

NOV 12 2009

ENTERED DIRECTOR'S JOURNAL

BEFORE THE

OHIO ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:

Ottawa County Board of Health
1856 E. Perry Street
Port Clinton, Ohio 43452

Ottawa County Board of Commissioners
315 Madison Street, Room 103
Port Clinton, OH 43452

Director's Final Findings
and Orders

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.

By [Signature] Date: 11-12-09

Respondents

I. JURISDICTION

These Director's Final Findings and Orders (the "Orders") are issued to the Ottawa County Board of Health and the Ottawa County Board of Commissioners (collectively the "Respondents") pursuant to the authority vested in the Director of the Ohio Environmental Protection Agency ("Ohio EPA") under Ohio Revised Code ("ORC") §§ 6111.03(H), 6117.34 and 3745.01, and Ohio Administrative Code ("OAC") Chapter 3745-11.

II. PARTIES BOUND

These Orders shall apply to and be binding upon Respondents and their successors in interest liable under Ohio law.

III. DEFINITIONS

Unless otherwise stated, all terms used in these Orders shall have the same meaning as defined in ORC Chapters 6111, and the rules promulgated thereunder.

IV. FINDINGS

The Director of Ohio EPA has determined the following findings:

1. Respondent Ottawa County Board of Health is located at 1856 E. Perry Street, Port Clinton, Ottawa County Ohio. Ottawa County Board of Health is responsible for issuing permits for home sewage disposal systems in Ottawa County.

2. South Bass Island is an island situated in Lake Erie and is within the boundaries of Ottawa County, Ohio. The Village of Put-in-Bay (the "Village") is a municipality located on South Bass Island and also includes Gibraltar Island. Put-in-Bay Township (the "Township") is an unincorporated community on South Bass, Middle Bass and North Bass Islands, Ottawa County, Ohio. References to the Township in these Orders is limited to the unincorporated community on South Bass Island.
3. South Bass Island's winter population is only about 350 people. However, during summer months, the Island can have 10,000 to 25,000 visitors per day.
4. The Village owns and operates a Community Public Water System (PWS) as that term is defined by OAC Rule 3745-81-01 that obtains drinking water from Lake Erie. This system also serves certain businesses located in the Township.
5. The Village owns and operates a wastewater treatment plant (WWTP) and associated sewer system that collects and treats sewage from the majority of the Village and some properties in the Township. The treatment capacity of the WWTP is 220,000 gallons/day.
6. The majority of properties within the Township utilize wells to extract groundwater to meet their water needs and on-site septic tanks for sewage disposal.
7. On August 3, 2004, the Ottawa County Health Department (OCHD) contacted the Ohio Department of Health (ODH) to report that an unusual number of people were reporting gastrointestinal illness after being on South Bass Island. During the following weeks a total of 1,450 cases of gastrointestinal illness in residents and visitors to South Bass Island were reported.
8. Ohio EPA was informed about a possible outbreak on August 12, 2004, when Ohio EPA was requested to investigate the wastewater systems at two specific businesses, and to determine if the businesses met the definition of a public water system.
9. On August 13, 2004, Ohio EPA Division of Drinking and Ground Waters (DDAGW) and Division of Surface Water (DSW) staff, at the request of the Ottawa County Health Department, visited two businesses in the Township to confirm they were transient noncommunity public water systems. It was determined that both businesses were public water systems but were not in Ohio EPA records. Ottawa County Health Department collected drinking water samples from these businesses on August 13, 2004. Ohio EPA also inspected the wastewater treatment systems at both of these locations. Both businesses were found to have failing wastewater systems, and were instructed to install wastewater holding tanks and transport the wastewater to the Village treatment facility.
10. The Center for Disease Control (CDC) was contacted on August 19, 2004, and invited to assist with the investigation.

11. The Ohio Department of Health, as the lead agency of a multi-agency investigation, held the first incident command meeting on August 20, 2004.
12. On August 23, 2004, Ohio EPA sent three teams to South Bass Island to initiate a three-pronged investigation of all public water systems on the Island including all wells and plumbing to ensure compliance with rules regarding well construction, isolation, treatment, cross-connection and backflow prevention. This work continued for several weeks.
13. Efforts were made to collect both raw (non-chlorinated) and finished water samples that were analyzed for total coliform and *E. coli* bacteria. Raw water samples and some finished water also were analyzed for *Campylobacter*.
14. On August 26, 2004, Ohio EPA issued Findings and Orders to all transient public water systems continuing to use their wells to collect raw and finished water samples at least once per week. These samples had to be sent to a certified laboratory and analyzed for total coliform and *E. coli*.
15. On August 30 and 31, 2004, representatives from the CDC conducted sampling at public water systems and private water wells where initial sampling by Ohio EPA or ODH had *E. coli* positive results and at the Village of Put-In-Bay. Samples collected from these wells were analyzed for: *E. coli*, fecal coliform, *Campylobacter*, Somatic coliphage, F-specific coliphage, *C. perfringens*, *Salmonella*, *Cryptosporidium*, *Giardia*, *Norovirus*, *Adenovirus* and *Enterovirus*. Several of these organisms were analyzed using multiple laboratory techniques.
16. Beginning on September 15, 2004, Ohio EPA in cooperation with Michigan State University (MSU) initiated an investigation of all other public water systems not sampled by the CDC. MSU analyzed samples for: total coliform, *E-coli*, *Campylobacter*, Somatic coliphage, F-specific coliphage, *C. perfringens*, *Cryptosporidium*, *Giardia*, *Salmonella*, *Norovirus* and Enterococci. Additionally, portions of the water samples collected were provided to laboratories at the CDC in Atlanta to be analyzed for: *Campylobacter*, *Giardia* and *Cryptosporidium* DNA. Sampling was completed September 21, 2004.
17. On September 28 and 29, 2004, Ohio EPA staff collected samples from three wells for microscopic particulates analysis. The samples were analyzed by Environmental Associates Laboratory in Ithaca, New York. The purpose of these samples was to determine interconnection of ground water supplying these wells with Lake Erie water.
18. In total, 112 samples were collected from transient public water systems. Of the eighteen (18) transient non-community water systems sampled, all had at least one positive detection of an indicator organism in samples collected from their well(s). Sixteen (16) have had positive detections for organisms other than total coliform bacteria.

19. Among the sixteen (16) systems that tested positive for indicators other than total coliform bacteria, *E. coli* and *Campylobacter*-like DNA are the most frequently detected organisms.
- Twelve (12) tested positive for *E. coli*
 - Twelve (12) tested positive for *Campylobacter*-like DNA (further speciation yielded four (4) *Campylobacter jejuni*, one (1) *Campylobacter upsaliensis* and *Arcobacter butzleri*, six (6) *Arcobacter butzleri*, and one (1) *Acinetobacter rhizospherae*)
 - Seven (7) tested positive for Enterococci
 - Six (6) tested positive for Somatic coliphages
 - Four (4) tested positive for fecal coliforms, *Salmonella* DNA and/or *Cryptosporidium* DNA
 - Three (3) tested positive F-specific coliphages
 - Two (2) tested positive for *Campylobacter*-like culture (further speciation yielded one (1) *Campylobacter jejuni* and one (1) *Arcobacter butzleri*)
 - One (1) system tested positive for *C. perfringens*, *Giardia* cysts, *Adenovirus* and/or *Enterovirus*
20. On August 2005, the Center for Disease Control and Prevention issued an Environmental Health Assessment Report pertaining to the outbreak of gastrointestinal illness outbreak on South Bass Island.
21. The report concludes that sewage has contaminated the groundwater aquifers on South Bass Island. It states, “[i]nadequate soil depth to bedrock, which is fractured and contains numerous solution channels contributes to the problem. This increases the likelihood that on-site subsurface sewage disposal systems at homes and businesses are introducing sewage directly into groundwater supplies. The karst formation of the island facilitates the movement of sewage in the aquifer and the movement of contaminated groundwater within the aquifer. (CDC Report at page 20).
22. The report concludes that drinking water from a groundwater well on South Bass Island is identified in the epidemiological investigation as the likely source of exposure for those individuals reporting illness. The report states, “groundwater samples collected in response to this outbreak found strong indicators of fecal contamination. *E. coli* was positive in 30% to 40% of collected groundwater samples. The geographical distribution of these sample locations indicates widespread contamination of the aquifer. (CDC Report at page 21).
23. The CDC recommended that “all housing units and commercial establishments and the island should be served by a public sewage collection and disposal systems and a public water supply. Extending public water supply lines without provision of public sewer system could result in higher water use and increase the volume of wastewater generated per household and business. Extending water supply lines to most of the island could result in additional residential and commercial development. This growth

may increase water use and wastewater production on the island. If such development took place without adequate sewage disposal system expansion, contamination of the aquifer could actually increase.” (CDC Report at page 23).

24. Local and state environmental and health authorities should develop a sewage management plan for South Bass Island. The severe soil and geologic limitations for conventional soil-based on-site wastewater disposal systems on South Bass Island may preclude the continued use of these types of systems. Continued use of existing on-site wastewater disposal systems will likely result in persistent contamination of groundwater supplies and present a serious risk to public health. A moratorium on the construction of new on-site wastewater treatment disposal systems should be imposed until a sewage management plan is developed and implemented.” (CDC Report at page 24).

25. Since 2004, the following businesses tied into the Village’s PWS:
 - a. Bird’s Nest Resort;
 - b. The Island Club;
 - c. ODNR Bass Island State Park;
 - d. Put-in-Bay Airport;
 - e. The Goat (f.k.a. The Horny Toad);
 - f. Fox’s Den;
 - g. Heineman Winery;
 - h. Irving’s Deli;
 - i. Perry’s Cave;
 - j. Joe’s Bar;
 - k. Ohio State University Stone Lab.

26. Since 2004, the following businesses now provide hauled water:
 - a. Miller Boat Line Kiln Dock;
 - b. South Shore Beach Resort;
 - c. Skyway.

27. Since 2004, Respondent, Ottawa County Board of Commissioners and/or the Village have either completed or worked with private developers to complete the following water and/or sewer projects:
- a. Cotton Clan Waterline & Sanitary Sewer Line Extension;
 - b. South Bass Island Water Main Extension (FAA);
 - c. Sanitary Sewer Extension to the Ground Level Storage Tank Site;
 - d. Loraine Avenue Waterline Extension Loop;
 - e. Chapman Road Sanitary Sewer Line Extension;
 - f. Dollar Avenue Waterline & Sanitary Sewer Extension;
 - g. OSU Waterline & Sanitary Sewer Line Extension;
 - h. Water Treatment Plant and Ground Level Storage Tank Improvements;
 - i. Redirect Victory Avenue FM to Lakeview Sanitary Sewer;
 - j. Elevated Water Tower;
 - k. Wastewater Treatment Plant Effluent Sewer;
 - l. Morgan Park Water and Sewer Extension along Columbus Ave.
28. Respondent, Ottawa County Board of Commissioners and/or the Village are in the process of constructing or are working with private developers to construct the following projects, which are scheduled to be completed in 2009:
- a. Wastewater Treatment Plant Upgrade;
 - b. Wastewater Treatment Plant Sludge Improvements;
29. Respondent, Ottawa County Board of Commissioners and/or the Village are in the planning process for several additional water and wastewater improvement projects. The total costs of the above referenced projects and the projected costs of the projects that are currently in the planning stages is in excess of \$18,000,000.00.
30. Since 2005, all new drinking water wells subject to the jurisdiction of the Ottawa County Health Department must be drilled to a depth of at least twenty (20) feet below the bottom of Lake Erie and must be approved by the Ohio Department of Health.

31. Since 2005, the Ottawa County Health Department has performed annual testing of forty-one (41) drinking water wells that are subject to the jurisdiction of the Ottawa County Health Department.
32. As a result of the Ottawa County Health Department's drinking water well testing program identified in the previous Finding, eight (8) drinking water wells have been replaced with new wells and/or are being treated by newly installed disinfection systems and thirty-three (33) drinking water wells are being treated by newly installed disinfection systems.
33. There were sporadic cases of gastrointestinal illness on South Bass Island reported to the Ottawa County Health Department in 2005 and 2006. Based upon the Ottawa County Health Department's investigation none of these cases were associated with the consumption of water on South Bass Island.
34. In 2007, 2008 and to date in 2009, there have been no cases of gastrointestinal illness on South Bass reported to the Ottawa County Health Department.
35. The Respondents, and the Township have determined that centralized sewers are the most appropriate long term strategy for addressing wastewater treatment needs on South Bass Island. To that end, the Respondents, Township and the Village are jointly working to amend the Toledo Metropolitan Area Council of Governments Section 208 Areawide Water Quality Management Plan (the "208 Plan") to limit new non-POTW related treatment works or disposal systems on South Bass Island.
36. Pursuant to OAC Chapter 3745-11, the Director of Ohio EPA has the authority to issue a "special connection ban".
37. Pursuant to OAC Rule 3745-11-02(F), a special connection ban prohibits the person upon which it is imposed from causing or allowing construction or installation of home sewage disposal systems. The Director may only impose a special connection ban when it can be shown that pollutants from new home sewage disposal systems in the geographical area to which the ban is applicable will be discharged into waters of the state.
38. The groundwater beneath South Bass Island constitutes "waters of the state" in accordance with OAC Rule 3745-11-01(G).
39. Based on the results of investigations conducted on the island, the Director hereby finds that pollutants from new home sewage disposal systems, if constructed on South Bass Island, would discharge into waters of the state.
40. The Director has given consideration to, and based his determination on, evidence relating to the technical feasibility and economic reasonableness of complying with these Orders and to evidence relating to conditions calculated to result from compliance with these Orders, and its relation to the benefits to the people of the State

to be derived from such compliance in accomplishing the purposes of Chapter 6111 of the Revised Code.

V. ORDERS

1. In accordance with OAC Rule 3745-11-02(G), the Director hereby gives notice that applications for any new on-site treatment works or disposal systems on South Bass Island under Ohio EPA's jurisdiction pursuant to Sections 6111.44, 6111.45, or 6111.46 of the Revised Code or Chapter 3745-42 of the Administrative Code will not be approved by the Ohio EPA until this Order is revoked. For purposes of these Orders, "on-site treatment works or disposal system" means any treatment works or disposal system other than those with a discharge that is regulated by an NPDES permit or a sewer line extension to a treatment system covered by an NPDES permit. No existing on-site system shall be replaced where sanitary sewer connection to the Village of Put In Bay is available or accessible.
2. If Ohio EPA receives a permit application for a new discharge that triggers an antidegradation review prior to the finalization of the 208 amendments referenced in Finding 35, Ohio EPA shall inform Respondents and Township Trustees in writing and provide notice of any public hearing(s).
3. Respondent County Commissioners has developed a long term general plan for sewer and water infrastructure improvements within the Township. As additional sewer lines are installed within the Township, Respondent County Commissioners and/or Respondent Ottawa County Health Department may petition the Director to remove the special connection ban.
4. In consultation and agreement with Respondent Ottawa County Board of Health, the Director hereby imposes a special connection ban on Respondent Ottawa County Board of Health's issuance of household sewage disposal systems or small flow on-site sewage systems, if applicable, on South Bass Island as follows:
 - a. No household sewage disposal permits shall be issued for any proposed subdivision, as that term is defined in O.A.C. 3701-29-01, of residential housing;
 - b. No household sewage disposal permits shall be issued for new individual houses unless it meets the exemption requirements set forth in Order No. 5.
5. A household sewage disposal system may be exempted from the connection ban in Order No 4b if the following conditions are met:
 - a. At the time of the permit application, the house is located in an Agricultural District (A) or Special Residential District ("R-1") Area;

- b. The applicant will use the house as his/her personal residence, and not as a rental property;
- c. The proposed system does not require an NPDES permit as determined by Ohio EPA;
- d. Ottawa County Health Department determines that a sanitary sewer connection to the Village of Put In Bay is not available or accessible and the on-site sewage system is designed in accordance with the following:
 - i. A site evaluation shall be conducted, including soil test pits, and the site evaluation form shall be completed;
 - ii. The soil depth as determined by soil pits, reveals at least 4 feet of natural suitable soil beneath the bottom of the leaching tile field of the proposed system. If site conditions do not provide for 4 feet of natural suitable soil, "special devices or systems" approved and remaining in effect by the Director of the Ohio Department of Health pursuant to Section 3701-29-20 (C) of the Ohio Administrative Code may be proposed if site specific tests and investigations demonstrate that such devices or systems will produce treatment results equivalent to those obtained by systems complying with regulations under OAC 3701-29-01 to 3701-29-21; and
 - iii. All other aspects of the system shall be designed in accordance with OAC Chapter 3701-29 at a minimum. No variances or exemptions to these requirements shall be approved.
- e. The Ottawa County Health Department shall provide Ohio EPA with a complete copy of the application and proposed permit including the site evaluation form, electronically or by certified mail, to Ohio EPA, NWDO, attention of Elizabeth Wick or her successor, along with a specific indication that the submittal is being made pursuant to this Order. Ottawa County Health Department shall consider any comments received by Ohio EPA that are received within 10 business days from date Ohio EPA receives the complete application prior to final issuance of the permit.
- f. The applicant agrees to have the system inspected by the Ottawa County Health Department one year after installation, and by an installer that has been licensed by the Ottawa County Health Department on an annual basis each year thereafter, with the results of the annual inspection reported to the Ottawa County Health Department; and
- g. The owner agrees to abandon the system and tie into a centralized sewer if and when it becomes available and accessible.

6. Household sewage disposal system permits may be issued for the replacement of failing systems at any location on South Bass Island in accordance with the following in order of preference for system type:
 - a. Replacement systems that meet the conditions in Order No. 5.d through g and all of the requirements of as outlined in OAC Rules 3701-29-01 through 3701-29-21.
 - b. If the Ottawa County Health Department determines that lot size or geologic/hydro geologic conditions will not allow a system to be designed for an on-site system, the replacement system may include an off lot discharge so long as the discharge would meet the conditions for coverage under NPDES permit No. OHK00001 or its successor, and the Ohio EPA has not provided the Ottawa County Health Department with a written objection to the issuance of coverage for an NPDES permit within 10 business days after the Ottawa County Health Department provides the Ohio EPA with a copy of the complete application for the replacement system.
 - c. If a replacement system cannot meet the requirements in Order 6.a or 6.b and after consulting with Ohio EPA in accordance with Order 5.e, the Ottawa County Health Department may authorize a holding tank. For purposes of these Orders, any holding tank proposed for approval must:
 - i. include a signed contract with a licensed septic hauler for pumping prior to installation;
 - ii. include an audio/visual high water alarm;
 - iii. be no smaller than 10x the daily design flow, and no larger than 30x the daily design flow;
 - iv. be pumped at least once per month during months when the island is accessible by ferry service. During winter months, alternative arrangements must be made to ensure adequate capacity for the holding tank;
 - v. install low flow /water conservation devices where feasible;
 - vi. include a permit requirement that requires records to be maintained concerning pumping dates and volumes;
 - vii. include a condition in its authorizing document that the approval is only valid relative to the owner in question and will not transfer to a new property owner;
 - viii. include a condition in its authorizing document that the approval is only valid until such time as public sewers become available;
 - ix. include a condition in its authorizing document that if anytime sewage is found to be overflowing onto the surface of the ground or otherwise not functioning properly, that such event would be cause for rescinding

approval and may cause orders to be issued by the local health department for non-occupancy of the dwelling; and

Ottawa County Health Department shall inspect such systems at least twice per calendar year, with at least one inspection to be conducted during the June – September timeframe.

7. The Director, pursuant to the procedure and criteria established in OAC Rule 3745-11-03, may grant a variance from the special connection ban imposed whenever, in his judgment, compelling public need, extreme individual hardship, or other extraordinary circumstances require that the variance be granted. In deciding whether to grant a variance the Director may take into consideration the following factors:
 - a. The proposed facility will replace a facility or facilities in the area of the ban that has been condemned;
 - b. The proposed facility will be used primarily as the dwelling place of a person whose physical or mental health requires that he live within the area of the ban;
 - c. The variance will allow the construction of a school or hospital, or fire or police department facilities;
 - d. The proposed facility will replace one or more existing facilities with a resulting decrease in the quantity of pollutants discharged into waters of the state; and
 - e. Other special facts indicate that the public interest will be served by the immediate availability of the proposed facility.

VI. TERMINATION

Respondents' obligations under these Orders shall terminate when Respondents certify in writing and demonstrates to the satisfaction of Ohio EPA that Respondents have performed all obligations under these Orders and the Chiefs of Ohio EPA's Division of Drinking and Ground Waters and Division of Surface Water, 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 Respondents of the obligations that have not been performed, in which case Respondents 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 Respondents to Ohio EPA and shall be signed by a responsible official of Respondents. For purposes of these Orders, a responsible official is as defined in OAC Rule 3745-33-03(E)(4) for a municipal, state, or other public facility.

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 activities occurring on or at the site.

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 Respondents.

IX. NOTICE

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

Ohio Environmental Protection Agency
Northwest District Office
Division of Surface Water and Division of Drinking and Ground Waters
347 North Dunbridge Road
Bowling Green, Ohio 43402

and to:

Ohio Environmental Protection Agency
Lazarus Government Center
Division of Drinking and Ground Waters
50 West Town Street / P.O. Box 1049
Columbus, Ohio 43215 / 43216-1049
Attn: Enforcement Manager

For mailings, use the post office box number.

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

X. 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.

XI. RESERVATION OF RIGHTS

Ohio EPA and Respondents 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, Respondents consent to the issuance of these Orders and agrees to comply with these Orders. Compliance with these Orders shall be a full accord and satisfaction for Respondents' liability for the violations specifically cited herein.

Respondents hereby waive the right to appeal the issuance, terms and conditions, and service of these Orders, and Respondents hereby waive any and all rights Respondents may have to seek administrative or judicial review of these Orders either in law or equity.

Notwithstanding the preceding, Ohio EPA and Respondents agree that if these Orders are appealed by any other party to the Environmental Review Appeals Commission, or any court, Respondents retain the right to intervene and participate in such appeal. In such an event, Respondents 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:

Ohio Environmental Protection Agency



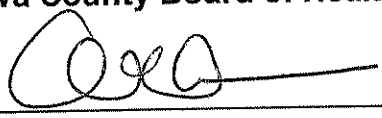
Chris Korleski
Director

11/12/09

Date

IT IS SO AGREED:

Ottawa County Board of Health



Signature

10/26/2009

Date

William Van Der Giessen

Printed or Typed Name

President

Title

Ottawa County Board of Commissioners



Signature

10.27.09

Date

Steven M. Arndt

Printed or Typed Name

President

Title

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