believe that the source of oxygen for this LFG well is a result of over pull, nor is the oxygen being introduced into the waste mass. Instead we believe the air is vapor locked in the well casing due to high liquid levels in the well during frozen periods which rendered the pump inoperable.

Please feel free to call me should you have any questions.



Tim Vandersall, P.E.  
 General Manager

Attachments:

Attachment A - Well Assessment and Repair Logs  
 Attachment B - Chronological Oxygen Content Readings

cc: Bill Skowronski, OEPA-NEDO  
 Kirk Norris, SCHD  
 Dan Aleman, CHD  
 Todd Hamilton, CWRDF  
 Kyle Nay, Cornerstone  
 Mike Michels, Cornerstone  
 Mike Contestabile, Cornerstone  
 Jason Perdion, B&H  
 Jim Walsh, SCS Engineers

**Attachment A**  
**Historical Record of Corrective Actions**



**PRIORITY RESPONSE TO > 1.5% O2 LFG WELL READING**

**Well Identification:** DW-14213

**Date:** 1-14-08 **Time:** 10:20 **of initial discovery of > 1.5% oxygen**

**Technician:** Thomas Philips 4.2 % O2 non-compliant reading

**Possible issue(s):** \_\_\_\_\_

Initial Discovery

Yes No N/A

Nominal vacuum adjustments "appropriate and reasonable reductions in vacuum"

**Date:** 1-14-08 **of AEGL O&M Well Integrity Assessment (below)**

**Technician:** Thomas Philips

Complete within 1-day of initial discovery

Yes	No	N/A		Yes	No	N/A		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well labeled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well lateral / header in good condition?	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is well head remote?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is lateral or header line surging?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well hard piped?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Is the well surging?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are all sample ports in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well boot (liner) in good condition?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are all flanges in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is well bore (soil) in good condition?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Are all other connections in good condition?	Yes	No	N/A		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well valve in good condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Compliance achieved?	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Is the well kanaflex in good condition?				Date compliance achieved?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is there a pump in the well?				% O2 compliant reading	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Does pump require service?					<u>pump not running due to weather</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Is well casing in good condition?					<u>See Additional Comments</u>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Miscellaneous - please describe					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nominal vacuum adjustments "appropriate and reasonable reductions in vacuum"					

**Date:** 1-21-08 **of AEGL O&M Well Integrity Repairs & Investigation**

**Technician:** Thomas Philips

**Description on noted issue(s):** pump not running due to weather

**Repair Summary:**

Complete within 2 days of initial discovery

Yes	No	N/A		Yes	No	N/A		
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Wellhead ports / fittings / connections repaired/replaced?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Compliance achieved?	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Wellhead Kanaflex repaired or replaced?				Date compliance achieved?	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Reviewed 3-months monitoring data for O2 trends (attach copy)				% O2 compliant reading	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Well casing integrity checked with dummy?					Noted integrity issues:
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Wellhead valve replaced or repair?					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Miscellaneous repaired or replaced? - please describe					
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Nominal vacuum adjustments "appropriate and reasonable reductions in vacuum"					
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Review logs for original pipe lengths installed?					

Solid \_\_\_\_\_ ft.

Perforation \_\_\_\_\_ ft.

DTB \_\_\_\_\_ ft.

DTF \_\_\_\_\_ ft.

**Additional Comments:** valve is minimally opened and the static pressure is surging.



**PRIORITY RESPONSE TO > 1.5% O2 LFG WELL READING**

Initiate within 3 days of discovery

Date: 1-29-08 of AEGL Pump Repairs

Technician: Wah-Wayt

Description on noted issue(s): Dewatered air lines + Thawed pump and alpha box.

Repair Summary:

Yes  No  N/A  Well pump repairs completed?

Yes  No  N/A  Compliance achieved?

1-29-08 Date compliance achieved?

0.2 % O2 compliant reading

Noted integrity issues:

Initiate within 3 days of discovery

Date: N/A of AEGL Field Repairs

Technician: N/A

Description on noted issue(s): N/A

Repair Summary:

Yes  No  N/A  Lateral or header piping adjustment or repair?

Well boot liner repair? "additional placement of membrane, repair of gas extraction boot"

Well bore seal repairs?(earthwork/bentonite seal) "placement of low permeability soils"

Well casing investigation performed? (camera) Yes  No  N/A

Compliance achieved?

Well casing repairs performed?

Date compliance achieved?

% O2 compliant reading

Noted issues:

Date: 1-29-08 compliance of < 1.5% achieved within 25 days

Date: N/A compliance not achieved - proposed alternate timeline and/or operating value

Additional Comments:

**Attachment B**  
**Chronological Oxygen Content Readings**

**Attachment B**  
**Chronological Oxygen Content Readings**

<b>GEM ID</b>	<b>As-built ID</b>	<b>Date Time</b>	<b>O2 %</b>
CYPW14R3	PW-14R(3)	1/14/2008 10:20	4.2
CYPW14R3	PW-14R(3)	1/14/2008 10:23	6.7
CYPW14R3	PW-14R(3)	1/14/2008 10:26	4.7
CYPW14R3	PW-14R(3)	1/21/2008 13:55	3.7
CYPW14R3	PW-14R(3)	1/21/2008 13:58	2.8
CYPW14R3	PW-14R(3)	1/29/2008 10:59	0.8
CYPW14R3	PW-14R(3)	1/29/2008 11:01	0