

OHIO E.P.A.

Effective Date JUL 06 2010

JUL -6 2010

ENTERED DIRECTOR'S JOURNAL

BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

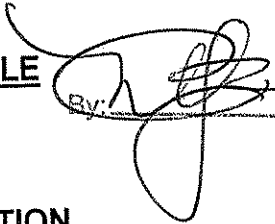
DIRECTOR'S FINAL  
FINDINGS AND ORDERS

Village of Cygnet  
210 Front Street  
PO Box 408  
Cygnet, Ohio 43413

Respondent,

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

PREAMBLE

By:  Date: 7-6-2010

It is agreed by the parties hereto as follows:

I. JURISDICTION

These Director's Final Findings and Orders (Orders) are issued to the Village of Cygnet (Respondent) pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency (Ohio EPA) under Ohio Revised Code (ORC) Chapter 6109 and § 3745.01.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondent and successors in interest liable under Ohio law. No change in ownership of Respondent's public water system shall in any way alter Respondent's obligations under these Orders.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapter 6109 and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA (Director) has determined the following findings:

1. Respondent owns and operates a "public water system" (PWS), which is also a "community water system" as defined by ORC § 6109.01 and Ohio Administrative Code (OAC) Rule 3745-81-01.
2. Respondent's PWS (PWS ID#8700612) is located at 125 Rocky Ridge Road, Cygnet (Wood County), Ohio, 43413.

3. Respondent's PWS obtains its drinking water from a "ground water" source as defined by OAC Rule 3745-81-01 and serves a population of 680 persons.
4. In accordance with OAC Rule 3745-81-21(A)(1)(a), a community water system using ground water and serving not more than one thousand (1000) persons shall monitor with at least one total coliform bacteria sample each month.
5. In violation of OAC Rule 3745-81-21(A)(1)(a), Respondent failed to collect at least one total coliform bacteria sample during the month of August 2004.
6. In accordance with OAC Rule 3745-81-24(C)(1), community PWSs that treat their water with any combination of chlorine, chloramines, chlorine dioxide and/or ozone, shall monitor for total trihalomethanes (TTHM).
7. In accordance with OAC Rule 3745-81-24(C)(4), if a sample (or average of annual samples, if more than one sample is taken) exceeds the maximum contaminant level (MCL) for TTHM, a PWS shall increase monitoring to one sample per treatment plant or bulk supplier per quarter, taken at a point reflecting the maximum residence time in the distribution system.
8. In accordance with OAC Rule 3745-81-24(C)(4), Respondent has monitored for TTHM quarterly. The running annual arithmetic averages (RAA) for the Respondent's TTHM samples are 0.0417 milligrams per liter (mg/L) for first quarter 2007, 0.0537 mg/L for second quarter 2007, 0.0655 mg/L for third quarter 2007, 0.0717 mg/L for fourth quarter 2007, 0.0843 mg/L for first quarter 2008, 0.0890 mg/L for second quarter 2008; 0.1060 mg/L for third quarter 2008, 0.1016 mg/L for fourth quarter 2008, 0.1014 mg/L for first quarter 2009, 0.1069 mg/L for second quarter 2009, and 0.0746 mg/L for third quarter 2009.
9. In accordance with OAC Rule 3745-81-24(C)(14), for PWSs monitoring quarterly, compliance with the MCL for TTHM shall be based on a RAA, computed quarterly, of quarterly arithmetic averages of all samples taken at each sampling point. If the RAA of quarterly averages covering any consecutive four-quarter period exceeds the MCL, the PWS is in violation of the MCL.
10. In accordance with OAC Rules 3745-81-12(B), a community PWS is in compliance with the MCL for TTHM if the RAA is not greater than 0.080 mg/L.
11. In violation of OAC Rule 3745-81-12(B), as determined by OAC Rule 3745-81-24(C)(14), the Respondent exceeded the MCL for TTHM during the monitoring periods: January through March 2008, April through June 2008, July through September 2008, October through December 2008, January through March 2009, and April through June 2009 monitoring periods. Respondent has returned to compliance with the TTHM MCL, with a current RAA of 0.0746 mg/L for the third quarter of 2009.

12. In accordance with OAC Rule 3745-81-32, the owner or operator of a PWS having violations shall notify all persons served by the PWS of these violations.
13. In violation of OAC Rule 3745-81-32, Respondent failed to issue public notification and submit copies of the required public notice and verification form for exceeding the MCL for TTHM during the April through June 2008, October through December 2008, January through March 2009, and April through June 2009 monitoring periods.
14. In accordance with OAC Rule 3745-81-60(D), a PWS shall respond to the Director in writing, within forty-five days following receipt of a sanitary survey letter, indicating how and on what schedule the PWS will address any significant deficiencies noted in the surveys.
15. On April 11, 2007, Ohio EPA provided Respondent with a letter identifying regulatory deficiencies observed at Respondent's PWS during the March 13, 2007 sanitary survey.
16. In violation of OAC Rule 3745-81-60(D), Respondent failed to respond to the Director, in writing, within forty-five days following receipt of the April 11, 2007 sanitary survey letter, indicating how and on what schedule the significant deficiencies noted in the survey letter would be addressed by Respondent.
17. On June 8, 2007, Ohio EPA issued a notice of violation for Respondent's failure to respond to the Director, in writing, within forty-five days following receipt of the April 11, 2007 sanitary survey letter. Respondent returned to compliance by responding in writing to the June 8, 2007 violation letter on June 20, 2007.
18. In accordance with OAC Rule 3745-85-01(B), each community water system shall prepare and maintain a written contingency plan for providing safe drinking water to its service area under emergency conditions.
19. In accordance with OAC Rule 3745-85-01(E)(1), the contingency plan shall be revised and updated as necessary, but at least annually.
20. In violation of OAC Rule 3745-85-01(E)(1), Respondent had failed to update their written contingency plan annually. During the July 23, 2009 sanitary survey of Respondent's PWS, Ohio EPA confirmed that Respondent had returned to compliance by completing a written contingency plan.
21. In accordance with OAC Rule 3745-95-03(A), the supplier of water shall conduct or cause to be conducted periodic surveys and investigations, of frequency acceptable to the Director, of water use practices within a consumer's premises to determine whether there are actual or potential cross-connections to the consumer's water system through which contaminants or pollutants could backflow into the PWS.

22. In violation of OAC Rule 3745-95-03(A), Respondent failed to provide documentation of a backflow prevention program during the March 13, 2007 PWS sanitary survey. During the July 23, 2009 sanitary survey, Ohio EPA confirmed that Respondent had completed a survey to determine if there were actual or potential cross-connections to consumer's water systems.
23. In accordance with OAC Rule 3745-95-06(C)(2), the supplier of water shall see that the tests and inspections of any backflow prevention devices are performed.
24. In accordance with OAC Rule 3745-95-06(D), the supplier of water shall inspect or cause to be inspected all installations where an approved connection exists between an auxiliary water system and the PWS or a consumer's water system at least once every twelve months and shall maintain an inventory of all such installations and inspection records. Such inventories and inspection records shall be made available during sanitary surveys and at other reasonable times.
25. In violation of OAC Rule 3745-95-06(C)(2) and (D), Respondent had failed to require consumers to have back flow prevention devices inspected every 12 months by a certified plumber. During the July 23, 2009 sanitary survey of the PWS, Ohio EPA confirmed that Respondent had enacted an ordinance requiring that back flow devices be inspected every 12 months.
26. In accordance with OAC Rule 3745-96-02(A), each community water system shall provide to its customers an annual report [Consumer Confidence Report (CCR)]; that contains the information specified in OAC Rules 3745-96-02 and 3745-96-03.
27. In accordance with OAC Rule 3745-96-02(C)(2)(c), each CCR that contains data on contaminants the state regulates shall include the definition of "Maximum residual disinfectant level goal" or "MRDLG": the level of drinking water disinfectant below which there is no known or expected risk to health.
28. In accordance with OAC Rule 3745-96-02(C)(2)(d), each CCR that contains data on contaminants the state regulates shall include the definition of "Maximum residual disinfectant level" or "MRDL": the highest level of a disinfectant allowed in drinking water.
29. In violation of OAC Rule 3745-96-02(C)(2)(c) and (d), Respondent's 2006 CCR failed to include the definitions of MRDLG and MRDL.
30. In accordance with OAC Rule 3745-96-02(D)(1), data relating to detected contaminants subject to mandatory monitoring shall be included in each CCR.
31. In accordance with OAC Rule 3745-96-02(D)(2), data relating to detected contaminants subject to mandatory monitoring shall be displayed in one table or in several adjacent tables within the CCR.

32. In violation of OAC Rule 3745-96-02(D)(2), Respondent's 2005 CCR's Table of Detected Contaminants omitted data relating to total chlorine residuals.
33. In accordance with OAC Rule 3745-96-02(D)(3), the data included in the tables within the CCR shall be derived from data collected to comply with USEPA and state monitoring and analytical requirements during the previous calendar year.
34. In violation of OAC Rule 3745-96-02(D)(3), Respondent's 2004 CCR's Table of Detected Contaminants omitted the data pertaining to the 2004 HAA5 detection.
35. In accordance with OAC Rule 3745-96-02(D)(4)(i), the tables within the CCR displaying data relating to detected contaminants subject to mandatory monitoring shall contain the likely source(s) of detected contaminants to the best of the operator's knowledge. If the operator lacks specific information on the likely source, the report shall include one or more of the typical sources for that contaminant listed in the appendix to OAC Rule 3745-96-02 which are most applicable to the system.
36. In violation of OAC Rule 3745-96-02(D)(4)(i), Respondent's 2006 CCR's Table of Detected Contaminants included fluoride as a likely source of contamination, although Respondent does not add fluoride to its drinking water; and the table did not include likely sources of contamination for nitrate that were true for the area.
37. In accordance with OAC Rule 3745-96-02(D)(3)(a), no data for detected contaminants that is older than five years shall be included in the tables within the CCR.
38. In violation of with OAC Rule 3745-96-02(D)(3)(a), Respondent's 2006 CCR's Table of Detected Contaminants included 2001 data.
39. Each violation cited above represents a separate violation of ORC § 6109.31.
40. On July 23, 2009, Ohio EPA inspected Respondent's PWS and found deficiencies in the operations and maintenance of the PWS, including, but not limited to, the following:
  - a) The water treatment plant has excessive moisture. The Recommended Standards for Water Works, 2003 Edition (Ten States Standards), Part 6.2.6, states "in areas where excess moisture could cause hazards to safety or damage to equipment, means for dehumidification should be provided".
  - b) The concrete at the base of the elevated tower appears to be flaking and cracking, and the exterior of the elevated storage tank shows signs of extensive rust spots. Ten States Standards, Part 7.0, states "materials and designs used for finished water storage structures shall provide stability and durability as well as protect the quality of the stored water."

- c) The 0.100 MG elevated tower, built in 1930, may not have sufficient capacity to meet domestic demands and fire flow demands. Ten States Standards, part 7.0.1, states "storage facilities should have sufficient capacity, as determined from engineering studies, to meet domestic demands, and where fire protection is provided, fire flow demands".
  - d) The water treatment plant site is not equipped with precautions to prevent trespassing. Ten States Standards, part 7.0.4, states "fencing, locks on access manholes, and other necessary precautions shall be provided to prevent trespassing, vandalism, and sabotage".
  - e) The overflow of the elevated tower is lacking a screen. Ten States Standards, part 7.0.7(c), states "the overflow for an elevated tank shall open downward and be screened with a four mesh, non-corrodible screen. The screen shall be installed within the overflow pipe at a location least susceptible to damage by vandalism. If a flapper valve is used, a screen shall be provided inside the valve".
  - f) The PWS has existing 4-inch distribution system piping which serves fire hydrants. Ten States Standards, part 8.2.2, states "the minimum size of water main which provides fire protection and serving fire hydrants shall be six-inch diameter."
  - g) The PWS has dead end mains. Ten States Standards, part 8.2.4(a), states "dead ends shall be minimized by making appropriate tie-ins whenever practical, in order to provide increased reliability of service and reduce head loss".
41. On February 18, 2009, an accidental crude oil release, from an oil transmission line, occurred within approximately two (2) miles of Respondent's PWS well field.
42. Respondent's PWS well field is located in an area which has been identified as having potential Karst formations (irregular limestone in which erosion has produced fissures, sinkholes, underground streams, and caverns).

## **V. ORDERS**

1. Within thirty (30) days of the effective date of these Orders, Respondent shall remedy the violations in Finding No. 13 by issuing public notification and by submitting copies of the required public notice and verification form to the Ohio EPA, Division of Drinking and Ground Waters (DDAGW), Central Office (CO), Lazarus Government Center, P.O. Box 1049, Columbus, Ohio 43216-1049, in accordance with OAC Rule 3745-81-32, for exceeding the MCL for TTHM during the April through June 2008, October through December 2008, January through March 2009, and April through June 2009 monitoring periods.

2. From the effective date of these Orders, Respondent shall, by July first annually, provide to customers a CCR containing data collected during or prior to, the previous calendar year; and provide a copy of the CCR distributed and a distribution certification to the Director, in accordance with OAC Chapter 3745-96.
3. From the effective date of these Orders, Respondent shall continue to implement a backflow prevention program in accordance with OAC Rule 3745-95.
4. From the effective date of these Orders, Respondent shall comply with all current and future chemical contaminant monitoring schedules issued by the Director.
5. From the effective date of these Orders, Respondent shall comply with total coliform bacteria monitoring requirements, in accordance with OAC Rule 3745-81-21.
6. From the effective date of these Orders, Respondent shall revise and update as necessary, but at least annually the contingency plan required by OAC Rule 3745-85-01, in accordance with OAC Rule 3745-85-01(E)(1).
7. From the effective date of these Orders, Respondent shall respond to the Director in writing, within forty-five days following receipt of a sanitary survey letter, indicating how and on what schedule the PWS will address any significant deficiencies noted in the surveys, in accordance with OAC Rule 3745-81-60(D).
8. Within ninety (90) days of the effective date of these Orders, Respondent shall submit a plan for a hydrant/valve flushing exercising program to Ohio EPA for approval.
9. Within sixty (60) days of Ohio EPA approval of the hydrant/valve flushing exercising program, Respondent shall implement the approved program.
10. Within one hundred twenty (120) days of the effective date of these Orders, Respondent shall submit a General Plan (three copies), in accordance with OAC Chapter 3745-91, to Ohio EPA, NWDO, DDAGW, 347 North Dunbridge Road, Bowling Green, Ohio, 43402 for review and approval. The General Plan shall describe at least 3 different options for TTHM reduction, a cost estimate of each option, and shall include a detailed compliance schedule with applicable milestone dates of significant events that are necessary to attain compliance. Additionally, the General Plan shall include:
  - a) A description of the options considered for TTHM reduction and the rationale for the approach selected;
  - b) An engineering description of the existing facilities and the selected option, including the construction phases, and an estimate of all the costs of any required construction, operation, maintenance; and
  - c) Anticipated sources of funds to cover these estimated costs.

11. If the Ohio EPA approval of the General Plan indicates that a pilot study is not necessary, Order Nos. 12 - 16 will not be required.
12. Within sixty (60) days of Ohio EPA approval of the General Plan, Respondent shall submit a pilot study protocol to Ohio EPA, Central Office, DDAGW, Engineering, for review and approval. The pilot study protocol shall describe the procedures necessary to evaluate the source water for the water treatment system identified as the preferred option in the General Plan.
13. If Ohio EPA should require any revisions to the pilot study protocol, Respondent shall make any such changes or modifications and/or submit any additional information to Ohio EPA, within thirty (30) days of receiving a written comment letter from Ohio EPA.
14. Within thirty (30) days of approval of the pilot study protocol, Respondent shall commence the pilot study.
15. Within sixty (60) days of completion of the pilot study, Respondent shall submit a report in which the data collected, results of the data analysis, and the conclusions and recommendations are presented in an acceptable format to Ohio EPA, Central Office, DDAGW, Engineering for review and approval. Data shall also be submitted in an agreed-upon electronic format. The report shall also include all other data collected during start-up prior to each test period. For each operation mode performed during the pilot study, the pertinent parameters (raw water source, chemical type and dose, pH, etc.) shall be clearly defined and presented in the report.
16. If Ohio EPA should require any revisions to the pilot study report, Respondent shall make any changes or modifications and submit any additional information to Ohio EPA, within thirty (30) days of receiving a comment letter from Ohio EPA. If the pilot study is not acceptable because the treatment failed to demonstrate sufficient consistent and reliable treatment, a revised pilot study protocol is required to be submitted to Ohio EPA, within ninety (90) days of receiving a written comment letter from Ohio EPA.
17. Within one hundred twenty (120) days after Ohio EPA approval of the pilot study report (if required), Respondent shall submit detail plans for approval to Ohio EPA for the modifications to the existing plant in accordance with OAC Chapter 3745-91. If it is determined that a pilot is not necessary, detail plans shall be submitted within one hundred twenty (120) days of approval of the General Plan.
18. Within sixty (60) days of Director's detail plan approval for the selected option for TTHM reduction, in accordance with detail plans approved by Ohio EPA and OAC Chapter 3745-91, Respondent shall begin construction on the selected option.
19. Within one hundred eighty (180) days of detail plan approval, in accordance with the detail plans approved by the Director and OAC Chapter 3745-91, Respondent shall complete the selected option and commence operation of the treatment for TTHM reduction.

20. Within seven (7) days after meeting the deadlines given in Order Nos. 18, 19 above, Respondent shall send written notification of compliance with the requirements of each of the Orders to Ohio EPA, NWDO, DDAGW, 347 North Dunbridge Road, Bowling Green, Ohio, 43402.
21. Within twelve (12) months of the completion of the selected option, Respondent shall comply with the MCL requirements for TTHM and HAA5 in accordance with OAC Rules 3745-81-12 and 3745-81-24.
22. Within one hundred eighty (180) days of the effective date of these Orders, Respondent shall submit a schedule to Ohio EPA, NWDO, DDAGW, 347 North Dunbridge Road, Bowling Green, Ohio, 43402, for addressing the deficiencies referenced in Finding No. 40. The schedule shall address the following:
  - a) Corrective actions for the removal of the excessive moisture from the water treatment plant to prevent and stop the deterioration of the water equipment;
  - b) Repair of the elevated tower, which is to include repair of the concrete at the base of the tower, and painting of the tower to prevent further corrosion, structural damage and potential sanitary risk;
  - c) The replacement of the 0.0100 MG elevated tower, built in 1930, with a storage facility that has sufficient capacity, as determined by an engineering study, to meet domestic demands and fire flow demands;
  - d) The installation of a fence, locks on access manholes, and other necessary precautions for the water treatment plant to prevent trespassing, vandalism and sabotage;
  - e) The installation of a screen on the overflow of the elevated tower;
  - f) The replacement of the existing 4-inch fire hydrants' distribution system piping with a minimum of 6-inch water mains per Ten State Standards section 8.2.2; and
  - g) The minimizing of the dead end mains to provide increased reliability of service and reduce head loss, per Ten States Standards section 8.2.4.
23. Within one hundred eighty (180) days of the effective date of these Orders, to better prepare for incidents such as the crude oil spill referenced in Finding No. 42, Respondent shall submit a Source Water Assessment and Protection Plan (SWAP) to Ohio EPA, NWDO, DDAGW, 347 North Dunbridge Road, Bowling Green, Ohio, 43402. The SWAP shall address the following:
  - a) Education and outreach;
  - b) Drinking water shortage and emergency response;

- c) Potential contaminant source control strategies;
  - d) The need for an early warning ground water monitoring program; and
  - e) An implementation schedule for the identified actions.
24. From the effective date of these Orders, and for as long as Respondent's PWS utilizes a well within an area characteristic of Karst formations, Respondent shall continue to collect monthly special raw bacteria samples from Well #1.
25. Within thirty (30) days of notification, Respondent shall respond in writing to address any comments or deficiencies noted by Ohio EPA on any plan or other documentation submitted by Respondent.

#### **VI. TERMINATION**

Respondent's obligations under these Orders shall terminate when Respondent certifies in writing and demonstrates to the satisfaction of Ohio EPA that Respondent has performed all obligations under these Orders and the Chief of Ohio EPA's DDAGW acknowledges, in writing, the termination of these Orders. If Ohio EPA does not agree that all obligations have been performed, then Ohio EPA will notify Respondent of the obligations that have not been performed, in which case Respondent shall have an opportunity to address any such deficiencies and seek termination as described above.

The certification shall contain the following attestation: "I certify that the information contained in or accompanying this certification is true, accurate and complete." This certification shall be submitted by Respondent to Ohio EPA and shall be signed by a responsible official of Respondent. For purposes of these Orders, a responsible official is as defined in OAC Rule 3745-33-03(E).

#### **VII. OTHER CLAIMS**

Nothing in these Orders shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership or corporation, not a party to these Orders, for any liability arising from, or related to the operation of Respondent's PWS.

#### **VIII. OTHER APPLICABLE LAWS**

All actions required to be taken pursuant to these Orders shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and regulations. These Orders do not waive or compromise the applicability and enforcement of any other statutes or regulations applicable to Respondent.

### **IX. MODIFICATIONS**

These Orders may be modified by agreement of the parties hereto. Modifications shall be in writing and shall be effective on the date entered in the journal of the Director of Ohio EPA.

### **X. NOTICE**

All documents required to be submitted by Respondent pursuant to these Orders shall be addressed to:

Ohio Environmental Protection Agency  
Northwest District Office  
Division of Drinking and Ground Waters  
347 North Dunbridge Road,  
Bowling Green, Ohio, 43402  
Attn: JoAnn Sabo, District Office Compliance Coordinator

or to such persons and addresses as may hereafter be otherwise specified in writing by Ohio EPA.

### **XI. RESERVATION OF RIGHTS**

Ohio EPA reserves its rights to seek civil or administrative penalties against Respondent for violations specifically cited in these Orders. Ohio EPA and Respondent each reserve all rights, privileges and causes of action, except as specifically waived in Section XII of these Orders.

### **XII. WAIVER**

In order to resolve disputed claims, without admission of fact, violation or liability, and in lieu of further enforcement action by Ohio EPA for only the violations specifically cited in these Orders, Respondent consents to the issuance of these Orders and agrees to comply with these Orders. Except for the right to seek civil or administrative penalties against Respondent for violations specifically cited in these Orders, which right Ohio EPA does not waive, compliance with these Orders shall be a full accord and satisfaction for Respondent's liability for the violations specifically cited herein.

Respondent hereby waives the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondent hereby waives any and all rights Respondent may have to seek administrative or judicial review of these Orders either in law or equity. Notwithstanding the preceding, Ohio EPA and Respondent agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondent retains the right to intervene and participate in such appeal. In such an event, Respondent shall continue to comply with these Orders notwithstanding such appeal and intervention unless these Orders are stayed, vacated or modified.

**XIII. EFFECTIVE DATE**

The effective date of these Orders is the date these Orders are entered into the Ohio EPA Director's journal.

**XIV. SIGNATORY AUTHORITY**

Each undersigned representative of a party to these Orders certifies that he or she is fully authorized to enter into these Orders and to legally bind such party to these Orders.

**IT IS SO ORDERED AND AGREED:**

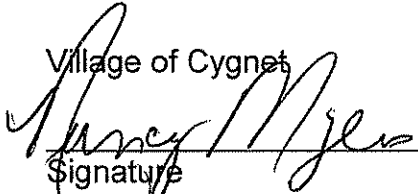
**Ohio Environmental Protection Agency**

  
Chris Korleski, Director

JUL 06 2010  
Date

**IT IS SO AGREED:**

Village of Cygnet

  
Signature

6-7-10  
Date

Nancy Myers  
Printed or Typed Name and Title

Mayor



Lon M. Shank  
Cygnet BPA