

REGIONAL AIR POLLUTION CONTROL AGENCY

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April 25, 2012

Certified Mail

Brad M. Malatesta, President
Clean Water Ltd.
2480 Jackson Pike
Columbus, OH 43223

NOTICE OF VIOLATION (HPV – GC2)

Summary: Following review of various reports (including malfunction reports) for the Clean Water Ltd. oil and wastewater treatment facility, RAPCA believes there have been excessive periods of malfunctions that have led to exceedances of the emissions limits due to the failure to maintain proper temperature in the regenerative thermal oxidizer (RTO), as well as, the failure to maintain the proper pressure differential (vacuum) in the closed-vent system (CVS). Enforcement orders may be issued in the future to resolve these violations.

Dear Mr. Malatesta:

This Notice is in regards to the regenerative thermal oxidizer (RTO) and closed-vent system (CVS) that Clean Water Ltd. (CWL) owns and operates at its oil and waste water treatment facility located at 300 Cherokee Dr, Dayton, Ohio, 45417. The facility is identified by Ohio EPA facility ID 0857751312. The RTO, CVS, and entrapment chamber make up the control system that is used by CWL to capture and destroy organic compound (OC) and hazardous air pollutant (HAP) emissions from various emissions units (EUs) located at the facility. Following review of CWL's RTO Malfunction Log (1st Quarter of 2012 – ATTACHMENT #1) submitted on April 4, 2012, RAPCA has identified violations due to the excessive number of reported deviations of the RTO minimum 24 hour average temperatures and the CVS minimum 24 hour negative pressure; both are required to demonstrate the capture and control efficiency of the control system.

RTO Temperature Deviations/Violations

Pursuant to the Monitoring and/or Recordkeeping Requirements contained in PTI P0105924, Part C Emissions Unit Terms and Conditions for various Emissions Unit Groups., "In order to maintain compliance with applicable emission limitations/control requirements contained in this permit, the acceptable daily average value, as defined in 40 CFR Part 63.695(e)(2), for the

combustion temperature measured within the RTO, when the emissions units controlled by the RTO are in operation, shall not be less than 1548 degrees Fahrenheit or not less than the average minimum temperature established during the most recent emissions test that demonstrated the emissions units and the capture and control equipment to be in compliance.” The minimum combustion temperature was determined to be 1548 degrees Fahrenheit from the compliance demonstration testing conducted on 8/19 – 8/21, 2009 and is the basis for demonstrating ongoing compliance with the requirement contained in PTI P0105924 and 40 CFR Part 63.693(f)(i)(A), that the total OC, less methane and ethane, or total HAP emissions be destroyed by 95% or more.

For calendar year 2011, CWL reported 25 deviations of the acceptable daily average value for the combustion temperature measured within the RTO (Temperature Deviations – ATTACHMENT #2). These deviations were reported in various malfunction reports, quarterly and semi-annual deviation reports, and 30 day deviation reports. RAPCA issued letters to CWL addressing the malfunctions and the overall operation of the control system on March 15, June 22, November 17, 2011 and February 16, 2012. CWL developed and implemented a preventative maintenance plan in September 2011 in order to abate the malfunctions.

However, upon receipt of CWL’s April 4, 2012 submittal of the first quarter 2012 Malfunction Log listing 13 days of RTO temperature deviations it is apparent that there are ongoing problems with the RTO. This is a temperature deviation rate of 14% for 2012 and is at a level that is excessive and does not demonstrate ongoing compliance with PTI P0105924 and 40 CFR Part 63.693(f)(i)(A). At least seven of the malfunctions reported during this period are denoted as “flame failure”, and the five most recent malfunctions are denoted as “low temperature alarm”. As defined in 40 CFR Part 63.2, malfunctions are “any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment...Failures that are caused in part by poor maintenance or careless operation are not malfunctions”. Repeated flame failures and low temperature alarms do not appear to be infrequent events or unpreventable failures and are indicative of the inability of the RTO to perform in a satisfactory manner.

Failing to maintain the acceptable daily average value for the combustion temperature measured within the RTO is an indication of improper RTO operation and is a violation of the emissions limits in PTI P0105924. Based on the excessive number and magnitude of the temperature deviations, CWL is not demonstrating ongoing compliance with the requirement to maintain 95% control efficiency and is in violation of the terms and conditions of PTI P0105924, 40 CFR Part 63, Subpart DD, the Consent Decree effective February 12, 2008, and Ohio Revised Code (ORC) 3704.05.

Closed-Vent System Pressure Deviations/Violations

Pursuant to the Monitoring and/or Recordkeeping Requirements contained in PTI P0105924, Part C Emissions Unit Terms and Conditions for various Emissions Unit Groups, “In accordance with the Consent Decree and in order to maintain compliance with the applicable emission limitation/control requirements contained in this permit, the acceptable daily value

for the pressure measured inside the closed-vent system at the location immediately upstream of the RTO fan is specified in c)(5) above, when the emissions units controlled by the RTO are in operation, shall be at a minimum differential pressure that is not less than the minimum differential pressure established during the most recent emission test that demonstrated the emissions units and the capture and control equipment to be in compliance". The minimum differential pressure was determined to be -0.96 inch water from compliance demonstration testing conducted on 8/19-8/21, 2009 and is the basis to demonstrate ongoing compliance with the requirement contained in PTI P0105924 and 40 CFR Part 63.693(f)(i)(A), that the total OC, less methane and ethane, or total HAP emissions be captured and destroyed by 95% or more.

For calendar year 2011, CWL reported 35 deviations of the acceptable daily value for the differential pressure measured inside the CVS (Pressure Differential Deviations – ATTACHMENT #3). These deviations were reported in various malfunction reports, quarterly and semi-annual deviation reports, and 30 day deviation reports. These deviations were addressed by RAPCA in various letters as discussed above and in CWL's preventative maintenance plan.

CWL reported two deviations of the CVS in the malfunction log submitted to RAPCA covering the 1st quarter of 2012. CWL's RTO Malfunction Log (1st Quarter of 2012 – ATTACHMENT #1) lists two days during which the CVS recorded pressures above the -0.96 minimum daily average value for pressure measured inside the CVS.

Failing to maintain the minimum differential pressure in the CVS when the emissions units are in operation is an indication of improper CVS operation and a violation of the emissions limits in PTI P0105924. These deviations together with the RTO temperature deviations again demonstrates the lack of ongoing compliance with the requirement to maintain 95% control efficiency and is in violation of the terms and conditions of PTI P0105924, 40CFR Part 63, Subpart DD, the Consent Decree effective February 12, 2008, and Ohio Revised Code (ORC) 3704.05.

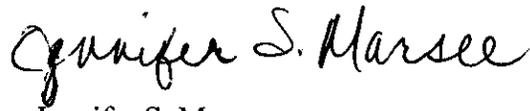
Resolution

In order to resolve the violations cited above, RAPCA requires that CWL submit a detailed compliance plan and schedule within **30 days** of receipt of this letter that will bring the control system, which includes the RTO and CVS, operations into continuous compliance by addressing and eliminating the excessive temperature and pressure differential deviations and demonstrate ongoing compliance with the applicable emission limitations/control requirements contained in PTI P0105924, 40 CFR Part 63 Subpart DD, and the Consent Decree. Acceptance of the corrective action plan does not constitute a waiver of Ohio EPA's and RAPCA's authority to seek civil penalties as provided in section 3704.06 and 3707.49 of the Ohio Revised Code. The determination whether to pursue such penalties will be made by Ohio EPA and RAPCA at a later date.

Clean Water Ltd.
April 25, 2012
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If you have any question regarding this matter, please contact Jefferis R. Canan at (937) 225-5934, or me at (937) 496-7540.

Sincerely,

A handwritten signature in black ink that reads "Jennifer S. Marsee". The signature is written in a cursive style with a large initial "J".

Jennifer S. Marsee
Supervisor, Abatement Unit
Regional Air Pollution Control Agency

Cc: John Paul, RAPCA
Jefferis Canan, RAPCA
Michael Matis, PHDMC
William MacDowell, U.S. EPA
Brian Dickens, U.S. EPA
Tom Kalman, Ohio EPA
Bonnie Buthker, Ohio EPA
Maria Cruset, Clean Water Ltd.

ATTACHMENT #1

CWL RTO Malfunction Log

Date	Classification	Details		Comments	Corrective Action	Duration (Time)	Total Minis RTO On	Duration RTO Flame Off (min)	24 Hr. Avg. Temp. (F)	Temp. DWR. From Comp. Temp (of)	24 Hr. Avg. Vacuum (" w.c.)	Data Reported	72 hr report?
1st Quarter 2012													
1/1/2012	Malfunction	Flame Failure		Contacted Combustion Equipment Co.	Restart. Clean eye & restart.	12:00 - 12:07 AM; 10:45 - 11:20 AM	1406	94	1538	-10	-1.2		
1/2/2012	Malfunction	Intermittent Flame Failure; Flame Failure		Contacted Combustion Equipment Co.	Restart. Clean eye & restart.	7:52 - 3:43 PM; 8:04 - 9:52 PM	1244	196	1400	-148	-1.06		
1/3/2012	Malfunction	Intermittent Flame Failure; Combustion Equipment Co. made air/gas ratio adjustments.		Individual mins. Between 12:30 AM & 30:15 AM.	Consistently observe RTO parameters & restart as necessary.	12:30 - 10:15 AM	1423	37	1558	10	-1.21		
1/6/2012	Operational	Tank overflow on 5-9. Had to turn off RTO to relieve suction on CVS to remove oil from ductwork.				1:15 PM - 2:38 PM	1342	98	1470	-78	-1.17		
1/20/2012	Malfunction	Frigid temperatures & high condensate levels. Freeze up on air switching valve. Wrapped with steam hose.				7:05 - 11:57 AM; 12:48 - 12:48 PM; 3:30 - 3:58 PM	1206	234	1329	-219	-1.09		N
1/31/2012	Malfunction	Flame Failure - Lots of moisture.		Multiple shutoffs on same day.		7:22 - 8:05 AM	2402	39	1538	-10	-1.21		
2/6/2012	Operational ?	RTO maintained operation, but RTO combustion temperature dropped in early morning.		Ambient temps dropped below 30 of to about 25 of.	Restricted amount of airflow added to biopant.	2:15 - 7:30 AM	1440	0	1546	-2	-1.23		
2/8/2012	Unknown	Unknown			Unit restarted 2 times.	6:15 - 6:35 AM	1421	19	1551	3	-1.22		
2/19/2012	Operational ?	VFD - Alarm N16 'Motor Over Temp'			Modified operation of blowers. Hoffman ran until ~ 12 AM then changed out to smaller blowers until decant completed.	5:00 - 7:04 AM	1408	32	1552	4	-1.21		
2/17/2012	Record Keeping Only	Server crash. Some RTO data not collected but RTO running.			No threat to public health	11:15 - 11:44 AM	1410	30	1555	7	-1.23		
2/23/2012	Record Keeping Only	Power turned off to building - RTO data not collected but RTO running. Operators ceased so performed evaluation of lead media and to check media structure to ensure no damage from 1/29/2012 incident; Flame			No threat to public health	6:15 - 8:29 AM	1425	15	1570	22	-1.22		
3/10/2012	Shutdown	Flame failures - related to cleanout.			Operations ceased on weekend.	12:00 AM - 11 AM	660	780	0	N/A	N/A		
3/10/2012	Operational ?	Malfunction; Operational; Malfunction		Media condition OK except some pi-passage from silos. Media cleaned until placed on idling blowers ceased until RTO returned to compliance.	Clean eye & restart.	2:25 - 3:32 PM; 4:41 - 5:40 PM			1240	-308	-0.99		
3/11/2012	Malfunction	DPBL Power Outage; VOC Damper Fail; DPBL Power Outage		Power must have surged after initial power outage because unit ran well until 8:08 AM & RTO was still running		5:08 - 6:08 AM; 9:08 - 10:07 AM; 10:58 AM - 2:00 PM	1178	262	1287	-261	-0.95		
3/12/2012	Malfunction	Low temperature alarm - all other indicators OK.				Early hours	3440	0	1528	-25	-1.12		
3/13/2012	Malfunction	Low temperature alarm - all other indicators OK.		Sent email regarding shutdown & startup issues.	Made adjustment to biopant blowers.	Early hours	1440	0	1523	-25	-1.2		
3/14/2012	Malfunction	Low temperature alarm - all other indicators OK.		Let a voice mail for Jennifer to advise of continuing RTO issues. CWL is working to troubleshoot.	Called Combustion Equipment Co.	Early hours	3440	0	1490	-58	-1.17		
3/15/2012	Malfunction	Low temperature alarm - all other indicators OK.			Replaced combustion blower motor electronics & made adjustment to air/gas ratio.	Early hours & ~ 10 AM.	1419	21	1541	-7	-1.14		
3/31/2012	Unknown	Low temperature alarm - all other indicators OK.			Await RTO evaluation for 4/13 & 4/24.	Early hours	1440	0	1547	-1	-1.23		

**Temperature Deviations
Jan 2011 thru March 2012**

Date	24-hr Average RTO Combustion Chamber (F)
2/2/2011	1531
3/22/2011	1526
7/19/2011	1453
7/21/2011	1465
7/23/2011	797
7/24/2011	1442
7/25/2011	1100
7/26/2011	1369
7/29/2011	1499
7/30/2011	164
7/31/2011	714
8/12/2011	1507
8/13/2011	640
8/18/2011	1521
9/4/2011	1153
9/11/2011	1533
9/19/2011	1532
12/11/2011	1541
12/12/2011	1457
12/13/2011	1540
12/14/2011	1439
12/15/2011	1316
12/21/2011	1542
12/27/2011	1437
12/31/2011	1210
1/1/2012	1538
1/2/2012	1400
1/8/2012	1470
1/20/2012	1329
1/31/2012	1538
2/6/2012	1546
3/10/2012	1240
3/11/2012	1287
3/12/2012	1523
3/13/2012	1523
3/14/2012	1490
3/15/2012	1541
3/31/2012	1547

ATTACHMENT #2

Summary of Non-Compliance 2011 and 2012	
# of Days Below 1548 F	38
Total Operating Days bw 1/1/2011 thru 3/31/2012	456
% of Days non-compliant bw 1/1/2011 thru 3/31/2012	8.33%

Summary of Non-Compliance 2012	
# of Days Below 1548 F	13
Total Operating Days bw 1/1 thru 3/31/2012	91
% of Days non-compliant bw 1/1 thru 3/31/2012	14.29%

Pressure Differential Deviations

Jan 2011 thru March 2012

Date	24 Hr Average CVS Pressure ("w.c.)
3/22/2011	-0.79
4/16/2011	-0.94
4/21/2011	-0.92
4/22/2011	-0.93
5/6/2011	-0.86
5/13/2011	-0.91
5/14/2011	-0.87
5/15/2011	-0.86
5/16/2011	-0.9
5/17/2011	-0.9
5/18/2011	-0.87
5/19/2011	-0.9
5/20/2011	-0.95
5/23/2011	-0.95
7/19/2011	-0.76
7/21/2011	-0.77
7/22/2011	-0.59
7/23/2011	-0.52
7/25/2011	-0.56
7/26/2011	-0.67
7/29/2011	-0.91
7/30/2011	-0.01
7/31/2011	-0.46
8/7/2011	-0.74
8/9/2011	-0.95
8/10/2011	-0.83
8/11/2011	-0.81
8/12/2011	-0.85
8/13/2011	-0.41
8/18/2011	-0.97
9/4/2011	-0.74
12/12/2011	-0.95
12/14/2011	-0.94
12/15/2011	-0.83
12/31/2011	-0.76
3/10/2012	-0.93
3/11/2012	-0.95

ATTACHMENT # 3

Summary of Non-Compliance 2011 and 2012	
# of Days Below -0.96"w.c.	37
Total Operating Days bw 1/1/2011 thru 3/31/2012	456
% of Days non-compliant bw 1/1/2011 thru 3/31/2012	8.11%

Summary of Non-Compliance 2012	
# of Days Below -0.96"w.c.	2
Total Operating Days bw 1/1 thru 3/31/2012	91
% of Days non-compliant bw 1/1 thru 3/31/2012	2.20%