

**MARION TOWNSHIP PLANNING COMMISSION
AGENDA**

**REGULAR MEETING
December 19, 2023
7:30 PM**

Virtual access instructions to participate in the meeting are posted on www.mariontownship.com

Call to Order:

Pledge of Allegiance:

Introduction of Members:

Approval of Agenda for: December 19, 2023 Regular Meeting

Approval of Minutes from: November 28, 2023 Regular Meeting

Call for Public Comment:

Public Hearing:

Unfinished Business:

- 1) TXT#02-23 Wellhead protection ordinance and map review

New Business:

- 1) Discuss definition of Contractor Storage Yard from Memo (11/28/23)
- 2) Discuss issues with Sign section
- 3) Family Accessory Apartment and affordable house

Special Orders:

Announcements:

Call for Public Comment:

Adjournment:

DRAFT

**MARION TOWNSHIP
PLANNING COMMISSION
REGULAR MEETING
NOVEMBER 28, 2023 / 7:30PM**

PC MEMBERS PRESENT: LARRY GRUNN – *CHAIRPERSON*
JIM ANDERSON - *VICE CHAIRPERSON*
CHERYL RANGE - *SECRETARY*
BOB HANVEY
BRUCE POWELSON

PC MEMBERS ABSENT: NONE

OTHERS PRESENT: DAVID HAMANN - *MARION TWP. ZONING ADMINISTRATOR*
ZACH MICHELS – *TOWNSHIP PLANNER*

CALL TO ORDER

Larry Grunn called the meeting to order at 7:30 pm.

APPROVAL OF AGENDA

Jim Anderson made a motion to approve the November 28, 2023 agenda as presented. Bruce Powelson seconded.

MOTION CARRIED

APPROVAL OF MINUTES

Cheryl Range made a motion to approve the October 24, 2023 Planning Commission minutes as presented. Jim Anderson seconded. **MOTION CARRIED**

CALL TO PUBLIC

No comment was made.

PUBLIC HEARING:

WELLHEAD PROTECTION ORDINANCE

No comments were made.

UNFINISHED BUSINESS:

TXT# 02-23 WELLHEAD PROTECTION ORDINANCE AND MAP REVIEW

The Commissioners recommended changes to the Wellhead Protection ordinance. Changes were made on:

PAGE 4 / 1D
PAGE 4 / 2D
PAGE 3 / 1C
PAGE 5 / 3G
PAGE 6 / 6 & 8G
PAGE 7 / 4.1 & 4.2
PAGE 8 / 2C
PAGE 7 / 8
PAGE 8 / 3A
PAGE 6 / 1B
PAGE 8 / 1J

DRAFT

Zach Michels highlighted the areas in the ordinance, that are already in our zoning map. Pages 9 & 10, sections 13, 14, 15, 16, 17, 18 & 19.

Jim Anderson thinks we should have the attorney look at these sections specifically. Zach agrees. Bruce thinks the wording on page 9, section 14 needs to be changed.

Zach is going to make Enforcement its own article (article #4). He is going to make the variance/appeal section shorter and is not going to reference section D & Q. Zach said that this ordinance will be part of the Zoning Ordinance.

Zach will have these provisions back to Dave by December 12th.

UNFINISHED BUSINESS:

TXT# 01-23 DATA PROCESSING

Cheryl Range said we should use "Data Processing Facility" throughout the language.

Cheryl Range made a motion to recommend approval for TXT# 01-23 Data Processing to the Board of Trustees with the mentioned updates. Larry Grunn seconded. **MOTION CARRIED**

NEW BUSINESS:

MEMO FROM SUPERVISOR

Bob Hanvey wanted to get the Commissioners thoughts on the article in the packet.

NEW BUSINESS:

DISCUSS 2023 WORK PLAN GOALS

The Commissioners discussed the new solar language developed and passed by the State. Commissioners are going to hold off on making any changes to our solar ordinance until we get more direction from the State.

Zach mentioned that our Master Plan should match our Zoning Ordinance. The Zoning map also needs to match our Master Plan.

Zach mentioned that our Sign Language needs a few changes because parts of our existing language could be considered discriminate.

Cheryl Range made a motion for Zach to make the necessary changes to our Sign ordinance language. Bruce Powelson seconded. **MOTION CARRIED**

Jim Anderson is going to start getting information together for a PDR application.

The Commissioners started discussing the Township's enforcement policies. Jim Anderson mentioned that we should let the Board make a decision on what direction they plan to go, before they continue having conversations on the topic.

SPECIAL ORDERS:

▪ **DISCUSS ROLE COMMISSIONERS ARE EXPECTING FROM ZACH**

Zach asked the Commissioners what their expectations are for the future regarding his role with the Township. Zach asked if the Commissioners prefer that Zach assist them when making decisions about things. Larry Grunn said they appreciate and welcome Zach's feedback and expertise.

▪ **ELECTION OF OFFICERS AND ANNUAL REQUIREMENTS**

Cheryl Range made a motion to elect Larry Grunn as the Chairperson for the Planning Commission. Bruce Powelson seconded. **MOTION CARRIED**

Larry Grunn made a motion to elect Jim Anderson as the Vice-Chairperson for the Planning Commission. Bruce Powelson seconded. **MOTION CARRIED**

Jim Anderson made a motion to elect Cheryl Range as the Secretary for the Planning Commission. Bruce Powelson seconded. **MOTION CARRIED**

DRAFT

CALL FOR PUBLIC COMMENT

Les Andersen resides at 4500 Jewell Road. Les Andersen had a question about the Mitch Harris property and the rezoning decision.

ADJOURNMENT

Bruce Powelson made a motion to adjourn the Planning Commission meeting at 10:23pm. Larry Grunn seconded.

MOTION CARRIED

DRAFT

Zoning Text Amendment for Marion Township Planning Commission

INTRODUCTION

Petition Number TXT 02-23
Applicant Marion Township
Request Zoning Text Amendment

PETITION SUMMARY

Marion Township, in coordination with several surrounding communities, has prepared a draft text amendment for wellhead protection. The draft text would delete the current §6.27 Wellhead Protection and Hazardous Substance Overlay Zone in its entirety and add a new Article XIA Wellhead Protection Overlay District.

The wellhead protection overlay would establish areas around public wells in which certain uses and substances that are more likely to impact those wells would be prohibited or allowed with more rigorous review and stricter conditions than in the underlying zoning district.

The draft text before the Planning Commission has been revised based on direction at the last meeting and to make it more consistent with the Zoning Ordinance. The redline draft shows changes from the previous draft; the clean draft shows revised text with changes made.

BRIEF SUMMARY OF REVISIONS

The majority of revisions to the draft text focus reorganization to add the text as a new Article. Revisions to make it more consistent with the structure of and terms used in the Zoning Ordinance have also been made.

Uses Permitted by Right has been revised to default to the underlying zoning district except where otherwise provided in the new Article. Uses permitted by right in the underlying zoning district but noted as uses permitted by special use permit would require a special use permit. Prohibited uses would not be allowed, regardless of how they are classified in the underlying zoning district.

Additional prohibited uses that were discussed have been added.

Enforcement and administration language has been revised to reflect that most of the enforcement and administration processes are already addressed in the Zoning Ordinance. Some specific provisions have been added to account for the unique nature of potential harm from violations of this Article and the need for more-timely corrective action.

AREAS FOR DISCUSSION AND GUIDANCE

The process of incorporating this text into the Zoning Ordinance raises several important considerations and areas where guidance is needed for future revisions. The items below have been highlighted for discussion by the Planning Commission.

Location of Wellhead Overlay Language

The current draft would create a new article devoted to the wellhead protection overlay district. It would continue to be located within the Zoning Ordinance. Because it is in the Zoning Ordinance, it would not be possible to require legally nonconforming uses to comply within a certain period, but it would be able to use other processes already established in the Zoning Ordinance.

The wellhead protection overlay district language could also be adopted as a general/police power ordinance. This would allow the Township to require legally nonconforming uses to cease after a reasonable period.

Intent

The current draft incorporates additional language from the current wellhead protection section. The structure has also been organized consistent with similar sections in the Zoning Ordinance. The Planning Commission should consider if the enumerated intents are consistent with the Township's goals.

Uses

The uses have been revised as discussed at the last Planning Commission meeting. Consideration should be given if there are other uses that should be prohibited or other uses that should require special use permit approval.

Enforcement and Administration

The current draft defaults many enforcement and administration processes to those already established in the Zoning Ordinance. However, there are some specific deviations in this draft for discussion. These specific deviations are intended to reflect the unique nature and need for more-timely remedies than typical enforcement or administrative actions.

The period to correct a violation could be less than the 15 days for typical violations.

A hearing before the Township Board would not be required.

The fines and penalties are greater than those for other violations.

The Zoning Administrator or Zoning Board of Appeals may request consultation with the Township Engineer when considering a variance from standards of the new Article. Additionally, an escrow can be collected to cover associated costs.

An appeal of decision period of 10 days is established.

PETITION TIMELINE

The proposed zoning text amendment has been reviewed by the Planning Commission at its August 22, 2023, and September 26, 2023, meetings.

The Planning Commission held a public hearing on November 27, 2023, and identified areas for revision.

The proposed zoning text amendment is scheduled for additional review at its November 27, 2023, meeting.

Following Planning Commission consideration, the proposed zoning text amendment is forwarded to the Livingston County Planning Commission for review and comment and to the Township Board for action.

-Zach Michels

Quality Zoning

Dexter, MI

WELLHEAD PROTECTION OVERLAY DISTRICT

**Marion Township Zoning Ordinance
Livingston County, Michigan**

Draft 12-11-2023

REDLINE DRAFT 12-11-2023

MARION TOWNSHIP
WELLHEAD PROTECTION OVERLAY DISTRICT ZONING ORDINANCE
AMENDMENT

An amendment to the Marion Township Zoning Ordinance to add definitions related to wellhead protection, amend/establish a wellhead protection overlay district, establish use and developmental standards for wellhead protection overlay districts, and establish procedures and enforcement for wellhead protection overlay districts.

1. AMENDMENT OF ARTICLE III: DEFINITIONS

Section 3.02 Definitions of the Zoning Ordinance is hereby amended to add the following wellhead protection definitions, which shall be placed in alphabetical order with existing definitions and shall read as:

Aquifer: A geologic formation composed of rock or sand and gravel that contain significant amounts of potentially recoverable potable water.

Discharge: Discharge includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any pollutants prohibited by law or regulation, that affects surface water or groundwater.

Impervious Surface: Materials or structures on or above the ground that do not allow precipitation to infiltrate the underlying soil.

Regulated Substances: With respect to wellhead protection: 1. Substances for which there is a safety data sheet , as established by the United States Occupational Safety and Health Administration, and that cites possible health hazards for said substance; 2. Hazardous Waste, as defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended; 3. Hazardous Substance, as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with the U.S. EPA regulations; 4. Radiological materials; and 5. Biohazards.

Wellhead Protection Area: The surface and subsurface area surrounding a public water supply well or well field through which contaminants, if discharged, are reasonably likely to move toward and reach the well or the well field. This area is also known as the zone of contribution that contributes groundwater to the well or well field. Wellhead Protection Areas for both the City of Howell and MHOG are present in areas of the Township.

2. AMENDMENT OF ARTICLE VI: GENERAL PROVISIONS

Section 6.27 Wellhead Protection and Hazardous Substance Overlay Zone of the Zoning Ordinance is hereby deleted and reserved for future use, which shall read as follows:

Reserved for future use.

3. AMENDMENT OF ARTICLE VI: GENERAL PROVISIONS

Article XXIIA Wellhead Protection Overlay District to the Zoning Ordinance is hereby added, which shall read as follows:

ARTICLE XIIA: WELLHEAD PROTECTION OVERLAY DISTRICT

Section 12A.01

Intent

The Wellhead Protection Overlay District is intended to provide supplemental developmental regulations in the designated wellhead protection areas to protect and preserve the surface and groundwater resources of the Township and the region from any use of land or buildings or hazardous materials that may reduce the quality or quantity of water resources; protect drinking water sources from long-term contamination; minimize economic impacts and legal liability; and recognize the importance of protecting groundwater in providing a safe drinking water supply for the Township. This Wellhead Protection Overlay District has been created in coordination with the Marion, Howell, Oceola, and Genoa Sewer and Water Authority's (MHOG) Wellhead Protection Plans drafted by Wood Environment and Infrastructure Solutions. This Wellhead Protection Overlay District was also created in conjunction with the City of Howell and Howell Township.

Section 12A.02

Scope of Regulation

The Wellhead Protection Overlay District is an overlay zoning district that imposes a set of requirements in addition to those of the underlying zoning district. In an area where an overlay district is established, the property is located simultaneously in the two (2) districts, and the property may be developed only under the applicable conditions and requirements of both districts. In the event there is a conflict between the requirements of the two (2) districts, the requirements of the Wellhead Protection Overlay District shall prevail.

Section 12A.03

District Delineation

- A. **Delineation:** The Wellhead Protection Overlay District includes all lands within the Marion, Howell, Oceola, and Geona Sewer and Water Authority's Wellhead Protection Areas, including recharge areas of groundwater aquifers and watershed areas that lie within the wellhead protection area that now or may in the future provide public water supply. If the wellhead protection area includes a portion of the lot, the entire lot shall be considered to be within the Wellhead Protection Overlay District.
- B. **Interpretation of District Boundaries:** Where the boundaries delineated are in doubt or in dispute, the burden of proof shall be upon the owner of the land in question to show whether the property should be located in the District. At the request of the owner, the Township may engage the services of a qualified professional to determine more accurately the location and extent of an aquifer within the wellhead protection area. The Township shall charge the owner for all or a part of the investigation.

Section 12A.04

Site Plan Review Required

All proposed new or expanded structures or uses within in the Wellhead Protection Overlay District, except single-family uses, shall be subject to site plan review, pursuant to Article XVIII Site Plan Requirements.

Section 12A.05

Materials to be Submitted for Site Plan Review

In addition to the data requirements of Article XVIII Site Plan Requirements, each application for site plan review within the Wellhead Protection Overlay District shall be accompanied by, at a minimum, the following:

- A. **List of Regulated Substances:** A complete list of chemicals, pesticides, fuels, and other Regulated Substances to be used or stored on the premises. Businesses that use or store such Regulated Substances shall file a management plan with the Fire Chief. The management plan shall include the following, at minimum:
1. Provisions to protect against the discharge of Regulated Substances or wastes to the environment due to spillage, accidental damage, corrosion, leakage or vandalism, including spill containment and clean-up procedures;
 2. Provisions for indoor, secured storage of Regulated Substances and wastes with impervious floor surfaces;
 3. Evidence of compliance with the rules and regulations of the Michigan Department of Environmental Quality;
 4. Drainage recharge features and provisions to prevent loss of recharge; and
 5. Provisions to control soil erosion and sedimentation, soil compaction, and to prevent seepage from sewer pipes.

- B. **Service Facilities and Structures:** Location of existing and proposed service facilities and structures, above and below ground, including:
1. General location of the site within the Wellhead Protection Overlay District;
 2. Areas to be used for the storage, loading/unloading, recycling, or disposal of Regulated Substances, including interior and exterior areas;
 3. Underground storage tank locations; and
 4. Location of exterior drains, dry wells, catch basins, retention/detention areas, sumps, and other facilities designed to collect, store, or transport storm water or wastewater. The point of discharge for all drains and pips shall be specified on the site plan.
- C. **Water Resources:** Location of existing wetlands and watercourses, including ponds and streams, on or within a quarter mile of the site.
- D. **Existing Contamination:** Delineation of areas on the site that are known or suspected to be contaminated, together with a report on the status of site clean-up.
- E. **MDEQ Checklist:** Completion of a Michigan Department of Environmental Quality checklist, indicating the types of environmental permits and approvals that may be needed for the project.
- F. **Additional Information:** Any additional information determined necessary by the Zoning Administrator, Planning Commission, or Township Board to determine compliance with this Ordinance.

Section 12A.06 Uses Permitted By Right

Except as otherwise provided for in this Article, the uses permitted by right in the underlying zoning district are permitted by right within the Wellhead Protection Overlay District.

Section 12A.07 Uses Permitted by Special Use Permit

The following uses are permitted by special use permit in the Wellhead Protection Overlay District:

- A. Commercial, industrial, governmental, or education uses that are allowed in the underlying district and are not prohibited in 12A.08 Prohibited Uses.
- B. Any enlargement, intensification, alteration, or change of use of an existing commercial, industrial, governmental, or education use.
- C. **Increase of Impervious Area:** The rendering impervious of more than fifteen (15) percent or 2,500 square feet of any lot, whichever is less, provided that a system for

artificial recharge of precipitation to groundwater is developed, which shall not result in degradation of the groundwater.

- D. **Mining or Excavation:** The mining or excavation for removal of earth, loam, sand, gravel, or other soils or mineral resources, provided that such excavation shall not extend closer than five (5) feet above the historical high groundwater table, as determined from on-site monitoring wells and historical water fluctuation data compiled by the United States Geological Survey. One (1) or more monitoring wells shall be installed by the property owner to verify groundwater elevations. This sub-section shall not apply to excavations incidental to permitted uses, including but not limited to installation or maintenance of structural foundations, freshwater ponds, utility conduits or on-site sewage disposal.
1. Upon completion of earth removal operations, all altered areas shall be restored with topsoil and vegetative plantings suitable to control erosion on the site.
 2. All fine materials, such as clays and silts, removed as part of the earth removal operation and leftover as by-products, shall be disposed of off-site to prevent damage to aquifer recharge characteristics.
- E. **Ice or Snow Removal Chemicals:** The storage of sodium chloride, calcium chloride, chemically treated abrasives, or other chemicals used for removal of ice and snow on roads, provided such chemicals are covered and located on a paved surface with berms, or within a structure designed to prevent the generation and escape of contaminated run-off.
- F. **Leachable Materials:** The storage of fertilizers, pesticides, herbicides, lawn care chemicals, or other leachable materials, provided that such materials are stored in accordance with the manufacturer's label instructions approved by the United States Environmental Protection Agency or the Michigan Department of Agriculture and that they are used in routine agricultural operations and applied under the "Generally Accepted Agricultural Management Practices" and all other necessary precautions are taken to minimize adverse impact on surface and groundwater.
- G. **Commercial Fertilizers or Soil Conditioners:** The storage of commercial fertilizers or soil conditioners, provided such storage shall be within structures designed to prevent the generation and escape of contaminated run-off or leachate.
- H. **Liquid Regulated Substances:** The storage of all liquid Regulated Substances, provided such materials must be stored either in a freestanding container within a building or in a freestanding container above ground level with protection to contain a spill the size of the container's total storage capacity.

Section 12A.08 Prohibited Uses and Substances

The following uses and substances are prohibited in the Wellhead Protection Overlay District:

- A. Business or industrial uses that generate, use, treat, process, store, or dispose of Regulated Substances, including, but not limited to, metal plating, chemical manufacturing, wood preserving, or dry cleaning factory, except for the following:
1. Generators of a very small quantity of Regulated Substances (less than 20 kilograms or six (6) gallons per month), subject to Special Use Permit review.
 2. Municipally-operated or sanctioned household waste collection stations.
 3. Waste oil retention facilities.
 4. Treatment works designed for the treatment of contaminated ground or surface waters, provided the facilities have been approved by the Michigan Department of Environmental Quality.
- B. Business or industrial uses that dispose of process wastewater on-site.
- C. Solid waste landfills, dumps, landfilling, spreading or storage of sludge or septage, with the exception of disposal of brush or stumps.
- D. Storage of liquid petroleum products of any kind, except for the following:
1. Storage that is incidental to:
 - a. Normal household use and outdoor maintenance or the heating of a structure.
 - b. Use of emergency generators.
 - c. Treatment works designed for the treatment of contaminated ground or surface waters, provided the facilities has been approved by the Michigan Department of Environmental Quality.
 2. Replacement of storage tanks and systems for the keeping, dispensing or storing of gasoline, which existed at the time of adoption of this Section, provided that:
 - a. All such replacement storage tanks or systems shall be located underground as required by the Michigan Department of Environmental Quality.
 - b. All such storage systems shall be protected by a secondary containment system as specified by the Michigan Department of Environmental Quality.
 - c. An application for tank replacement may be denied or approved subject to conditions upon determination by the Fire Chief that it could constitute a fire hazard or by EGLE or Livingston County Health Department that it could constitute a danger to public or private water supplies.
- E. Outdoor storage of salt, de-icing materials, pesticides, or herbicides.

- F. Dumping or disposal on the ground, in water bodies, or in residential septic systems of any toxic chemical, including, but not limited, to septic systems cleaners that contain toxic chemicals, such as methylene chloride and 1-1-1 trichlorethane, or other household Regulated Substances.
- G. Stockpiling or disposal of snow or ice removed from highways and streets located outside of the Wellhead Protection Overlay District that contains sodium chloride, calcium chloride, chemically treated abrasives, or other chemicals used for snow or ice removal.
- H. Sewage disposal systems that are designed to receive more than one hundred ten (110) gallons of sewage per quarter acre per day or four hundred forty (440) gallons of sewage per acre per day, whichever is greater, provided that:
 - 1. The replacement or repair of an existing system shall be exempted if it does not result in an increase in design capacity above the original design.
 - 2. In calculating the maximum sewage disposal system density, it shall be assumed that each single-family-residential home will generate two hundred sixty (260) gallons of sewage per day.
 - 3. The maximum sewage disposal system density may computed using the following method:
 - a. On an individual per lot basis (i.e., a single-family home typically generates 260 gallons of sewage per day, creating the need for a minimum lot area of $\frac{3}{4}$ acre.
- I. Wastewater treatment facilities, except the following:
 - 1. The replacement or repair of an existing system that will not result in a design capacity greater than the design capacity of the existing system.
 - 2. The replacement of an existing subsurface sewage disposal system with wastewater treatment works that will not result in a design capacity greater than the design capacity of the existing system.
 - 3. Treatment facilities designed for the treatment of contaminated surface waters or groundwaters.
- J. Deep well injection systems.
- K. Junkyards.
- L. Automobile fueling/mixed-use station.
- M. Automobile repair garage, except for those where all activities are conducted within a fully enclosed building.

Section 12A.09 Basis for Determination.

Both the Planning Commission and the Board of Trustees shall employ and be guided by the standards that shall be consistent and promote the intent and purpose of this Ordinance and this Article, and ensure that the land use or activity authorized shall be compatible with the Wellhead Protection Overlay District and shall comply with the following additional standards. Approval shall only be made upon a finding that the petitioner's application includes sufficiently detailed, definite, and credible information to support findings.

- A. In no way, during construction or thereafter, shall a project adversely affect the quality or quantity of water that is available in the Wellhead Protection Overlay District.
- B. The project shall be designed to avoid substantial disturbance of the soils, topography, drainage, vegetation, and water-related natural characteristics of the site.

Section 12A.010 Performance Standards

The following requirements shall apply to all uses in the Wellhead Protection Overlay District:

- A. **Drainage:** For commercial and industrial uses, run-off from impervious surfaces shall not be discharged directly to drains, streams, ponds, or other surface water bodies. Oil, grease, and sediment traps shall be used to facilitate removal of contamination. Forebays/sediment basins and other requirements shall be adhered to per the Township Engineering Design Standards.
- B. **Discharge of Regulated Substances:** The property owner shall prevent the discharge of regulated substances.
 - 1. Upon discovery of a discharge within the Wellhead Protection Area, the owner of the property on which a discharge occurred, as well as the person responsible for the discharge, if they are not the same, shall take appropriate reasonable actions to mitigate the potential impact of the discharge on the groundwater and remediate the discharge. Remediation shall be conducted in a timely manner and in accordance with applicable law. Wastes generated during remediation of a Regulated Substance discharge must be handled in accordance with all applicable legal requirements. Storage of these materials for a period of greater than ninety (90) days must be reported to, and approved obtained from, the Zoning Administrator.
 - 2. All discharges shall be documented in writing and mailed to the Zoning Administrator within ten (10) business days of said incident. Initial discharge notification shall include, at a minimum, the following:
 - a. Location of the discharge (name, address, and phone);

- b. Reporting party's name, address, and phone (if different from above);
 - c. Emergency contact and phone;
 - d. Description of the nature of the incident, including date, time, location, and cause of the incident; type, concentration, and volume of substance(s) discharged;
 - e. Map showing exact discharge location, and relevant site features (i.e. paved area, storm sewer catch basins/inlets, water features, etc.), scale, and north arrow;
 - f. All measures taken to clean up the discharge; and
 - g. All measures proposed to be taken to reduce and prevent any future discharge.
3. The Zoning Administrator shall determine if and where any additional investigative work needs to be completed to assess the potential impact of the discharge. The owner or operator shall retain a copy of the written notice for at least three years.

Section 12A.011 Enforcement

Violations of any provisions of this Article are declared to be nuisances per se, subject to enforcement as provided in Section 4.04 Violations and Section 4.05 Penalties and Remedies of this Ordinance, except as specified below.

- A. Violation Correction Period: A shorter period than fifteen (15) days may be required to correct a violation.
- B. Hearing Before Township Board. A hearing shall not be required before the Township Board.
- C. Fines and Penalties. Any person who violates this Article shall, upon being found responsible or being convicted, be fined one thousand (1,000) dollars for a first offense, three thousand (3,000) dollars for a second offence, and ten thousand (10,000) dollars for each addition offence, and in addition, shall pay all direct and indirect costs and expenses involved in the case, including actual attorney costs.

Section 12A.012 Variances and Appeals

Variances from the developmental standards of this Article and appeals from the administration of this Article may be heard by the Zoning Board of Appeals as provided in Article V Zoning Board of Appeals, except as specified below.

- A. **Township Engineer:** The Zoning Administrator or Zoning Board of Appeals may consult with the Township Engineer. The Township may collect an administrative

escrow account, as provide in Section 4.07 Administrative Escrow Accounts, to cover the cost of Township Engineer consultation.

- B. **Appeal Submission.** A complete appeal of decision application must be submitted within ten (10) calendar days of the decision or action being appealed.

REDLINE DRAFT (12-11-2023)

WELLHEAD PROTECTION OVERLAY DISTRICT

**Marion Township Zoning Ordinance
Livingston County, Michigan**

Draft 12-11-2023

CLEAN DRAFT (12-11-2023)

MARION TOWNSHIP
WELLHEAD PROTECTION OVERLAY DISTRICT ZONING ORDINANCE
AMENDMENT

An amendment to the Marion Township Zoning Ordinance to add definitions related to wellhead protection, amend/establish a wellhead protection overlay district, establish use and developmental standards for wellhead protection overlay districts, and establish procedures and enforcement for wellhead protection overlay districts.

1. AMENDMENT OF ARTICLE III: DEFINITIONS

Section 3.02 Definitions of the Zoning Ordinance is hereby amended to add the following wellhead protection definitions, which shall be placed in alphabetical order with existing definitions and shall read as:

Aquifer: A geologic formation composed of rock or sand and gravel that contain significant amounts of potentially recoverable potable water.

Discharge: Discharge includes, but is not limited to, any spilling, leaking, seeping, pouring, misapplying, emitting, emptying, or dumping of any pollutants prohibited by law or regulation, that affects surface water or groundwater.

Impervious Surface: Materials or structures on or above the ground that do not allow precipitation to infiltrate the underlying soil.

Regulated Substances: With respect to wellhead protection: 1. Substances for which there is a safety data sheet, as established by the United States Occupational Safety and Health Administration, and that cites possible health hazards for said substance; 2. Hazardous Waste, as defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended; 3. Hazardous Substance, as defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with the U.S. EPA regulations; 4. Radiological materials; and 5. Biohazards.

Wellhead Protection Area: The surface and subsurface area surrounding a public water supply well or well field through which contaminants, if discharged, are reasonably likely to move toward and reach the well or the well field. This area is also known as the zone of contribution that contributes groundwater to the well or well field. Wellhead Protection Areas for both the City of Howell and MHOG are present in areas of the Township.

2. AMENDMENT OF ARTICLE VI: GENERAL PROVISIONS

Section 6.27 Wellhead Protection and Hazardous Substance Overlay Zone of the Zoning Ordinance is hereby deleted and reserved for future use, which shall read as follows:

Reserved for future use.

3. AMENDMENT OF ARTICLE VI: GENERAL PROVISIONS

Article XXIIA Wellhead Protection Overlay District to the Zoning Ordinance is hereby added, which shall read as follows:

ARTICLE XIIA: WELLHEAD PROTECTION OVERLAY DISTRICT

Section 12A.01

Intent

The Wellhead Protection Overlay District is intended to provide supplemental developmental regulations in the designated wellhead protection areas to protect and preserve the surface and groundwater resources of the Township and the region from any use of land or buildings or hazardous materials that may reduce the quality or quantity of water resources; protect drinking water sources from long-term contamination; minimize economic impacts and legal liability; and recognize the importance of protecting groundwater in providing a safe drinking water supply for the Township. This Wellhead Protection Overlay District has been created in coordination with the Marion, Howell, Oceola, and Genoa Sewer and Water Authority's (MHOG) Wellhead Protection Plans drafted by Wood Environment and Infrastructure Solutions. This Wellhead Protection Overlay District was also created in conjunction with the City of Howell and Howell Township.

Section 12A.02

Scope of Regulation

The Wellhead Protection Overlay District is an overlay zoning district that imposes a set of requirements in addition to those of the underlying zoning district. In an area where an overlay district is established, the property is located simultaneously in the two (2) districts, and the property may be developed only under the applicable conditions and requirements of both districts. In the event there is a conflict between the requirements of the two (2) districts, the requirements of the Wellhead Protection Overlay District shall prevail.

Section 12A.03

District Delineation

- A. **Delineation:** The Wellhead Protection Overlay District includes all lands within the Marion, Howell, Oceola, and Geona Sewer and Water Authority's Wellhead Protection Areas, including recharge areas of groundwater aquifers and watershed areas that lie within the wellhead protection area that now or may in the future provide public water supply. If the wellhead protection area includes a portion of the lot, the entire lot shall be considered to be within the Wellhead Protection Overlay District.
- B. **Interpretation of District Boundaries:** Where the boundaries delineated are in doubt or in dispute, the burden of proof shall be upon the owner of the land in question to show whether the property should be located in the District. At the request of the owner, the Township may engage the services of a qualified professional to determine more accurately the location and extent of an aquifer within the wellhead protection area. The Township shall charge the owner for all or a part of the investigation.

Section 12A.04

Site Plan Review Required

All proposed new or expanded structures or uses within in the Wellhead Protection Overlay District, except single-family uses, shall be subject to site plan review, pursuant to Article XVIII Site Plan Requirements.

Section 12A.05

Materials to be Submitted for Site Plan Review

In addition to the data requirements of Article XVIII Site Plan Requirements, each application for site plan review within the Wellhead Protection Overlay District shall be accompanied by, at a minimum, the following:

- A. **List of Regulated Substances:** A complete list of chemicals, pesticides, fuels, and other Regulated Substances to be used or stored on the premises. Businesses that use or store such Regulated Substances shall file a management plan with the Fire Chief. The management plan shall include the following, at minimum:
1. Provisions to protect against the discharge of Regulated Substances or wastes to the environment due to spillage, accidental damage, corrosion, leakage or vandalism, including spill containment and clean-up procedures;
 2. Provisions for indoor, secured storage of Regulated Substances and wastes with impervious floor surfaces;
 3. Evidence of compliance with the rules and regulations of the Michigan Department of Environmental Quality;
 4. Drainage recharge features and provisions to prevent loss of recharge; and
 5. Provisions to control soil erosion and sedimentation, soil compaction, and to prevent seepage from sewer pipes.

- B. **Service Facilities and Structures:** Location of existing and proposed service facilities and structures, above and below ground, including:
1. General location of the site within the Wellhead Protection Overlay District;
 2. Areas to be used for the storage, loading/unloading, recycling, or disposal of Regulated Substances, including interior and exterior areas;
 3. Underground storage tank locations; and
 4. Location of exterior drains, dry wells, catch basins, retention/detention areas, sumps, and other facilities designed to collect, store, or transport storm water or wastewater. The point of discharge for all drains and pips shall be specified on the site plan.
- C. **Water Resources:** Location of existing wetlands and watercourses, including ponds and streams, on or within a quarter mile of the site.
- D. **Existing Contamination:** Delineation of areas on the site that are known or suspected to be contaminated, together with a report on the status of site clean-up.
- E. **MDEQ Checklist:** Completion of a Michigan Department of Environmental Quality checklist, indicating the types of environmental permits and approvals that may be needed for the project.
- F. **Additional Information:** Any additional information determined necessary by the Zoning Administrator, Planning Commission, or Township Board to determine compliance with this Ordinance.

Section 12A.06 Uses Permitted By Right

Except as otherwise provided for in this Article, the uses permitted by right in the underlying zoning district are permitted by right within the Wellhead Protection Overlay District.

Section 12A.07 Uses Permitted by Special Use Permit

The following uses are permitted by special use permit in the Wellhead Protection Overlay District:

- A. Commercial, industrial, governmental, or education uses that are allowed in the underlying district and are not prohibited in 12A.08 Prohibited Uses.
- B. Any enlargement, intensification, alteration, or change of use of an existing commercial, industrial, governmental, or education use.
- C. **Increase of Impervious Area:** The rendering impervious of more than fifteen (15) percent or 2,500 square feet of any lot, whichever is less, provided that a system for

artificial recharge of precipitation to groundwater is developed, which shall not result in degradation of the groundwater.

- D. **Mining or Excavation:** The mining or excavation for removal of earth, loam, sand, gravel, or other soils or mineral resources, provided that such excavation shall not extend closer than five (5) feet above the historical high groundwater table, as determined from on-site monitoring wells and historical water fluctuation data compiled by the United States Geological Survey. One (1) or more monitoring wells shall be installed by the property owner to verify groundwater elevations. This sub-section shall not apply to excavations incidental to permitted uses, including but not limited to installation or maintenance of structural foundations, freshwater ponds, utility conduits or on-site sewage disposal.
1. Upon completion of earth removal operations, all altered areas shall be restored with topsoil and vegetative plantings suitable to control erosion on the site.
 2. All fine materials, such as clays and silts, removed as part of the earth removal operation and leftover as by-products, shall be disposed of off-site to prevent damage to aquifer recharge characteristics.
- E. **Ice or Snow Removal Chemicals:** The storage of sodium chloride, calcium chloride, chemically treated abrasives, or other chemicals used for removal of ice and snow on roads, provided such chemicals are covered and located on a paved surface with berms, or within a structure designed to prevent the generation and escape of contaminated run-off.
- F. **Leachable Materials:** The storage of fertilizers, pesticides, herbicides, lawn care chemicals, or other leachable materials, provided that such materials are stored in accordance with the manufacturer's label instructions approved by the United States Environmental Protection Agency or the Michigan Department of Agriculture and that they are used in routine agricultural operations and applied under the "Generally Accepted Agricultural Management Practices" and all other necessary precautions are taken to minimize adverse impact on surface and groundwater.
- G. **Commercial Fertilizers or Soil Conditioners:** The storage of commercial fertilizers or soil conditioners, provided such storage shall be within structures designed to prevent the generation and escape of contaminated run-off or leachate.
- H. **Liquid Regulated Substances:** The storage of all liquid Regulated Substances, provided such materials must be stored either in a freestanding container within a building or in a freestanding container above ground level with protection to contain a spill the size of the container's total storage capacity.

Section 12A.08 Prohibited Uses and Substances

The following uses and substances are prohibited in the Wellhead Protection Overlay District:

- A. Business or industrial uses that generate, use, treat, process, store, or dispose of Regulated Substances, including, but not limited to, metal plating, chemical manufacturing, wood preserving, or dry cleaning factory, except for the following:
1. Generators of a very small quantity of Regulated Substances (less than 20 kilograms or six (6) gallons per month), subject to Special Use Permit review.
 2. Municipally-operated or sanctioned household waste collection stations.
 3. Waste oil retention facilities.
 4. Treatment works designed for the treatment of contaminated ground or surface waters, provided the facilities have been approved by the Michigan Department of Environmental Quality.
- B. Business or industrial uses that dispose of process wastewater on-site.
- C. Solid waste landfills, dumps, landfilling, spreading or storage of sludge or septage, with the exception of disposal of brush or stumps.
- D. Storage of liquid petroleum products of any kind, except for the following:
1. Storage that is incidental to:
 - a. Normal household use and outdoor maintenance or the heating of a structure.
 - b. Use of emergency generators.
 - c. Treatment works designed for the treatment of contaminated ground or surface waters, provided the facilities has been approved by the Michigan Department of Environmental Quality.
 2. Replacement of storage tanks and systems for the keeping, dispensing or storing of gasoline, which existed at the time of adoption of this Section, provided that:
 - a. All such replacement storage tanks or systems shall be located underground as required by the Michigan Department of Environmental Quality.
 - b. All such storage systems shall be protected by a secondary containment system as specified by the Michigan Department of Environmental Quality.
 - c. An application for tank replacement may be denied or approved subject to conditions upon determination by the Fire Chief that it could constitute a fire hazard or by EGLE or Livingston County Health Department that it could constitute a danger to public or private water supplies.
- E. Outdoor storage of salt, de-icing materials, pesticides, or herbicides.

- F. Dumping or disposal on the ground, in water bodies, or in residential septic systems of any toxic chemical, including, but not limited, to septic systems cleaners that contain toxic chemicals, such as methylene chloride and 1-1-1 trichlorethane, or other household Regulated Substances.
- G. Stockpiling or disposal of snow or ice removed from highways and streets located outside of the Wellhead Protection Overlay District that contains sodium chloride, calcium chloride, chemically treated abrasives, or other chemicals used for snow or ice removal.
- H. Sewage disposal systems that are designed to receive more than one hundred ten (110) gallons of sewage per quarter acre per day or four hundred forty (440) gallons of sewage per acre per day, whichever is greater, provided that:
 - 1. The replacement or repair of an existing system shall be exempted if it does not result in an increase in design capacity above the original design.
 - 2. In calculating the maximum sewage disposal system density, it shall be assumed that each single-family-residential home will generate two hundred sixty (260) gallons of sewage per day.
 - 3. The maximum sewage disposal system density may computed using the following method:
 - a. On an individual per lot basis (i.e., a single-family home typically generates 260 gallons of sewage per day, creating the need for a minimum lot area of $\frac{3}{4}$ acre.
- I. Wastewater treatment facilities, except the following:
 - 1. The replacement or repair of an existing system that will not result in a design capacity greater than the design capacity of the existing system.
 - 2. The replacement of an existing subsurface sewage disposal system with wastewater treatment works that will not result in a design capacity greater than the design capacity of the existing system.
 - 3. Treatment facilities designed for the treatment of contaminated surface waters or groundwaters.
- J. Deep well injection systems.
- K. Junkyards.
- L. Automobile fueling/mixed-use station.
- M. Automobile repair garage, except for those where all activities are conducted within a fully enclosed building.

Section 12A.09 Basis for Determination.

Both the Planning Commission and the Board of Trustees shall employ and be guided by the standards that shall be consistent and promote the intent and purpose of this Ordinance and this Article, and ensure that the land use or activity authorized shall be compatible with the Wellhead Protection Overlay District and shall comply with the following additional standards. Approval shall only be made upon a finding that the petitioner's application includes sufficiently detailed, definite, and credible information to support findings.

- A. In no way, during construction or thereafter, shall a project adversely affect the quality or quantity of water that is available in the Wellhead Protection Overlay District.
- B. The project shall be designed to avoid substantial disturbance of the soils, topography, drainage, vegetation, and water-related natural characteristics of the site.

Section 12A.010 Performance Standards

The following requirements shall apply to all uses in the Wellhead Protection Overlay District:

- A. **Drainage:** For commercial and industrial uses, run-off from impervious surfaces shall not be discharged directly to drains, streams, ponds, or other surface water bodies. Oil, grease, and sediment traps shall be used to facilitate removal of contamination. Forebays/sediment basins and other requirements shall be adhered to per the Township Engineering Design Standards.
- B. **Discharge of Regulated Substances:** The property owner shall prevent the discharge of regulated substances.
 - 1. Upon discovery of a discharge within the Wellhead Protection Area, the owner of the property on which a discharge occurred, as well as the person responsible for the discharge, if they are not the same, shall take appropriate reasonable actions to mitigate the potential impact of the discharge on the groundwater and remediate the discharge. Remediation shall be conducted in a timely manner and in accordance with applicable law. Wastes generated during remediation of a Regulated Substance discharge must be handled in accordance with all applicable legal requirements. Storage of these materials for a period of greater than ninety (90) days must be reported to, and approved obtained from, the Zoning Administrator.
 - 2. All discharges shall be documented in writing and mailed to the Zoning Administrator within ten (10) business days of said incident. Initial discharge notification shall include, at a minimum, the following:
 - a. Location of the discharge (name, address, and phone);

- b. Reporting party's name, address, and phone (if different from above);
 - c. Emergency contact and phone;
 - d. Description of the nature of the incident, including date, time, location, and cause of the incident; type, concentration, and volume of substance(s) discharged;
 - e. Map showing exact discharge location, and relevant site features (i.e. paved area, storm sewer catch basins/inlets, water features, etc.), scale, and north arrow;
 - f. All measures taken to clean up the discharge; and
 - g. All measures proposed to be taken to reduce and prevent any future discharge.
3. The Zoning Administrator shall determine if and where any additional investigative work needs to be completed to assess the potential impact of the discharge. The owner or operator shall retain a copy of the written notice for at least three years.

Section 12A.011 Enforcement

Violations of any provisions of this Article are declared to be nuisances per se, subject to enforcement as provided in Section 4.04 Violations and Section 4.05 Penalties and Remedies of this Ordinance, except as specified below.

- A. Violation Correction Period: A shorter period than fifteen (15) days may be required to correct a violation.
- B. Hearing Before Township Board. A hearing shall not be required before the Township Board.
- C. Fines and Penalties. Any person who violates this Article shall, upon being found responsible or being convicted, be fined one thousand (1,000) dollars for a first offense, three thousand (3,000) dollars for a second offence, and ten thousand (10,000) dollars for each addition offence, and in addition, shall pay all direct and indirect costs and expenses involved in the case, including actual attorney costs.

Section 12A.012 Variances and Appeals

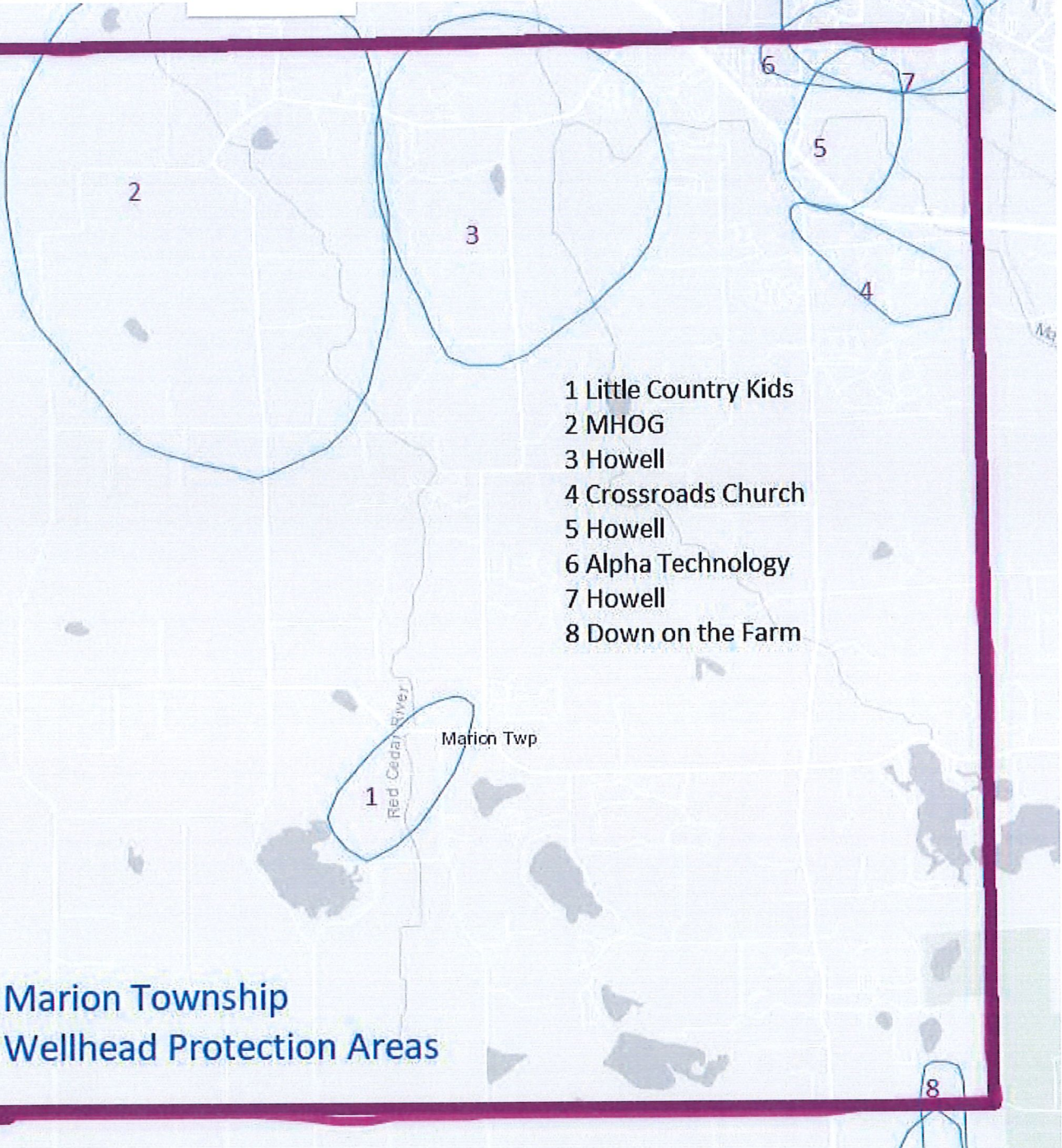
Variances from the developmental standards of this Article and appeals from the administration of this Article may be heard by the Zoning Board of Appeals as provided in Article V Zoning Board of Appeals, except as specified below.

- A. **Township Engineer:** The Zoning Administrator or Zoning Board of Appeals may consult with the Township Engineer. The Township may collect an administrative

escrow account, as provide in Section 4.07 Administrative Escrow Accounts, to cover the cost of Township Engineer consultation.

- B. **Appeal Submission.** A complete appeal of decision application must be submitted within ten (10) calendar days of the decision or action being appealed.

CLEAN DRAFT (12-11-2023)



- 1 Little Country Kids
- 2 MHOG
- 3 Howell
- 4 Crossroads Church
- 5 Howell
- 6 Alpha Technology
- 7 Howell
- 8 Down on the Farm

**Marion Township
Wellhead Protection Areas**

AN OVERVIEW OF MICHIGAN'S WELLHEAD PROTECTION PROGRAM

HISTORY OF WELLHEAD PROTECTION

The purpose of Michigan's Wellhead Protection Program (WHPP) is to protect public water supply systems (PWSS), which use ground water, from potential sources of contamination. Protection is provided by identifying the area which contributes ground water to PWSS wells, identifying sources of contamination within the area, and developing methods to manage the area and minimize the threat to the PWSS.

Michigan's WHPP was developed in response to 1986 amendments to the federal Safe Drinking Water Act (SDWA). Unlike many programs throughout the country, wellhead protection is a voluntary program which is implemented on a local level through the coordination of activities by local, county, regional, and state agencies. Guidelines for the program were developed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE). Although the program is voluntary, PWSSs who choose to participate in wellhead protection must develop a local WHPP consistent with the guidelines established by the state. Local WHPPs must specifically address seven elements which include the establishment of roles and duties, wellhead protection area (WHPA) delineation, identification of potential sources of contamination within the WHPA, development of strategies to manage potential sources and minimize threats to the PWSS, development of contingency plans for water supply emergencies, identification of procedures for the development of new well sites and incorporate them into the local WHPP, and provide opportunities for public participation.

Funding for WHPP is available through a grant program designed to assist PWSSs in the development and implementation of WHPPs. The program is a 50% grant program which must be matched with 50% local funds. Grant money will be awarded to PWSSs based on a scoring system as outlined in the Grant Application.

SEVEN ELEMENTS OF WELLHEAD PROTECTION

Roles and Responsibilities

This element is designed to identify individuals working as a team in development and implementation of the local WHPP. While one individual is generally identified as the primary contact for the local WHPP, the establishment of roles and responsibilities requires the building of partnerships within the community and the participation of multiple individuals. Since ground water knows no political boundaries, partnerships may be developed between local, township, county, regional, and state agencies; and organizations to facilitate management of the WHPA. In an effort to develop effective partnerships, local teams may include managers at the local level (city manager, utilities superintendent, city engineer, fire chief, building inspectors, etc.), county and state agency representatives, local watershed councils, and representatives from the general public. The team can serve to provide consistency in the local WHPP as new parts of the program are addressed or team members leave. Building a team to oversee the wellhead protection process helps to ensure a continuance and continuity of the program in future years.

Wellhead Protection Area

Delineation

The federal SDWA defines a WHPA as "... the surface and subsurface area surrounding a water well or well field, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or well field." In simpler terms, it is that area which contributes ground water to a PWSS well. Michigan's WHPP requires a hydrogeologic study to identify the

contributing area. The area contributing ground water to a well may extend for miles therefore, Michigan's WHPP is based upon a ground water time-of-travel (TOT) of 10 years. The 10-year TOT provides a reasonable length of time for responding to environmental problems within the WHPA while concurrently providing a smaller area which can be reasonably managed.

Tritium Analysis

Tritium analysis may be used to estimate the time since recharge to the ground water system occurred and the susceptibility of the ground water system to contamination. Tritium concentrations in ground water provide a useful method for determining an aquifer's degree of confinement. Tritium levels that are at or below one tritium unit indicate that the aquifer as "not vulnerable."

Potential Sources of Contamination

Michigan's WHPP requires the identification of potential sources of contamination within the WHPA. As a minimum, known and potential sites of environmental contamination should be included on a contaminant source inventory list. Known sites of environmental contamination may include leaking underground storage tanks, Superfund sites, sites of environmental contamination, and oil and gas contamination sites. Sites which represent a potential for contamination include registered underground storage tanks, hazardous waste generators, chemical storage facilities and ground water discharges.

Land use associated with agricultural operations, commercial facilities, manufacturing and industrial facilities, institutional facilities, and utility companies may also be considered potential sources of contamination. Abandoned wells left improperly sealed provide a direct conduit into the ground water system through which contaminants may migrate and should be considered potential sources of contamination.

Wellhead Protection Area Management

The goal of WHPA management is to provide mechanisms which will prevent existing and potential sources of contamination from reaching the public water supply well or well field. Communities are encouraged to develop management strategies which may be unique to their situation and specific to the contaminant source inventory developed for the WHPA. Management approaches may entail a broad range of activities including facility inspections, land-use regulations, operational policies, best management practices, public information and education. Management strategies should serve to generate support and attention to the WHPA for local, county, state, and federal regulatory activities. The strategies should attempt to minimize (eliminate if possible) land use activities which pose a significant threat to the PWSS, motivate landowners within the WHPA to take appropriate steps to reduce threats to the PWSS, and provide education to residents, businesses, and industries located within the WHPA to emphasize their role in making wellhead protection work.

An important aspect of wellhead protection is the general acceptance of the concept by community leaders and the development of land use and land protection measures which support wellhead protection. One means of providing for intelligent land use development is the incorporation of the wellhead protection concept and the WHPA into a community's Master Plan. Incorporation in the Master Plan aids community leaders in recognizing the extent of the WHPA and the need to set goals and objectives for community development which serve to protect the PWSS. This approach provides a mechanism for the effective use of local regulations in support of wellhead protection. Such support may come through the development of community wide zoning provisions, the development of a local site plan review process, or development of local standards for operation and maintenance of facilities located in the WHPA.

Contingency Plans

As part of the local WHPP it is important that the PWSS identify an effective contingency plan for emergencies that may threaten wells serving the PWSS. The plan should identify personnel, testing equipment, materials and procedures necessary for the fast and effective mitigation of emergencies. A contingency plan should include public water supply system emergency response protocol (as required by the SDWA), notification procedures, and methods for handling emergencies based upon the nature of the emergency and the threat to the PWSS. Contingency plans should provide a course of action with an emphasis on providing a mechanism for containment in the case of chemical spills. The contingency plan should also identify alternative water supplies in the event that an emergency results in an impact to a well or wells serving the PWSS.

New Wells

Wellhead protection activities provide an excellent opportunity for the assessment of the PWSS by providing information on existing ground water availability, the ability of the PWSS to meet present demands, and the susceptibility of the existing wells to contamination. Where water supply expansion, increases in water use, or susceptibility of existing wells to contamination threats warrants development of additional production facilities, a mechanism should be provided to incorporate the new facilities into the local WHPP. PWSSs which undergo expansion with the construction of new wells are strongly encouraged to incorporate the new wells into the local WHPP. WHPA delineation is easier (and cheaper) at the time of construction, wellhead protection can be used to evaluate the availability of the ground water resources in an area, and wellhead protection helps ensure that ground water resource development is occurring in areas which are not subject to contamination.

Public Education and Participation

Community involvement in the development and implementation of the local WHPP helps to ensure its success and longevity. While it is best if all citizens are provided an opportunity to participate, it is essential that individuals who live, work, and own businesses in the WHPA take an active interest in the program. To generate interest in wellhead protection, communities have focused on public education and the dissemination of wellhead protection information. Public education may be provided by presentations, at village/city/township meetings, before local boards and commissions, and at local schools. Information can be provided through wellhead protection newsletters and brochures, radio and cable television spots, and signs posted in WHPAs.

For further information, please contact:

Mr. Jason Berndt, Environmental Quality Specialist
Michigan Department of Environment, Great Lakes, and Energy
Drinking Water and Environmental Health Division
Source Water Protection Program
989-705-3420 or BerndtJ1@Michigan.gov