



**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PD0001420100315

MONTGOME WEST CARROLLTON STP

WARE, MAUREEN 2010/03/15

File: Montgomery Co.
West Carrollton WWTP
Sewer age

**Environmental
Protection Agency**

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

March 15, 2010

Mayor and Council
City of West Carrollton
300 East Central Ave.
West Carrollton, Ohio 45449

RE: West Carrollton WWTP Compliance Evaluation Inspection (CEI)

Ladies and Gentlemen:

On March 4, 2010, I conducted a Compliance Evaluation Inspection at the West Carrollton WWTP facility. A copy of my inspection report is enclosed. The inspection report contains no marginal or unsatisfactory ratings.

If you have any questions or comments concerning the contents of this letter, please feel free to contact me this office.

Sincerely,



Maureen M. Ware
Division of Surface Water

enclosures

cc: Montgomery County Health Dist.

MW/ca



Permit #: 1PD00014
 NPDES #: OH0020133



State of Ohio Environmental Protection Agency
 Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PD00014	OH0020133	3/4/2010	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
West Carrollton WWTP 601 W. Central Ave. West Carrollton, Ohio	1:00 PM	8/1/2009
	Exit Time	Permit Expiration Date
	3:00 PM	1/31/2014
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Tom Scherack, Utilities Superintendent	937-859-5184	
Name, Address and Title of Responsible Official	Phone Number	
Mayor and Council City of West Carrollton 300 East Central Ave. West Carrollton, Ohio		

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	S	Laboratory	N	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	N	Other
S	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)

Only two violations were noted for the period of 9/1/08 – 1/31/10: pH on 11/28/0 reported 5.8, limit 6.5; and pH on 11/29/09 reported 3.6, limit 6.5. Form 4498 was submitted for both events the morning of 11/30/09, followed by a letter. Scheduling of routine and preventative maintenance is done via computer software. The GLC for West Carrollton had a rating of 18 acceptable and 0 marginal or unacceptable. It is worth noting that West Carrollton's laboratory manager is a former employee of Test America, and West Carrollton's operator used to be the WWTP laboratory manager before becoming the operator.

Inspector	Reviewer
Maureen M. Ware Division of Surface Water Southwest District Office	Martyn Burt Environmental Supervisor Division of Surface Water Southwest District Office
Date	Date
	3/12/2010



Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Flows and loadings conform with NPDES permit..... Y
- (c) Treatment processes are as described in permit application... Y
- (d) All discharges are permitted..... Y
- (e) Number and location of discharge points are as described
in permit..... Y
- (f) Storm water discharges properly permitted..... Y

Comments/Status:

Section F: Compliance

- (a) Any significant violations since the last inspection..... N/A
- (b) Appropriate Non-compliance notification of violations..... N/A
- (c) Permittee is taking actions to resolve violations..... N/A
- (d) Permittee has a compliance schedule..... N/A
- (e) Compliance schedule contained in.....N/A
- (f) Permittee is in compliance with schedule..... N/A
- (g) Has biomonitoring shown toxicity in discharge since last inspection N

Comments/Status:

A compliance check for the period of 9/1/08 – 1/31/10 was done. Two violations were noted for that period. They are as follows: pH on 11/28/0 reported 5.8, limit 6.5; and pH on 11/29/09 reported 3.6, limit 6.5. Form 4498 was submitted for both events the morning of 11/30/09, followed by a letter.



Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained.....Y

(a) Standby power available.....generator or dual feedY

i. What does the back-up power source operate.....

Influent pumps and main building. Does not operate aeration or return, but does get flow through the WWTP.

ii. How often is the generator tested under load.....

Weekly

(b) Which components have an alarm system available for power or equipment failures.....

Wet well and all lift stations.

(c) All treatment units in service other than backup units..... Y

(d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.)..... Y

(e) Any major equipment breakdown since last inspection..... N

(f) Operation and maintenance manual provided and maintained..... Y

(g) Any plant bypasses since last inspection..... N

(h) Any plant upsets since last inspection..... N

Comments/Status:

West Carrollton uses computer software to schedule routine & preventative maintenance.



Section G: Operation & Maintenance con't

Record Keeping/Operator of Record:

- (a) Wastewater Treatment Works classification (OAC 3745-7)..... Y
- (b) Operator of Record holds unexpired license of class required by Permit..... Y
- (c) Copy of certificate of Operator of Record displayed on-site..... Y
- (d) Has the Operator of Record submitted an ORC Notification form.. Y
- (e) Minimum operator staffing requirements fulfilled (OAC 3745-7.... Y
- (f) If a Staffing Reduction plan has been approved, are the stipulations of the plan being met..... Y
- (g) Operator of Record log book provided..... Y
- (h) Format of log book (e.g. computer log, hard bound book)

Hardbound

- (i) Log book kept onsite (in an area protected from weather)..... Y
- (j) Log book contains the following:
 - I. Identification of treatment works..... Y
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... Y
 - iii. Daily record of operator and maintenance activities (including preventative maintenance, repairs and request for repairs, process control test results, etc.)..... Y
 - iv. Laboratory results (unless documented on bench sheets)... Y
 - v. Identification of person making entries..... Y
- (k) Has the Operator of Record submitted written notifications to the permittee, Ohio EPA and, if applicable, any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred..... Y

Comments/Status:

West Carrollton is a Class II WWTP. They use bench sheets instead of tracking the laboratory results in the Log Book.



Section G: Operation & Maintenance con't

Collection System:

- (a) Are there pump stations in the collection system..... Y
 - i. How many publicly-owned pump stations equipped with permanent standby power or equivalent.....2
 - ii. How many pump stations have telemetered alarms.....0
 - iii. How many pump stations have operable alarms.....2

- (b) Any chronic collection system overflows since last inspection..... N
- (c) Regulatory agency notified of all overflows..... N/A
- (d) CSOs in the collection system....if so, what is the LCTP status..... N/A

- (e) How are CSOs monitored (chalk, block, level sensor, etc.)..... N/A
- (f) Portable pumps available for collection system maintenance..... Y
- (g) RDII Program established and active..... N/E
- (h) Any WIB complaint received since last inspection..... N
- (i) Is there a WIB response plan..... Y
- (j) Is any portion of the collection system at or near dry weather Capacity..... N

Comments/Status:

Portable generators are available for both pump stations.



Section H: Sludge Management

- (a) Method of Sludge Disposal... Land Application
 Haul to Another NPDES Permittee
 Haul to a Mixed Solid Waste Landfill

*if one of the selected methods is land application, complete applicable charts.
Class A - Exception Quality Sewage Sludge (monitoring station 584)

Class B Sewage Sludge (monitoring station 581)

- (b) Has amount of sludge generated changed significantly since the last inspection..... N
(c) How much sludge storage is provided at the plant.....
20 days.
(d) Records kept in accordance with State and Federal law (5 years according to OAC 3745-40-06)..... Y
(e) Any complaints received in last year regarding sludge..... N
(f) 5/8" screen at headworks for facilities that land apply sludge..... N/A
(g) Are sludge application sites inspected to verify compliance with NPDES permit..... N/A

Comments/Status:

Sludge is hauled by Rumpke on an as needed basis.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary/Secondary flow measuring devices (e.g. weir with ultrasonic level sensor):
Ultrasonic with parshall flume
(b) Flow meter calibrated annually Y
(Date of last calibration: 3/10/2010)
(c) 24-hour recording instruments operated and maintained..... Y
(d) Flow measurement equipment adequate to handle full range of flows..... Y
(e) All discharged flow is measured..... Y

Comments/Status:

West Carrollton calibrates their flow meter quarterly.



Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
(see GLC page)
- (d) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e, continuous monitoring instrumentation, calibration and maintenance records)..... Y

Comments/Status:

Laboratory:

General

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... Y
- (b) Do SOP's include the following if applicable:.....Y
 - Title
 - Scope and Application
 - Summary
 - Sample Handling and Preservation
 - Interferences
 - Apparatus and Materials
 - Reagents
 - Procedure
 - Calculations
 - Quality Control
 - Maintenance
 - Corrective Action
 - Reference (Parent Method)



Note: Standard Methods 1020A establishes that "Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy. "Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (e) Analyses being performed more frequently than required by permit. N
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/A
- (g) Satisfactory calibration and maintenance of instruments/equipment. Y (see score from GLC page)
- (h) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: Everything except BOD5, Suspended Solids, and Ammonia.

Lab name: Test America

Discharge Monitoring Report Quality Assurance (DMRQA)

- (a) Participation in latest USEPA quality assurance performance sampling..... Y
Date:
- (b) Were any parameters "Unsatisfactory"..... N
- (c) Reasons for "Unsatisfactory" parameters.....

Comments/Status:

West Carrollton's laboratory manager is a former employee of Test America, and West Carrollton's operator used to be the WWTP laboratory manager before becoming the operator.

Section J: Effluent/Receiving Water Observations

Outfall # 001

Outfall Description: Pipe

Receiving Stream: Great Miami River

Receiving Stream Description: River was high enough at the time of the inspection to just barely cover the outfall.

Comments/Status:



Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status:



Draft General Lab Criteria

Criteria	Std Methods Required	Status	Rating
Balance <ul style="list-style-type: none"> • Standard Weights • Calibration Frequency / Documentation • Cleanliness, air movement, vibration 	<ul style="list-style-type: none"> • Either NIST Class S or ASTM/ANSI Class 1 weights^{1,2} • Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)³ • Cleanliness of balance is a must and air movement and vibration needs to be kept to a minimum¹ • Service and recalibrate annually (manufacturer representative or comparable)¹ • Must be able to measure to 0.1 grams⁴ • Instrument manual available • Log book maintained⁶ 		
Comments:			
Drying Oven <ul style="list-style-type: none"> • Temperature Recordkeeping • Calibration Frequency / Documentation 	<ul style="list-style-type: none"> • Thermometer calibrated annually with NIST traceable thermometer^{1,2} • Correction factor posted on thermometer / equipment¹ • Temperature recorded with each use⁴ • Thermometer temperature in 0.1° C increments⁵ • Acceptable temperature range is 103° – 105° F⁴ • Instrument manual available • Log book maintained⁶ 		



Draft General Lab Criteria

Comments:			
<p>pH Meter</p> <ul style="list-style-type: none"> • Buffers Used for Calibration • Minimum of 2 point calibration • Buffer Expiration Date • Calibration Frequency / Documentation • Slope Documentation / Acceptability 	<ul style="list-style-type: none"> • Calibration per manufacturer specification and calibration buffers must bracket anticipated result⁷ • Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)³ • Teflon covered magnetic stirrer for sample mixing or equivalent⁸ • Buffers must not be expired • Slope acceptable range indicated on benchsheet² • Instrument manual available • Logbook maintained⁹ 		
Comments:			
<p>DO Meter</p> <ul style="list-style-type: none"> • Calibration Frequency / Documentation • Calibration Method 	<ul style="list-style-type: none"> • Calibration per manufacturer specification¹⁰ • Air or known DO calibration method¹⁰ • Small to no bubble present under membrane (must be smaller than the lead in number 2 pencil)¹¹ • Logbook maintained⁹ • Instrument manual available • Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)³ 		



Draft General Lab Criteria

Comments:			
Incubator <ul style="list-style-type: none"> • Temperature Recordkeeping • Temperature Calibration / Documentation 	<ul style="list-style-type: none"> • Check / record temperature twice daily for each shelf in use¹ • Thermometer calibrated annually with NIST traceable thermometer^{1,2} • Temperature correction information posted on incubator¹ • Acceptable temperature range is 20° C +/-1.0^{o12} • Instrument manual available • Logbook maintained⁹ • Temperature Log (thermometer reads to 0.1 Celsius).⁵ 		
Comments:			
Refrigerator <ul style="list-style-type: none"> • Temperature Recordkeeping • Temperature Calibration / Documentation 	<ul style="list-style-type: none"> • Temperature Log (thermometer reads to 0.1 Celsius).⁵ • Thermometer calibrated annually with NIST traceable thermometer^{1,2} • Thermometer held in water bath.¹ • Refrigerator temperature 4° Celsius (+/-2°).¹³ • Do not store volatile solvents, food, or beverages.¹⁴ 		
Comments:			



Draft General Lab Criteria

<p>Chlorine Meter</p> <ul style="list-style-type: none"> • Calibration Frequency / Documentation • Calibration Method • Standard expiration date • Standards used for calibration • Slope Documentation / Acceptability 	<ul style="list-style-type: none"> • pH / millivolt meter read to 0.1 mV¹⁵ • Electrode free of deposits and foreign material • Calibration using three iodate solutions 0.2, 1.0, 5.0 or Calibration per manufacturer specification¹⁶ • Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)³ • Calibration curve (acceptable slope) • Log book being maintained.⁹ • Instrument manual available • Standards Expiration Date 		
<p>Comments:</p>			
<p>Ammonia Meter</p> <ul style="list-style-type: none"> • Calibration Frequency / Documentation • Calibration Method • Standard expiration date • Standards used for calibration • Slope acceptability 	<ul style="list-style-type: none"> • Electrode free of deposits and foreign material • Calibration verification required for testing over long period of time (e.g. 12 hrs.), or after a large number of samples (every 10 samples)³ • Teflon covered magnetic stirrer for sample mixing or equivalent¹⁸ • Standards used for calibration (3 ammonia solution 10 mg/l, 1 mg/l, and 0.1 mg/l) or calibration per manufacturer specification¹⁷ • Verify calibration slope is acceptable (per manufacturer Spec.). • Log book being maintained⁹ • Instrument manual available 		<p style="text-align: center;">A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">A</p>



Draft General Lab Criteria

Comments: The Ammonia meter is calibrated every time they use it. West Carrollton uses 25 mg/l, 10 mg/l and 0.5 mg/l as their standards for ammonia calibration.			
Sample Handling / Collection <ul style="list-style-type: none"> • Sample Labeling • Chain of Custody 	<ul style="list-style-type: none"> • Samples container labeled (description, date, time, preservative added, initialed).¹⁹ • Chain of custody (description, date, time, signature).¹⁹ • Composite samples refrigerated during sample collection¹⁴ • Equipment blanks utilized¹⁴ • SOP for cleaning of sampling equipment • Logbook being maintained⁹ 		A A A A A
Comments:			
Desiccator	<ul style="list-style-type: none"> • Properly working seals. • Desiccant fresh (blue color) • Log book being maintained⁹ 		
Comments:			



Draft General Lab Criteria

<p>Benchsheets</p>	<ul style="list-style-type: none"> • Date(s)² • Analyst initials² • Equations, calculations, units for all measurements, notations, and results present² • Calibration information² • Blue or black ink pen² • Corrections, single line through, initialed and dated² 		<p style="text-align: center;">A A A A A A</p>
<p>Comments:</p>			
<p>Hot Water Bath</p> <ul style="list-style-type: none"> • Temperature Recordkeeping • Temperature Calibration / Documentation • Water Level 	<ul style="list-style-type: none"> • Temperature Log (thermometer reads 0.2° C)²¹ • Thermometer calibrated annually with NIST traceable thermometer^{1,2} • Thermometer total immersion or partial (line on thermometer to ID immersion depth)^{1,5} • Incubator temperature 44.5° C +/- 0.2^{o21} • Log book being maintained⁹ 		
<p>Comments:</p>			
<p>Autoclaves / Steam Sterilizers</p> <ul style="list-style-type: none"> • All apparatus utilized is adequately sterilized before use 	<ul style="list-style-type: none"> • Sterilizing temperature 121° C¹ • Date, contents, sterilization time and temperature, total time in autoclave, and analyst's initials should be recorded each time the autoclave is used¹ • Test monthly for sterilization 		



Draft General Lab Criteria

	<p>efficacy using a biological such as commercially available <i>Geobacillus stearothermophilus</i> in spore strips, suspensions, or capsules ¹</p> <ul style="list-style-type: none"> • Verify the autoclave temperature weekly by using a maximum registering thermometer (MRT) to confirm that 121°C has been reached. ¹ • Thermometer calibrated annually with NIST traceable thermometer ^{1,2} • Log book being maintained ⁹ 		
Comments:			
		Acceptable	18
		Marginal	0
		Unacceptable	0

Acceptable Ratings – No action required (recommend SOP's written or updated, perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, written response not required).

Marginal Ratings – Improvements required, written response required (recommend SOP's be written or updated, recommend they perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, require deficiencies to be addressed in written response).

Unsatisfactory Rating - Improvements required, written response required, NOV issued (recommend SOP's be written or updated, recommend they perform DMRQA's for all onsite analysis, recommend voluntary lab analyst certification, require deficiencies to be addressed in written response to NOV).

PAI Audit Recommendation Criteria:

>60% Marginal Rating = Recommend PAI Audit from DES

>45% Combination of Marginal and Unacceptable Rating = Recommend PAI Audit from DES

>30% Unacceptable = Recommend PAI Audit from DES



Draft General Lab Criteria

Approved Standard Methods

- CBOD / BOD 5 Day, Std Methods 5210-B
- Ammonia, Selective Electrode Method, Std Methods 4500-NH3 D
- Total Residual Chlorine, DPD Colorimetric Method, Std Methods 4500-Cl G
- Total Suspended Solids, Dried at 103-105 Degrees C, Std Methods 2540-D
- Dissolved Oxygen, Membrane Electrode Method, Std Method 4500-O G
- pH, Electrometric Method, Std Methods 4500-H+ B
- Fecal Coliform, Membrane Filter Procedure, Std Methods 9222D
- Oil and Grease USEPA 1664A or Std Methods 5520B
- Metals, general, USEPA 200, Std Methods 3111B or C, or 3120B
- Volatiles (Purgeables by purge and trap), USEPA 6210, Std Methods 624
- Semi-Volatiles (Base/Neutrals and acids), USEPA 6410, Std Methods 625
- Pesticides, USEPA 6410 and 6630, Std Methods 608

Preservation and Holding Times

Parameter	Container	Min. Sample Size (mL)	Sample Type	Preservation	Maximum Storage	
					Recommended	Regulatory
BOD / CBOD	P, G	1000	G, C	Refrigerate 4° C +/-2°	6h	48h
TSS	P, G	200	G, C	Refrigerate 4° C +/-2°	7 d	7 d
pH	P, G	50	G	Analyze immediately	0.25h	0.25 h
NH3-N	P, G	500	G, C	Analyze as soon as possible or add H ₂ SO ₄ to pH <2, Refrigerate 4° C +/-2°	7 d	28 d
TRC	P, G	500	G	Analyze immediately	0.25h	0.25 h
DO (electrode)	G, BOD Bottle	300	G	Analyze immediately	0.25h	0.25 h
Temperature	P, G	--	G	Analyze immediately	0.25h	0.25 h
Metals, general	P, G	1000	G, C	For dissolved filter immediately and add HNO ₃ to pH <2	6 months	6 months
Purgeables by purge and trap	G (PTFE lined lid)	40 (X2)	G	HCl to pH<2, Refrigerate 4° C +/-2°	7 d	14 d
Base/Neutrals	G (solvent	1000	C, G	Refrigerate 4° C +/-2°	7 d	7 d until



Draft General Lab Criteria

and acids	rinsed or baked)					extraction 40 day after extraction
Pesticides	G (PTFE lined lid)	1000	C	Refrigerate 4° C +/-2°	7 d	7 d until extraction 40 day after extraction
Fecal Coliform	G, P (Sterilized)	100	G	Refrigerate 4° C +/-2°, If chlorine present add sodium thiosulfate tablet,	start analysis within 2 hrs of sample collection.	
Oil and Grease	G	1000	G	HCl or H ₂ SO ₄ to pH <2, Refrigerate 4° C +/-2°	28 d	28 d

Notation of Referenced Method

1. Method 9020-B, Item 4	2. Method 1020-A, Item 1
3. Method 1020-B, Item 10	4. Method 2540-B, Item 2
5. Method 2550-B, Item 1	6. Method 1020-B, Item 1
7. Method 4500-H B, Item 4	8. Method 4500-H B, Item 2
9. Method 1020-B, Item 2	10. Method 4500-O B, Item 3
11. Method 4500-O G, Item 3	12. Method 5210-B, Item 5
13. Method 1060B, Table 1060I	14. Method 1060A, Item 2
15. Method 4500-CI I, Item 2	16. Method 4500-CI I, Item 24
17. Method 4500-NH3 D, Item 4	18. Method 4500-NH3 D, Item 2
19. Method 1060-B, Item 2	20. Method 1060-B, Item 1
21. Method 9222D, Item 1	22.

Equipment Logbook Content - all maintenance performed on a piece of equipment should be documented in the logbook. This should include parts replacement and routine maintenance activities. Entries should include date, maintenance performed and initials of person making entry.

