

Storm Water Quality Management Plan

Summary of Changes

Major SWQMP revisions in response to the Ohio EPA plan review:

General Revisions

- Adjusted the permit years to coincide with years 2014-2018.
- Updated the City's Table of Organization

MCM 1 & 2 Public Education, Outreach, Involvement and Participation

- BMP 1.1 - Included Ohio EPA and USEPA website links within the plan on the City stormwater website.
- BMP 1.7 - Added a Best Management Practice (BMP) associated with the Groundwater Consortium Partnership.

MCM 3 Illicit Discharge Detection and Elimination (IDDE)

- BMP 3.1 - Inserted a portion of the City GIS map within BMP 3.1 showing how the storm sewer pipes and outfalls are labeled.

MCM 4 Construction Site Stormwater Runoff Control

- BMP 4.1 – Revised ordinances 925, 1117, and 1182 to meet the minimum requirements of the Ohio EPA General Storm Water Permit for Construction Activities.
- BMP 4.1 – Explained erosion and sediment control enforcement proceedings.

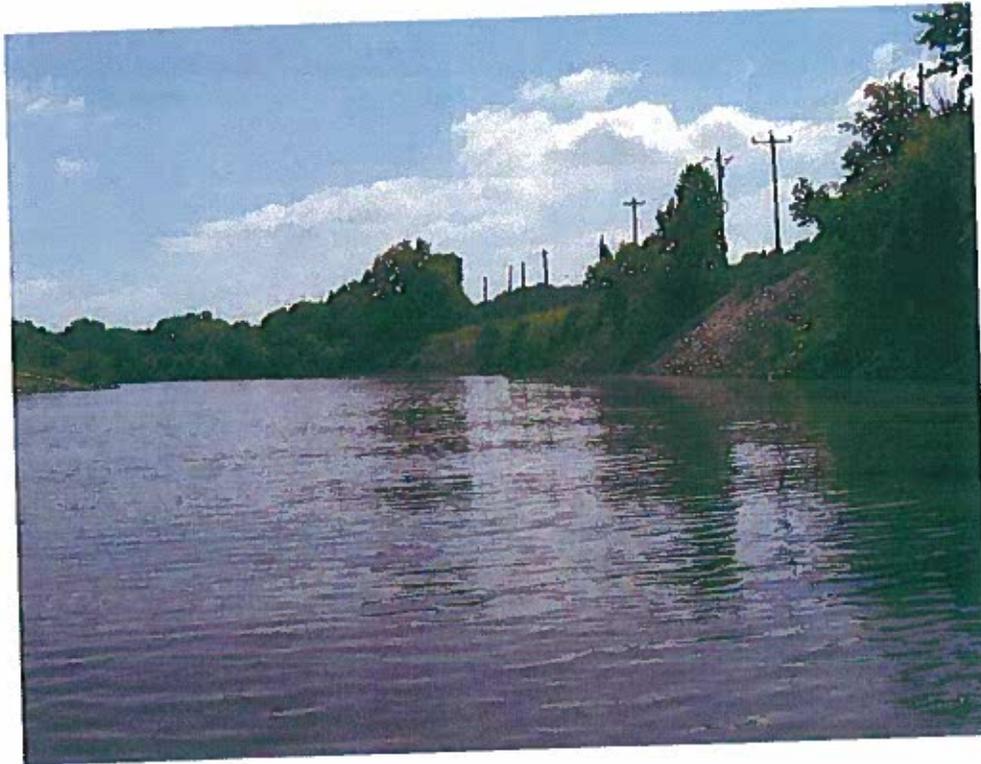
MCM 5 Post-Construction Stormwater Management in New/Re-Development

- BMP 5.6 – Revised ordinances 1117 and 1182 to require post-construction practices to be designed and installed per the Ohio EPA General Construction Permit.
- BMP 5.6 – Revised ordinance 925 to ensure long-term operation and maintenance (O&M) plans are developed and agreements in place. The City is required to ensure that all privately maintained post-construction controls are inspected at least annually to ensure that the approved O&M plans are being properly followed. These inspections can be provided by the City or the post-construction operators can submit inspection reports to the City for review.

MCM 6 Pollution Prevention/Good Housekeeping for Municipal Operations

- BMP 6.3 – Added a BMP associated with applying fertilizers, herbicides, and pesticides within City maintained property and discuss means of reducing application amounts to improve water quality.

City of Fairfield Storm Water Quality Management Plan



Prepared by

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5350 Pleasant Avenue
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January 2005
Revised February 2014



Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

City Manager, City of Fairfield, Ohio Date

Public Works Director, City of Fairfield, Ohio Date

City Engineer, City of Fairfield, Ohio Date

Approved as to form by:

Law Director, City of Fairfield, Ohio Date

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Background

This storm water quality management plan is intended to demonstrate compliance by the City of Fairfield with the NPDES Phase II regulations. The City of Fairfield is regulated under the Phase II program as the operator of a small municipal separate storm sewer system (MS4). All of the described storm water program activities will be funded through existing funding mechanisms, including the City's general fund, the flood protection fund, and the Public Works Department's small drainage project account. The City of Fairfield has the legal authority to implement all of the storm water best management activities (BMPs) described in this plan.

The storm water quality management plan (SWQMP) outlines the Six Minimum Control Measures that are expected to result in reductions in the adverse effects of storm water discharged by the City of Fairfield over the 5 year permitting period of 2009-2013.

The Six Minimum Control Measures are:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations

Each measure is addressed separately within the plan. Generally, the plan identifies the strategies, existing programs and proposed programs for each minimum control measure. A table of organization outlines who will be responsible for completing each Minimum Control Measure under this permit.

The City will submit its required update annually during the permit cycle to the Ohio EPA. The report will include the status of compliance with the permit conditions, an assessment of the appropriateness of the BMPs and progress towards achieving measurable goals for each of the Six Minimum Control Measures.

A summary of the activities the City will undertake during the subsequent annual reporting cycle and any changes to the BMPs or measurable goals will be included in the annual report.

This plan was revised in August of 2012 by the City of Fairfield as a result of meeting with the Ohio EPA. The purpose of the meeting with the Ohio EPA was to evaluate the City's storm water management program. The revised plan indicates the status of the previously established measurable goals set forth by

the original plan and identifies additional BMPs, goals, and schedules that are planned to be implemented by the City over the remainder of the City's small MS4 permitting period.

BMPs, Measurable Goals, and Schedule

This section describes the best management practices (BMPs), measurable goals, and implementation schedule for each of the six minimum control measures listed in the Phase II rule.

1. Public Education and Outreach

According to the Phase II rule (paraphrased),

... operators of small MS4s must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff ...

The City of Fairfield chose a mix of BMPs for public education and outreach. This control measure targets homeowners, commercial property owners, and the general public (those visiting Fairfield and non-homeowners). The program is predicated largely on increasing awareness of how the City's MS4 system functions through information dissemination. As awareness increases, the program will be enhanced to include more active public participation.

The City of Fairfield has partnered with the Groundwater Consortium and the Butler County and Hamilton County Soil and Water Conservation Districts for public education/outreach efforts and will continue its support of these activities within the City.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

1.1 Storm Water Web-page - The City has developed a web-page (address - www.fairfield-city.org/publicworks/stormwater.cfm), linked to the City of Fairfield homepage, that provides information on storm water quality and pollution prevention. The information presented at this web site includes the impact of urbanization on storm water, typical sources of storm water pollution, pollution prevention measures, an overview of the City's storm water management plan, and links to related websites.

Links to additional storm water educational websites:

Ohio EPA:

http://www.epa.ohio.gov/dsw/storm/ms4_index.aspx

US EPA:

http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=min_measure&min_measure_id=6

Butler County Storm Water District:
<http://www.stormwaterdistrict.org/>

Hamilton County Storm Water District
<http://www.hamilton-co.org/stormwater/>

Schedule

Permit Year 1	Finalized content for storm water web-page and activated link
Permit Years 2 - 5	Log activity at site and update content as needed

Measurable Goal: *At least 200 visits annually to storm water web page in Permit Years 2 through 5 (actual number of visits will be monitored by Fairfield's Web Analyst).*

As of August 2013, the City has developed a storm water related web-page and will modify and update the content as needed to continue to provide educational material to those who visit the web-site over the remainder of the permit period.

Responsible Person(s): The web-page content was developed by the City Engineer in conjunction with the City's Web Analyst. The Web Analyst will log activity at the site.

1.2 **Newsletter Articles** - The City publishes a series of articles in the *Fairfield Flyer*, a quarterly newsletter that is sent to all residents of Fairfield. The initial article focused on the planned activities of the storm water program, steps the public can take to reduce storm water pollution, and how the public can become involved in the program.

Schedule

Permit Years 1 through 5	Prepare and publish articles documenting progress of the storm water program and provide additional storm water pollution prevention
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Measurable Goal: *Publication of at least three articles in the Fairfield Flyer newsletter during the 5-year permit cycle.*

As of August 2013, the City has published numerous newsletter articles and will continue to provide additional educational articles over the remainder of the permit period.

Responsible Person(s): The articles are written by Public Works Department personnel and they will coordinate their publications in the newsletters.

1.3 **Public Education Display** – The City has developed a set of educational materials for display at the Fairfield Municipal Building and Fairfield Library. This

display includes posters providing information on storm water pollution, a flyer describing pollution prevention measures, and distribution items such as magnets and coloring books.

Schedule

Permit Year 1	Developed and purchased display materials
Permit Years 1 - 5	Present storm water display and distribute educational materials

Measurable Goal: *Presentation of storm water display at least twice annually and distribution of 200 storm water items (flyers, magnets, coloring books) annually in Permit Years 1 through 5.*

As of August 2013, the City has developed an educational display and has posted at City facilities and has partnered with the Groundwater Consortium at public events where educational materials were shared with the public. The City will continue to post the display and provide educational material throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will organize the materials and coordinate with other City staff and outside personnel for their display.

1.4 Storm Water Quality Flyer – The City has developed a flyer describing storm water pollution prevention measures that can be implemented by residents and businesses. The flyer has been distributed as part of the Public Education Display and the information posted on the City storm water web page.

Schedule

Permit Year 1	Developed storm water quality flyer
Permit Years 1 - 5	Distribute flyer to residents and businesses and post on the City web page

Measurable Goal: *Distribution of at least 100 flyers annually in Permit Years 2 through 5.*

As of August 2013, the City has developed, printed, and made a storm water education brochure available at various City facilities. An electronic version of the brochure is posted on the City's storm water web-page. The City will continue to distribute the brochure throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will coordinate with an outside contractor to develop and print the storm water flyer.

1.5 Educational Video – The City has coordinated with the local cable company, Time Warner, to present a public service announcement (PSA) on storm water pollution. The PSA, "Protecting Our Communities from Storm Water

Pollution," was produced by the US EPA and can be shown in formats ranging from 4 minutes to 30 seconds. The PSA has been shown on Time Warner channel 18, a local public access channel for the City of Fairfield. As of August 2012, approximately 12,000 of Fairfield's 18,000 households receive Time Warner cable service. The City has additionally posted a storm water video, "After the Storm," on the City's storm water website to present to the public.

City web-page: www.fairfield-city.org/publicworks/stormwater.cfm

Schedule

Permit Years 1 - 5	Present storm water PSA on local public access channel and provide a link on the City web-page.
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Measurable Goal: Monthly presentation of storm water PSA on local public access channel during first 5-year permit cycle. Presentation times will be varied to maximize audience coverage.

As of August 2013, the City has coordinated with the local cable company to present the storm water pollution prevention PSA and posted an additional EPA sponsored video on the City's storm water web-page. The PSA will continue to air over the local cable channel and the video will remain posted on the web-page throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will coordinate with the Clerk of Council and the local cable company for the presentation of the public service announcement.

1.6 School Program – In coordination with the Fairfield City schools, the Groundwater Consortium, and the Butler County and Hamilton County Stormwater Districts, the City has provided storm water and groundwater pollution prevention educational presentations to students within the City's School District. The City additionally provided training to intermediate school teachers on storm water related issues that can be included within the school educational program.

Schedule

Permit Years 1 - 5	Present program at City schools through cooperation with the Ground Water Consortium
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Measurable Goal: Presentation of educational program to at least two (2) intermediate school classes annually in Permit Years 1 through 5.

As of August 2013, the City has teamed with the Groundwater Consortium and has presented storm water and groundwater pollution prevention educational material to over 500 Fairfield students annually. The City has additionally teamed with the Butler County SWCD associated with providing storm water protection to

intermediate school teachers. The City will continue to explore educational opportunities throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will coordinate with the Ground Water Consortium to develop and present the educational program to Fairfield students.

1.7 Pet Waste Collection Stations – City Ordinance 521.15 (see Appendix A) requires pet owners to remove their pet’s waste from any public property or private property not owned by them. To ensure compliance with this ordinance, the City has installed and maintained pet waste collection stations in Fairfield’s public parks. These stations include signs describing the purpose of the station and disposable plastic bags for collecting waste.

Schedule

Permit Years 1 - 5	Purchase materials and install stations
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Measurable Goal: *Installation of at least two (2) pet waste collection stations annually on Fairfield City Park property during the first 5-year permit cycle.*

As of August 2013, the City has purchased pet waste collection stations that have been installed at various City park locations. The City will continue to maintain the pet waste collection stations throughout the remainder of the permit period.

Responsible Person(s): The Public Works and Parks Departments will coordinate on the purchase and installation of the pet waste collection stations.

1.8 Groundwater Consortium Partnership – The City will continue involvement with the Hamilton to New Baltimore Ground Water Consortium (website address: www.gwconsortium.org) as means of providing storm water and groundwater pollution prevention education materials to City residents and school students and providing public involvement activities such as the City of Fairfield Race for Global Water.

Schedule

Permit Years 1 - 5	Provide educational materials and organize public events
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Measurable Goal: *Presentation of educational materials to intermediate school classes annually and assisting with the organization of at least one annual public event in Permit Years 1 through 5.*

As of August 2013, the City has coordinated with the Groundwater Consortium to assist with distributing educational storm water brochures to the public and providing storm water and groundwater pollution prevention educational presentation to Fairfield students. The City will continue to work with the

Groundwater Consortium throughout the remainder of the permit period to explore public educational opportunities.

Responsible Person(s): The City Engineer will coordinate with staff from the Ground Water Consortium to develop and present the educational materials and assist with organizing public events.

Rationale Statement

Individuals and households within Fairfield will be informed about the steps they can take to reduce storm water pollution through all of the BMPs previously described. The storm water web-page (BMP 1.1), newsletter articles (BMP 1.2), and storm water flyer (BMP 1.4) will encourage interested parties to contact the City to become involved in the program. The target audiences for the education program include homeowners and businesses at large. These groups were targeted because it is expected that changing their activities will produce the greatest storm water benefits. Additional narrowing of the target audience was not warranted because Fairfield does not have a particular population category or business type that is more prone to producing storm water impacts. The target pollutant sources include illegal dumping into the storm sewer system, improper disposal of yard waste, and improper use of household chemicals / lawn products. Through the newsletter articles (BMP 1.2), all households and business within the City will receive information on the storm water program during the first permit term. Success of this minimum measure will be based on the achievement of the measurable goals. The measurable goals for each BMP were selected to emphasize quantitative measurements of materials distributed to the public.

2. Public Involvement and Participation

According to the Phase II rule (paraphrased),

... operators of small MS4s must, at a minimum, comply with State and local public notice requirements when implementing a public involvement / participation program...

The City recognizes that a successful storm water program relies not only on the MS4 owners and operators and the regulatory community, but also upon the input, assistance and understanding of the general public. The City's program includes means and methods to give the public opportunity to play an active role in both the development and implementation of the NPDES Phase II program.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

2.1 Public Hearings – Hold a public meeting prior to completing the revised storm water management plan to solicit comments and other input from the public.

Schedule

Permit Year 4	Hold a public hearing to receive input on the revised storm water plan.
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Measurable Goal: Hold one (1) public hearing to solicit comments from City Council and the general public on the storm water quality management plan.

As of August 2013, the City held a public hearing on January 14, 2003 prior to completing the initial storm water management plan to solicit comments and other input from the public. At the hearing, Public Works staff made a brief presentation and distributed copies of program materials. Additionally, the City will present the revised plan to City Council for review and adoption and publically advertise the meeting which will allow the public an opportunity to attend.

Responsible Person(s): The City Engineer will coordinate with the Clerk of Council and other City staff to publicize and conduct the public hearing.

2.2 Formal Adoption of Plan by City Council - The initial storm water quality management plan was formally adopted by the Fairfield City Council through Ordinance 27-03 (see Appendix A). The process involved public readings of a Council Letter at three City Council meetings. These council readings provided an opportunity to receive public comments on the storm water plan. A copy of the plan is kept at the Public Works Building for public review. The revised plan will be presented to City Council for review and approval by means of establishing a new ordinance.

Schedule

February 2003	Adoption of initial plan by City Council
Permit Year 4	Adopt the revised plan by City Council

Measurable Goal: *Formally adopt the revised storm water quality management plan by City Council.*

Responsible Person(s): The City Engineer coordinated with the Clerk of Council and other staff on the formal adoption of the revised plan by City Council.

2.3 Storm Drain Marking – The City has installed storm drain markers on curb inlets in Fairfield’s public storm sewer system to assist with providing stormwater pollution prevention education to the public. The public storm sewer system in Fairfield contains an estimated 4,000 curb inlets.

Schedule

Permit Year 1	Purchased storm drain markers, and begin marker installation
Permit Years 2-5	Continue to install markers and inspect and maintain as necessary

Measurable Goal: *Replace markers annually, in Permit Years 1 through 5.*

As of August 2013, the City has installed markers on all public storm sewer inlets. Every storm sewer inlet will be checked by the City sidewalk inspector and markers replaced as necessary within the next five years. As structures are upgraded, the City will purchase storm sewer inlet grates that have the marking stamped into the metal.

Responsible Person(s): The City Engineer will coordinate with City staff to arrange for the installation of storm drain markers.

2.4 Tree Planting Program – The City of Fairfield has been recognized as a “Tree City” by the National Arbor Foundation since 1995. A key activity in the City’s reforestation program is the use of volunteers to plant trees on City property. The City will continue this activity and encourage tree planting in riparian corridors whenever feasible.

Schedule

Permit Years 1 - 5	Plant trees through volunteer tree planting program
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Measurable Goal: *Provide a storm water and groundwater educational opportunity by coordinating with a volunteer group to plant trees within the City.*

As of August 2013, the City has annually coordinated with a volunteer group to plant approximately 100 trees on public property every year since 2003. The

trees were donated by the Izaak Walton League and planted by the City of Fairfield elementary school students.

Responsible Person(s): The Parks Department will manage the tree planting program and report program activities to the City Engineer.

2.5 Storm Water Hotline – To encourage participation from the public, the City has designated and publicized the central Public Works Department phone number as a “storm water hotline.” This phone number (513-867-4200) allows the public to report storm water problems such as illegal dumping, material spills, construction site erosion, clogged catchbasins, etc. This is featured prominently on the storm water flyer, Fairfield’s storm water web page, and other materials distributed through the storm water program.

Schedule

Permit Years 1 - 5	Publicize storm water hotline, respond to calls, and keep records on reported problems.
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Measurable Goal: *During first 5-year permit term, respond to all reported problems and keep call records.*

As of August 2013, the City has posted the “storm water hotline” on the City’s web-page and has included the number on various printed educational material distributed to the public. The City has followed-up to each complaint and concern received from the public and will continue posting the hotline number throughout the remainder of the permit period.

Responsible Person(s): Public Works Department staff will receive and respond to all calls to the storm water hotline.

Rationale Statement

The public hearing (BMP 2.1) and adoption of the plan by City Council (BMP 2.2) will be the primary means of public involvement for developing this storm water management program. Public involvement in the program will continue through storm drain marking (BMP 2.3), tree planting (BMP 2.4), and calls to the storm water hotline (BMP 2.5). The target audiences for the public involvement program include community groups interested in volunteering and the public at large (both homeowners and businesses). Success of this minimum measure will be based on the achievement of the measurable goals. The measurable goals for each BMP were selected to emphasize quantitative measurements (i.e., number of markers installed, number of trees planted, number of calls received) of public participation in the storm water program.

3. Illicit Discharge Detection and Elimination

According to the Phase II rule (paraphrased),

... the operator of a small MS4 must: (1) develop a storm sewer system map showing the location of all outfalls and names and location of all surface waters of the United States that receive discharges from those outfalls; (2) effectively prohibit non-storm water discharges into the storm sewer system and implement appropriate enforcement procedures and actions; (3) develop and implement a plan to detect and address non-storm water discharges, including illegal dumping; and (4) inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste...

Due to the largely residential nature of the City, it is important to coordinate the effort to eliminate illicit discharges by local citizens through the public education/outreach and public involvement portions of the Storm Water Management Plan. Public education, public complaint process, visual screening of outfalls, and dry weather screening of outfalls are components of the program.

The City has initiated an education program to increase public awareness of the storm water system and illicit discharge control. The City will continue to provide an illicit discharge detection and elimination brochure at City facilities. As the public education and outreach program results in greater awareness of the system, local citizens may become involved using the website to report illicit discharge locations.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

3.1 Storm Sewer Mapping – The City has developed a geographic information system (GIS) map of the storm sewer system that includes all publicly-owned components (catchbasins, pipes, manholes, culverts, etc.), all outfalls that discharge to surface waters of the State, and the names and location of surface waters of the State. The storm sewer map was created using construction plans, field measurements, and an aerial survey of the City flown in March 2005. USGS maps were used to define surface waters of the State and an outfall will be defined as any conveyance (pipe or open channel) that directly connects to a surface water body. During the review of USGS mapping, it was determined that there are approximately 30 miles of receiving streams within the Fairfield City limits that receive discharge from the storm sewer system. No outfalls from Fairfield's public storm sewer directly discharge into the 2.5 river-miles of the Great Miami River that are adjacent to the city.

This GIS map was created using ArcView software. Construction plans used for the mapping work included hard-copy subdivision plans and roadway improvement plans. Field data was collected using survey-grade Trimble GPS

equipment (owned by City). The focus of the field work consisted of locating outfalls and storm sewer components in areas not covered by the available construction plans. The map will be updated by the City Public Works Department as new development occurs using construction plans and GPS-surveyed field data, if necessary.

A preliminary review of Fairfield's utility billing information indicates that there are approximately 160 addresses in Fairfield that feature home sewage treatment systems (HSTS). City and County records indicate that the majority of these systems are septic systems that percolate into the soil. As part of this storm sewer mapping BMP, staff from the Public Utilities Department inspected these systems over the first permit cycle to verify their working condition. If failing systems are found, the City contacted the local board of health to determine the proper course of action in resolving the non-functional HSTS. No HSTS's were found to be connected to the storm sewer system during the investigation.

Schedule

Permit Year 1	Completed Base Map of Storm Sewer System using available construction plans. Field-verified locations of outfalls and add other system components in areas not covered by construction plans. Inspected HSTS's.
Permit Years 1 - 5	Update the map using new development plans, as necessary.
Permit Years 4-5	Map the City maintained and privately maintained post-construction water quality Best Management Practices.

Measurable Goal: Base map of storm sewer system completed in Permit Year 1. Outfall locations field verified in Permit Years 2 through 5, beginning in largest stream reaches. All HSTS's inspected by end of first permit cycle.

As of August 2013, the City has developed a GIS map of the storm sewer system during Permit Year 1 that includes all the publicly-owned components, outfalls that discharge to waters of the State, and the names and locations of the surface waters of the State. Additionally, it has been confirmed that all HSTS located within the City don't consist of discharges into the City maintained storm sewer system. Known HSTS locations are identified on the City developed GIS map. The map will be updated as necessary during the remainder of the permit period by the City Public Works Department. The City will determine the locations of the City maintained and privately maintained post-construction water quality Best Management Practices and identify the locations on the map. The public can view the GIS map by means of the City web-site.

City web-site address: www.fairfield-city.org/maps/index.cfm

Storm System GIS Map Example



Responsible Person(s): Under the direction of the City Engineer, Public Works Department technicians will develop the storm sewer system map. Field work will be conducted by staff from the Public Works and Public Utilities Departments.

3.2 Prohibiting Illicit Discharges – Revised City Ordinance 925.07 (see Appendix B) prohibits illicit discharges into the storm sewer system and includes enforcement sanctions. Under this ordinance, any person, firm or corporation that is causing an illicit discharge is guilty of a third degree misdemeanor. Revised City Ordinance 521.08 (see Appendix B) prohibits littering and defines “litter” to include garbage, construction debris, leaves, yard waste or any material of an unsightly or unsanitary nature. Violations of Ordinance 521.08 are punishable as minor misdemeanors.

When necessary, these ordinances will be invoked to cause guilty parties to remove the source of an illicit discharge or stop illegal dumping. The City will enforce these ordinances using staff from the Public Works, Development Services, Police, and Fire Departments.

Schedule

Permit Year 1	Adopted Revised Ordinances 925.07 and 521.08
Permit Year 2 - 5	Enforce City Ordinances 925.07 and 521.08

Measurable Goal: When an illicit discharge / illegal dumping is detected or reported, City code will be invoked to cause the guilty party to eliminate the illicit discharge.

As of August 2013, the City has adopted revised City Ordinances 925.07 and 521.08 which prohibits illegal discharges into the City MS4 system. The City will continue to enforce these ordinances throughout the remainder of the permit period. Additionally as discussed within Part 2.3, the City has installed markers on all public storm sewer inlets to assist with educating the public and discourage illegal discharges into the City MS4 system.

Responsible Person(s): City Ordinances 925.07 and 521.08 will be enforced by the Public Works Director, City Engineer, Law Director, and other city staff as necessary.

3.3 Field Program to Detect and Address Illicit Discharges – The City has developed a program for the detection and elimination of illicit discharges. This program includes field inspection of outfalls, limited water quality analysis, and source identification. The field work involves walking City streams during dry-weather and visually inspecting outfalls. To best utilize City resources, this outfall inspection work will be conducted as part of the survey work for the GIS map development and routine drainage crew operations (see BMP 6.1).

If an outfall discharge is suspected to have an illicit source, on-site analysis with a YSI model 63 hand-held water quality meter will be conducted. The parameters included in this analysis include temperature, pH, and conductivity. If necessary, additional analysis will be performed at Fairfield’s wastewater department laboratory. This facility has the ability to test samples for fluoride, ammonia, chlorine, fecal coliform, BOD5, and TSS.

If the visual inspection and water quality analysis indicate a potential illicit discharge, the source will be identified using the storm sewer map in conjunction with other measures such as TV inspection of storm sewer lines (equipment owned and operated by Fairfield wastewater department). The City will work with any parties found to be causing illicit discharges to eliminate those sources. If necessary, enforcement sanctions will be applied in accordance with City Code. Fairfield will coordinate with neighboring communities if the source of an illicit discharge is found to be outside of city limits.

Schedule

Permit Year 1	Developed illicit discharge field inspection program
Permit Years 2 – 5	Conduct outfall inspections in field for detection and elimination of illicit discharges. Identify the sources of any discovered illicit discharges and work with responsible parties to eliminate those discharges.

Measurable Goal: *Outfall inspection conducted over approximately 7.5-miles (25%) of Fairfield’s streams annually in Permit Years 2 through 5. All outfalls will be inspected by Year 5.*

As of August 2013, the City has inspected has provided dry weather screening of all outfall locations within the MS4 system. These outfall locations are indicated on the City GIS map.

Responsible Person(s): The City Engineer will develop the illicit discharge detection program and coordinate with other Public Works Department staff in its implementation.

3.4 Educate Public Employees – The City will develop a training program for City staff that incorporates information on the hazards of illegal discharges and improper waste disposal. This training program will target staff from the Public Works, Development Services Departments, Public Utilities, Police, and Fire Departments.

Training for Public Works and Public Utilities staff will be oriented towards identification of existing illicit connections and improper waste disposal. Training for Development Services Department staff will be targeted towards insuring that new development / redevelopment projects do not result in illegal connections to the MS4. Training for Police and Fire Department staff will be targeted towards spill response / illegal dumping procedures.

Schedule

Permit Year 1	Developed a training program and conducted first session
Permit Years 3 and 5	Provide annual training for City staff

Measurable Goal: *Determine the availability of educational training opportunities for City staff to attend during the first 5-year permit cycle.*

As of August 2013, the City has City staff have attended various training sessions associated with illegal discharges and improper waste disposal. The City will continue to identify training opportunities for City staff to attend throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will develop and present the public employee education program on illicit discharges.

3.5 Educate Businesses and the General Public – The Public Education and Outreach program includes information on the hazards of illegal discharges and improper waste disposal. This information is presented on the storm water web page (BMP 1.1), in the newsletter articles (BMP 1.2), on the storm water flyer (BMP 1.4), and is incorporated in the school program (BMP 1.6).

Schedule

Permit Years 1 - 5	Include illicit discharge information in Public Education program BMPs 1.1, 1.2, 1.4, and 1.6
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Measurable Goal: See *Public Education and Outreach Best Management Practices 1.1, 1.2, 1.4, and 1.6.*

Responsible Person(s): Same as listed in Public Education and Outreach section.

3.6 Spill Response Program – The City of Fairfield is a member of the Greater Cincinnati Hazardous Materials Unit, a regional response team that covers a number of counties and cities in the Cincinnati area. In coordination with the Fairfield Fire Department, the Greater Cincinnati Hazardous Materials Unit provides spill containment services to Fairfield for significant spill events. A private contractor under the direction of the Fairfield Fire Department removes any contained spilled hazardous materials. Spill response for smaller events (vehicle accident leaks, etc.) is provided solely by Fire Department personnel.

Schedule

Permit Years 1 - 5	Implement existing spill response program
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Measurable Goal: *All spills reported to the Greater Cincinnati Hazardous Materials Unit within the City of Fairfield will be contained in accordance with their standard practices. The Fairfield Fire Department will respond to smaller spills.*

Responsible Person(s): The Fire Department Chief will have overall authority in managing the City's spill response program.

Rationale Statement

The storm sewer map (BMP 3.1) will be developed by Public Works Department staff using construction plans, field data, and aerial mapping from Fairfield's GIS. The map will be updated using construction plans for new development projects in conjunction with field data collected with a survey-grade GPS unit. Ordinances 925.07 and 521.08 will be used to prohibit illicit discharges (BMP 3.2) and were selected because Fairfield's Codified Ordinances are a standard mechanism for enforcing compliance. Violations of Ordinance 925.07 are punishable as third-degree misdemeanors and violators are also subject to any enforcement penalties incurred by the City. Violations of Ordinance 521.08 are punishable as minor misdemeanors. The plan for detecting and addressing illicit discharges, including HSTS's, is described under BMP 3.3. Priority areas within Fairfield have not been identified because random, illegal dumping is the expected source of most illicit discharges, not aging sanitary sewer lines or failing septic systems. No particular areas of the City are more susceptible to illegal dumping than others. Procedures for tracking and removing illicit discharges are described in BMP 3.3.

The illicit discharge program will be evaluated annually by the City Engineer when the annual reports are being prepared. Public employees, businesses, and the general public will be informed on the hazards of illegal discharges through the following BMPs: employee training program (BMP 3.4), storm water web page (BMP 1.1), the newsletter articles (BMP 1.2), the storm water flyer (BMP 1.4), and the school program (BMP 1.6). Success of this minimum measure will be based on the achievement of the measurable goals. The primary measurable goal for this minimum control is the inspection of outfalls over the permit period. This measurable goal was selected because it is currently unknown whether there are any new significant illicit discharges in the City and the inspection program is the best mechanism for locating such discharges. Other measurable goals were selected to ensure that an accurate storm sewer map is prepared for the City and that City staff are trained to identify illicit discharges.

4. Construction Site Storm Water Runoff Control

According to the Phase II rule (paraphrased),

... the operator of a small MS4 is required to develop, implement, and enforce a pollutant control program to reduce pollutants in any storm water runoff from construction activities that result in land disturbance of greater than or equal to one acre. This program must include: (1) an ordinance or other regulatory mechanism to require erosion and sediment controls and sanctions to ensure compliance; (2) requirements for construction site operators to implement appropriate best management practices; (3) requirements for construction site operators to control waste that may cause adverse impacts to water quality; (4) procedures for site plan review; (5) procedures for receipt and consideration of information submitted by the public; (6) procedures for site inspection and enforcement of control measures ...

The City recognizes that sediment laden runoff from construction sites, if unchecked, can deposit more sediment and pollutants in a stream than would be deposited there over the course of decades from other land use types. The resulting siltation, and other pollutants, can cause physical, chemical, and biological harm to the waterways.

The permit requires that the City's program include pre-construction storm water pollution prevention plan review of all construction activities resulting in a land disturbance of greater than or equal to one acre. To ensure compliance, these construction sites must be initially inspected. The frequency of follow-up inspections is on a monthly basis unless the City documents its procedures for prioritizing inspections, such as location to a waterway, amount of disturbed area, compliance of site, etc.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

4.1 Erosion and Sediment Control Ordinance – Revised City Ordinances 1117.06 and 1309.15 (see Appendix B) requires that erosion and sediment control best management practices be established for all new development and redevelopment projects in Fairfield. Ordinance 1117.06 specifically states that an erosion and sediment control plan must be approved by the City through the Staff Technical Review (STR) site plan review process. The City currently requires the submittal of erosion and sediment control plans by means of the Building Division site plan submission checklist. Ordinance 1309.15 states that construction site operators are responsible for controlling construction site waste.

The City Engineer and Inspectors from the Public Works and Development Services Departments enforces these ordinances. If adequate erosion and sediment control measures are not being provided, the first response is to alert

the contractor or developer to the problem and advise them of the necessary changes both verbally and in writing. These ordinances provide the City with the authority to suspend work on a project until adequate controls are in place. Site inspections are performed by inspectors from the Public Works Department on projects involving the construction of public infrastructure. Public Works inspectors visit these sites at the following stages: site clearing / grading, sanitary sewer installation, water line installation, storm sewer installation, curb construction, and pavement construction. On individual lot developments (residential and commercial), Building Department staff inspects the site at the following stages of construction: footing / slab / foundation wall, rough framing, insulation, rough electric, HVAC, rough heating, and gas line installation. All construction sites are inspected by City staff, at a minimum of, once per month to ensure that construction site operators are properly managing the storm water runoff per the Revised City Ordinances. Sites requiring enforcement proceedings based upon observations made during site inspections will be implemented per Revised Ordinance 1117.06. Enforcement includes the issuance of stop-work orders where sediment and erosion control measures are not provided in accordance with the approved erosion and sediment control plan.

Schedule

Permit Years 1	Adopt Revised Ordinances 1117.06 and 1309.15
Permit Years 2 - 5	Review erosion and sediment control plans submitted to the City associated with site improvement projects.
Permit Years 2 - 5	Provide monthly erosion and sediment control site inspections and enforce Ordinances 1117.06 and 1309.15
Permit Years 4-5	Adopt an ordinance requiring the development of Storm Water Pollution Prevention Plans (SWPPPs) per the requirements of the latest version of the Ohio EPA's General Construction Storm Water Permit

Measurable Goal: All new development / redevelopment projects will include erosion and sediment control measures to minimize the water quality impact of construction site runoff.

As of August 2013, the City has adopted the revised ordinances that require erosion and sediment control plans to be submitted to the City for review and approval. The City has additionally been providing erosion and sediment control site inspections to ensure that the approved erosion and sediment control plans are being properly implemented throughout construction activities. The City will continue to review plans and conduct inspections throughout the remainder of the permit period. The City will additionally adopt an ordinance requiring the development of Storm Water Pollution Prevention Plans (SWPPPs) per the requirements of the latest version of the Ohio EPA's General Construction Storm Water Permit.

Responsible Person(s): The Public Works Director, Development Services Director, City Engineer, and other staff from the Public Works and Development Services Departments will enforce the erosion and sediment control ordinances.

4.2 Adoption of Erosion Control Manual – Per Revised Ordinance 1117.06, Fairfield has officially adopted the standard erosion control manual of the Ohio DNR, “Rainwater and Land Development.” It is expected that the use of this widely available and accepted manual will help ensure that erosion control measures are used properly on construction projects. The manual is referred to during plan reviews and field inspections.

Schedule

Permit Years 1	Adopted Revised Ordinance 1117.06
Permit Years 1 - 5	Per Ordinance 1117.06, use “Rainwater and Land Development” manual as standard reference for erosion control measures.

Measurable Goal: “Rainwater and Land Development” will be the standard erosion control reference document used for plan review and field inspection of all new development / redevelopment projects in Fairfield.

As of August 2013, the City has adopted Revised Ordinance 1117.06 that requires all erosion and sediment controls used to manage construction site runoff are to be installed and maintained per the Ohio DNR “Rainwater and Land Development” manual. City Staff will continue to inspect construction sites to ensure that the controls are installed and maintained per the manual requirements throughout the remainder of the permit period.

Responsible Person(s): The City Engineer and inspectors from the Public Works and Development Services Departments will be responsible for ensuring that erosion and sediment control measures be implemented in accordance with this ODNR manual.

4.3 City Staff Training – The City has developed a training program for inspectors in the Public Works and Development Services Departments. The training focused on the proper installation and maintenance of erosion and sediment control measures and verification that a given set of measures provides adequate protection. Public Works Department inspectors are used primarily for the inspection of residential and commercial subdivision projects. Development Services Department inspectors will be used for the inspection of individual lot projects.

Schedule

Permit Year 1	Developed training program and conduct first session
Permit Years 2 - 5	Conduct annual training sessions

Measurable Goal: Select City staff from Public Works and Development Services Departments will attend at least three (3) training sessions during first permit cycle that include information on construction site erosion and sediment control.

As of August 2013, City staff has attended at least three training sessions associated with erosion and sediment control. The City will continue to evaluate potential training opportunities during the remainder of the permit period.

Responsible Person(s): The City Engineer will develop and present the public employee education program on erosion and sediment control.

Rationale Statement

Ordinances 1117.06 and 1309.15 (BMP 4.1) will be used to enforce compliance with the construction site runoff program and were selected because Fairfield's Codified Ordinances are a standard regulatory mechanism for the City. Compliance with the City's erosion control requirements will be monitored through the site inspection process described in BMP 4.1. When violations occur, stop work orders will be issued. Ordinances 1117.06 and 1309.15 describe the City's basic requirements for preventing storm water pollution due to construction site runoff and construction site waste. Ordinance 1117.06 also states that Fairfield will use the most recent standards and specifications available from the Ohio Department of Natural Resources, which currently is the manual "Rainwater and Land Development," as an erosion and sediment control reference (BMP 4.2). Site plan review for all new construction and redevelopment projects will be provided through the City's Staff Technical Review process, and will include a consideration of water quality impacts. Information submitted by the public will be forwarded to the City Engineer. Inspectors from the Public Works and Development Services Departments will conduct site inspection. Success of this minimum measure will be based on the achievement of the measurable goals. The measurable goals were selected to ensure the continued operation of the City's erosion control program.

Prior to applying for its Phase II permit, Fairfield has had an erosion and sediment control program in place and has experienced good compliance with the program requirements. The BMPs listed under this minimum control represent a refinement of the existing program, not the beginning of a completely new City function.

5. Post-Construction Storm Water Management

According to the Phase II rule (paraphrased),

... the operator of a small MS4 must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre. The program must ensure that controls are in place that would prevent or minimize water quality impacts. The operator of a small MS4 is required to: (1) develop and implement strategies which include a combination of structural and/or non-structural BMPs appropriate for the community; (2) use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects; (3) ensure adequate long-term operation and maintenance of BMPs...

The City addresses the post-construction storm water management in new development and redevelopment with structural and non-structural BMPs in keeping with the BMP requirements of the OEPA Construction General Permit, OHC00003. As part of this minimum control, the City seeks to effectively manage quantities of post development flow, diminish the impact of the amount of impervious cover within its system and enhance existing storm water practices through inclusion of water quality components.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

5.1 Stormwater Management Requirements – Through revised Ordinance 1182 (see Appendix B), the City currently requires on-site stormwater runoff quantitative and qualitative control for all new development and redevelopment projects that result in an increased amount of impervious surface. Specifically, this ordinance requires the construction of facilities that reduce a 100-year post-developed peak flow rate from the site to the 2-year pre-developed level. Revised Ordinance 906.0 (see Appendix B) describes the maintenance responsibilities for facilities located on commercial, industrial, multi-family residential property and in single-family residential subdivisions.

City regulations allow for the use of dry basins (detention), wet basins (retention), underground storage, and infiltration measures to meet the requirements of Ordinance 1182. Infiltration structures have typically been used in the northwest portion of Fairfield where soils are permeable and the flat topography has made the construction of storm sewers difficult. On small sites where these facilities are not practical or in locations where they would not provide the intended benefits, the ordinance allows the developer to pay a waiver fee in lieu of constructing such facilities. In addition to requiring the construction of on-site facilities, the City also has built two regional detention basins for flood mitigation.

The storm water quality benefits of detention / retention facilities include the reduction of peak flows which can erode stream channels and the pollutant removal characteristics of wet ponds. Infiltration facilities provide additional storm water quality benefits because potential pollutants are not transported to surface waters. Ordinance 1182 is primarily enforced through the City's STR (Staff Technical Review) plan approval process.

Schedule

Permit Years 1 - 5	Enforce Ordinance 1182.
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Measurable Goal: All new development / redevelopment projects will be reviewed for storm water detention/retention facilities. Waivers will only be granted in those instances where these facilities are impractical or do not provide benefits.

As of August 2013, the City has reviewed site improvement plans to ensure compliance with ordinance 1182. The City will continue to review plans throughout the remainder of the permit period.

Responsible Person(s): The Development Services Director will enforce City Ordinance 1182 through the plan review process.

5.2 Wellhead Protection Program – Under City Ordinance 1192 (see Appendix A), portions of Fairfield have been delineated into a set of districts, collectively referred to as the “wellhead protection area” (see figure in Appendix C). Development within these districts is regulated for the protection of groundwater resources. These regulations include restrictions on new businesses with a high pollution risk potential such as gas stations, registration of existing facilities, and requirements for spill control plans.

This ordinance provides storm water quality benefits because it addresses a number of potential pollution sources (hazardous material spills, industrial operations involving hazardous materials, etc.) and provides authority to assess penalties for non-compliance.

Schedule

Permit Years 1 - 5	Enforce Ordinance 1192.
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Measurable Goal: All new development / redevelopment projects will be regulated in accordance with the wellhead protection program.

As of August 2013, the City has reviewed site improvement plans to ensure compliance with ordinance 1192. The City will continue to review plans throughout the remainder of the permit period.

Responsible Person(s): The Public Utilities Director will enforce City Ordinance 1192.

5.3 Maintenance of Regional Basins – Permits from the Ohio Department of Natural Resources (ODNR) were obtained for the two regional detention basins built and owned by the City (Sites 'A' and 'C'). These permits require that the City conduct regular inspection, vegetation maintenance, and clearing of the basin outlet structures. The City will continue to inspect, maintain, and repair the two regional detention facilities in accordance with the ODNR permits.

Schedule

Permit Years 1 - 5	Maintain two regional detention basins in accordance with ODNR permits.
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Measurable Goal: Regional basins will be inspected by City staff at least quarterly, mowed at least monthly during the growing seasons, and repaired as necessary.

As of August 2013, the City has performed quarterly inspections and conducted routine maintenance to ensure the proper functionality of the basins. The City will continue to provide inspection and maintenance activities throughout the remainder of the permit period.

Responsible Person(s): The City Engineer will inspect the two regional basins. Maintenance will be performed by staff from the Public Works and Parks Departments.

5.4 Inspection of Residential Subdivision Detention Basins – The City has created an inventory of the detention/retention basins located in residential subdivisions and provides inspections. The purpose of the inspections is to verify their condition, with particular emphasis given to structural components such as inlet pipes, headwalls, outlet structures, and paved gutter. Where damaged components are found, their repair and replacement will be scheduled into the small drainage project program or capital improvement program.

Schedule

Permit Year 1	Established inventory of detention / retention basins located in residential subdivisions.
Permit Years 2 - 5	Inspect detention / retention basins located in residential subdivisions.

Measurable Goal: A complete inventory of residential subdivision detention / retention basins will be completed in Permit Year 1. City staff will inspect these basins once every two years in Permit Years 2 through 5. Damaged structural components will be scheduled for repair or replacement through the small drainage project and/or capital improvement programs.

As of August 2013, the City has established an inventory of basins located within residential subdivisions and has inspected the basins on a two-year cycle.

Responsible Person(s): Under the direction of the City Engineer, Public Works Department staff will perform the residential subdivision basin inspections.

5.5 Stamped Curb Inlets – Fairfield replaces existing curb inlets with new inlets that have grates stamped with a fish logo and the message “DUMP NO WASTE.” These inlets have been replaced through the street overlay program and a contract specifically intended for curb inlet work. These stamped inlets are also used in new development, redevelopment and public roadway improvement projects, whenever possible. The use of the stamped inlets serves the same purpose as the storm drain marking program (BMP 2.3).

Schedule

Permit Years 1 - 5	Install new curb inlets featuring fish logo and text “DUMP NO WASTE”
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Measurable Goal: *Install at least 15 stamped curb inlets annually during first 5-year permit cycle.*

As of August 2013, the City has installed more than 100 inlets and dry wells with “Dump No Waste” stamps. The City will continue to incorporate this educational Best Management Practice during future improvement projects during the remainder of the permit period.

Responsible Person(s): The City Engineer will coordinate with other City staff to monitor the activity and progress of the stamped inlet program.

5.6 Post-Construction BMP's - Through the Staff Technical Review (STR) process, developers of projects involving the disturbance of at least 1 acre of land are required to demonstrate compliance with part III.G.2.e of the Ohio EPA's general NPDES permit for construction activity. Project plans submitted to the City are required to include post-construction BMP's as a condition for their approval. Allowable BMP's include vegetated swales / filter strips, extended detention basins, retention basins, constructed wetlands, and alternative BMP's that are equivalent in effectiveness to other structural controls listed in the general permit. Developers of large construction projects (five or more acres of disturbed land) will also be required to provide structural BMP's that are sized to treat the water quality volume as defined in the Ohio EPA general permit.

Schedule

Permit Years 3 - 5	Ensure compliance with part III.G.2.e of the Ohio EPA general construction permit through the STR process.
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Permit Year 4-5	Adopt an ordinance requiring a post-construction Operation and Maintenance Plan and agreement
Permit Year 5	Ensure long-term O&M plans are prepared for post-construction water quality Best Management Practices
Permit Year 5	Ensure annual inspections are being provided to ensure compliance with the approved O&M plans

Measurable Goal: Through the STR process, all new development / redevelopment projects that involve the disturbance of at least 1 acre of land will be required to submit plans that demonstrate compliance with part III.G.2.e of the Ohio EPA general construction permit prior to receiving site plan approval by the City.

As of August 2013, the City has reviewed site improvement plans to ensure that post-construction water quality controls are provided per the Ohio EPA General Construction Permit. The City will revise an existing ordinance or adopt new ordinance that requires the development of O&M plans and agreements between the post-construction operator and the City.

Responsible Person(s): The Public Works Director or his designee will be responsible for ensuring that all projects involving the disturbance of at least 1 acre meet the requirements of part III.G.2.e of the OEPA general construction permit.

Rationale Statement

Through Ordinance 1182, on-site detention / retention facilities are required for all new development and redevelopment projects that result in an increased amount of impervious surface (BMP 5.1). Ordinance 1182 also allows for the use of infiltration practices. Revised Ordinance 925.07 includes language describing maintenance responsibility for detention / retention facilities (BMP 5.1). Ordinance 1192 functions as a non-structural BMP that provides additional regulatory control for the region of the City where maintaining high groundwater quality is critical (BMP 5.2). BMP 5.3 describes the long-term maintenance program for the City's two regional detention basins. The residential subdivision basin inspection / inventory program (BMP 5.4) will help ensure the long-term operation of those facilities. Installation of the stamped curb inlets (BMP 5.5) serves the function of a non-structural BMP by reducing the likelihood of illegal dumping. BMP 5.6 will ensure that post-construction BMP's are incorporated into new development projects that disturb at least 1 acre (in accordance with the Ohio EPA general construction permit) and that an Operation and Maintenance plan and agreement are established.

Success of this minimum measure will be based on the achievement of the measurable goals. These BMPs were chosen because controlling peak runoff

rates, protecting groundwater quality, and addressing illegal dumping are high priority concerns for Fairfield. The measurable goals were selected to: (1) ensure the continued operation of the City's detention / retention and wellhead protection policies, (2) ensure that the residential detention / retention basins and the City's two regional basins are performing properly, and (3) establish a quantitative goal for installation of stamped curb inlets.

6. Pollution Prevention / Good Housekeeping

According to the Phase II rule (paraphrased),

... the operator of a small MS4 must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing storm water pollution from municipal operations...

The City has a variety of procedures in place to provide 'good housekeeping'. These procedures include the following:

- The proper disposal of waste oils and greases used in the City's maintenance facilities;
- The careful use of salt and calcium chloride during snow removal periods using measures appropriate to conditions;
- Catch basin cleaning, removal of debris from swales, ditches and culverts;
- Maintenance of City-owned storm pipe;
- Street sweeping;
- Very limited pesticide/herbicide use on City-owned property.

To fulfill this requirement, the City of Fairfield will use the following BMPs:

6.1 Drainage Crew Operations – The City utilizes a four-man crew within the Public Works Department to conduct general maintenance and repair work on the public storm sewer system. Their operations include inspection of the storm sewer system, catchbasin cleaning, repairing structural components, and removing obstructions from major streams.

The storm water quality benefits of this crew's activities include the removal of pollutants from catchbasins and the potential identification and elimination of illicit discharges.

Schedule

Permit Years 1 - 5	Maintain public storm sewer system using Public Works Department drainage crew
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Measurable Goal: Drainage crew will address maintenance-related storm sewer system problems by performing necessary repairs or scheduling repair into long-range plan. Catchbasin structures will be inspected annually by the Drainage Crew. Specific Drainage Crew activities will be reported in annual reports.

Responsible Person(s): Under the direction of the Public Works Director, Streets Superintendent, and City Engineer, the drainage crew will perform storm sewer maintenance duties.

6.2 Street Sweeping Program – The City contracts with an outside vendor for street sweeping services. The street sweeping program involves the sweeping of all curbed streets within the City (approximately 232 curb miles) and four (4) publicly owned parking lots. The frequency of cleaning varies from weekly in the City center area to bi-monthly in lower-use residential streets (see figure in Appendix C).

This program provides storm water quality benefits through the removal of pollutants from streets that would otherwise be washed into receiving streams. The pollutants removed from the impervious areas as a result of the Street Sweeping Program are temporarily stored within enclosed dumpsters, in a manner not to expose the collected pollutants to storm water, located within the City maintained construction yard. The temporary stored pollutants are removed from the yard and properly disposed of at a licensed facility by a local waste management company.

Schedule

Permit Years 1 - 5	Perform street sweeping operations and properly dispose of the collected pollutants
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Measurable Goal: Street sweeping over approximately 232 curb miles of public street and four publicly-owned parking lots in accordance with schedule shown in figure from Appendix C.

Responsible Person(s): The Streets Superintendent will be responsible for management of the street sweeping program.

6.3 Fertilizer, Pesticide, and Herbicide Application Program – Certified City staff and Contractors apply these chemicals on City owned and maintained property. The chemicals are stored at the City facilities in a manner not to be exposed to storm water. The chemicals are applied per the manufacturers recommended application rates and careful consideration is made not to apply these chemicals just prior to, or during, a rain event or on impervious surfaces. The appropriate storage and application of these chemicals assist with storm water pollution prevention.

Schedule

Permit Years 1 - 5	Track the amount of chemicals applied to City maintained property and determine means to reduce application amounts throughout the City.
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Measurable Goal: Determine means to reduce application amounts on City maintained property to assist with water quality improvements.

Responsible Person(s): The Streets Superintendent and Parks Superintendent will be responsible for management of the application of the products.

6.4 Leaf / Brush Pickup Programs – The City provides leaf and brush pick-up services for all City residents. The leaf pick-up program operates from November through January. All areas of the City will receive the pick-up service three times over this period (see figure in Appendix C). The collected leaves are deposited at a City-owned lot for composting.

The brush pick-up program, provided upon request to City residents, begins in April and continues through October. The collected brush is chipped and transported to a local waste disposal company, Rumpke, for composting. A third program, Operation Dump truck, allows residents to borrow City-owned trucks for the collection and disposal of yard waste. This material is transported to Rumpke.

These programs provide storm water quality benefits through the removal of leaves, brush, and yard waste, which could otherwise be washed into the storm sewer system.

Schedule

Permit Years 1 - 5	Operate City leaf and brush pick-up programs
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Measurable Goal: Leaf and brush removal throughout City in accordance with program guidelines.

Responsible Person(s): The Streets Superintendent will be responsible for managing the leaf and brush pick-up programs.

6.5 Fleet Maintenance Program - The City's fleet maintenance program incorporates several components that help minimize the potential for storm water pollution. Pollution prevention measures used include the following:

- All City fleet maintenance operations are conducted within the main garage at the Public Works facility. This area is completely enclosed and features numerous spill control measures. All floor drains within the main garage are connected to the sanitary sewer system and feature grease interceptors.
- The Public Works facility includes an enclosed truck wash. The wash-water runoff is routed through an oil-water separator before being discharged to the sanitary sewer system.
- All waste oil generated through fleet maintenance operations is either re-used on-site in a waste oil furnace or recycled by an outside contractor.
- The City only uses above-ground fuel storage tanks equipped with leak detection systems.

Schedule

Permit Years 1 - 5	Continue use of existing pollution prevention measures in fleet maintenance program
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Measurable Goal: All City fleet maintenance activities will be conducted in accordance with storm water program guidelines. Quantified use of these measures (number of vehicles through truck wash and amount of oil recycled) will be included in the Phase 2 annual reports.

Responsible Person(s): The Fleet Manager will be responsible for managing the City's fleet maintenance program.

6.6 Snow Removal Program – The City's current snow removal program is based on the use of salt and calcium chloride. Although the amounts can vary widely from year to year, an average of 3,000 tons of salt and 1,800 gallons of calcium chloride are used annually. The salt is stored in a 4,000-ton capacity salt barn that is completely enclosed. All calcium chloride is stored in a 5,600-gallon tank. The pavement adjacent to the salt barn drains to a catchbasin equipped with a sediment trap that is periodically cleaned. All of the City's snowplows are equipped with computerized hydraulic control systems that optimize the application of road salt.

The storm water pollution prevention benefits of the City's snow removal program are that any un-necessary contact between salt and storm water is minimized and salt application to roads is optimized.

Schedule

Permit Years 1 - 5	Continued operation of Snow Removal program
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Measurable Goal: All salt and calcium chloride used in the snow removal program will be stored in the salt barn and tank and snowplows will continue to use computerized control systems. Actual amounts of materials used (salt and calcium chloride) will be included in the Phase 2 annual reports.

Responsible Person(s): The Streets Superintendent will be responsible for managing the City's snow removal program.

6.7 City Staff Training – The City has developed a training program for select City staff involved in municipal operations that could impact storm water quality. These staff members will include representatives from the Parks and Public Works Departments. The training focuses on minimizing the potential for storm water pollution from fleet maintenance, street maintenance, storm sewer maintenance, and park and golf course maintenance.

Schedule

Permit Year 1	Developed a training program and conducted the first session
Permit Years 3 and 5	Provide additional training sessions and determine educational opportunities for City staff to attend

Measurable Goal: Selected City staff from Parks and Public Works Departments will attend training sessions during first 5-year permit cycle.

Responsible Person(s): The City Engineer will develop and present the City staff training program on water quality impacts of municipal operations.

Rationale Statement

Fairfield's program to prevent or reduce pollutant runoff from municipal operations includes all of the BMPs described in this section of the plan. Municipal operations that are involved include storm sewer maintenance (BMP 6.1), street sweeping (BMP 6.2), fertilizer, pesticide, and herbicide application (BMP 6.3), yard waste management (BMP 6.4), fleet maintenance (BMP 6.5), snow removal (BMP 6.6), and parks / open space maintenance (BMP 6.7). The City staff training program is described in BMP 6.7. Floatables and other pollutants that could potentially enter the MS4 will primarily be controlled through BMPs 6.1 (drainage crew operations), street sweeping (BMP 6.2), and leaf / brush pick-up (BMP 6.4). Pollutants from streets, municipal parking lots, maintenance shops, and salt storage areas will be controlled primarily through BMPs 6.2 (street sweeping), 6.5 (fleet maintenance program), 6.6 (snow removal program). Waste material collected through the drainage crew operations is disposed of at Fairfield's sewage treatment plant. Yard waste collected through the leaf and brush pick-up programs is disposed of through composting.

Prior to applying for its Phase II permit, the City of Fairfield has been proactive in ensuring that City operations did not lead to storm water pollution. The BMPs listed under this minimum control represent a refinement of the existing City operations, not the beginning of a completely new City function. Success of this minimum measure will be based on the achievement of the measurable goals. The measurable goals were selected to ensure continued success in the implementation of these practices.

Appendix A

Existing City Ordinances

CHAPTER 521
Health, Safety and Sanitation

- 521.01 Abandoned refrigerators and airtight containers.
- 521.02 Venting of heaters and burners.
- 521.03 Barricades and warning lights; abandoned excavations.
- 521.04 Sidewalk obstructions; damage or injury.
- 521.05 Notice to fill lots, remove putrid substances.
- 521.06 Duty to keep sidewalks in repair and clean.
- 521.07 Fences.
- 521.08 Littering and deposit of garbage, rubbish, junk, etc.
- 521.09 Noxious or offensive odors.
- 521.10 Nonsmoking areas in places of public assembly.
- 521.11 Air pollution.
- 521.12 Swimming in certain streams prohibited.
- 521.13 Noise control.
- 521.14 Urinating in public.
- 521.15 Animal feces.
- 521.16 Smoking prohibited in City buildings.
- 521.17 Pollution from internal combustion engines.
- 521.18 Outdoor wood-fired boilers.
- 521.99 Penalty.

CROSS REFERENCES

See sectional histories for similar State law

Flagpole installation in sidewalk - see Ohio R.C. 723.012

Excavation liability - see Ohio R.C. 723.49 et seq.

Removal of noxious weeds or litter - see Ohio R.C. 731.51 et seq.

Nuisances - see Ohio R.C. Ch. 3767

Tampering with safety devices - see GEN. OFF. 541.04

521.08 LITTERING AND DEPOSIT OF GARBAGE, RUBBISH, JUNK, ETC.

(a) No person shall, regardless of intent, throw, drop, discard, place or deposit litter or cause litter to be thrown, dropped, discarded, placed or deposited on any public property, on private property not owned by him, or in or on waters of the State, the Municipality or waters not owned by him, unless the person has:

- (1) Been directed to do so by a public official as part of a litter collection drive.
- (2) Thrown, dropped, discarded, placed or deposited the litter in a litter receptacle in a manner that prevents its being carried away by the elements; or
- (3) Been issued a permit or license covering the litter pursuant to Ohio R.C. Chapter 3734 or 6111.

(Ord. 158-95. Passed 11-13-95.)

(b) As used in this section "litter" means garbage, trash, waste, rubbish, ashes, cans, drums, bottles, wire, oil, paper, cartons, boxes, scrap pieces of wood, concrete pieces, pieces of brick or concrete blocks, pieces of drywall, construction debris of any type, automobile or truck parts, furniture, glass, leaves, yard waste or anything else of an unsightly or unsanitary nature.

(Ord. 127-03. Passed 8-11-03.)

(c) No person shall cause or allow litter to be collected or remain in any place to the damage or prejudice of others or of the public, or unlawfully obstruct, impede, divert, corrupt or render unwholesome or impure, any natural watercourse.

(d) No person shall throw, drop, discard, place or deposit litter in any dumpster or receptacle not owned by that person without the permission of the owner of the dumpster or receptacle or his/her authorized agent.

(e) Whoever violates subsection (a) or (d) hereof, is guilty of a misdemeanor of the third degree. The sentencing court may, in addition to or in lieu of the penalty provided in this subsection require a person who violates subsection (a) or (d) hereof to remove litter from any public or private property, dumpster or receptacle, or from any waters.

(f) Whoever violates subsection (c) hereof is guilty of a minor misdemeanor.
(Ord. 158-95. Passed 11-13-95.)

CHAPTER 925
Sewers

- 925.01 Definitions.
- 925.02 Responsibilities and enforcement.
- 925.03 General sewer construction requirements.
- 925.04 Use of public sewers.
- 925.05 Connection to public sewers.
- 925.06 Restrictions on sanitary sewer discharges.
- 925.07 Special storm sewer rules.
- 925.08 User charge established.
- 925.09 Industrial Cost Recovery System. (Repealed)
- 925.10 Payments of charges and fees.
- 925.11 Inspections.
- 925.99 Penalty.

CROSS REFERENCES

- Power to license sewer tappers and vault cleaners - see Ohio R.C. 715.27
- Power to regulate water closets and privies - see Ohio R.C. 715.40
- Power to construct sewerage system - see Ohio R.C. 715.40, 717.01
- Compulsory sewer connections - see Ohio R.C. 729.06
- Regulations to control house sewers and connections - see Ohio R.C. 729.51
- Weekly deposit of sewer rentals collected - see Ohio R.C. 729.52
- Untreated sewage - see Ohio R.C. 3701.59
- Interference with sewage flow - see Ohio R.C. 4933.24
- Sewerage districts - see Ohio R.C. 727.44 et seq.
- Assessments - see Ohio R.C. Ch. 729
- Household sewage disposal systems - see OAC Ch. 3701-29

925.07 SPECIAL STORM SEWER RULES.

(a) Permit; Fee. No connection shall be made to a public storm sewer within the City until the written permission of the Public Works Director or his designee has been obtained by the person, firm or corporation proposing to or employed to perform the work. An application for a permit shall be signed by the owner or agent of the property for which the connection is desired and by the person, firm or corporation employed to perform the work; shall describe the property and state the purpose for which the connection is desired; and shall be accompanied by a fee in accordance with the following schedule:

- | | |
|---|----------|
| (1) Existing residential structure sump pump drain pipe | \$10.00 |
| (2) Existing residential structure roof downspout | \$10.00 |
| (3) Existing residential structure yard drain pipe
(6-inch diameter or less) | \$10.00 |
| (4) Existing residential structure storm sewer pipe
(up to 12-inch diameter) | \$25.00 |
| (5) All other connections | \$125.00 |

No permit shall be issued until the appropriate application is made and the applicable fee is paid.

(b) Discharges Into Storm Sewers Regulated. Storm water and all other unpolluted drainage shall be discharged to such sewers as are specifically designated as storm sewers, or to a natural outlet approved by the Public Works Director. Industrial cooling water or unpolluted process waters may be discharged upon approval of the Public Works Director to a storm sewer or natural outlet after obtaining the appropriate permits from the State, Environmental Protection Agency or any other required agencies.

(c) Prohibition of Illegal Discharges. No person, firm, or corporation shall discharge or cause to be discharged into a public storm sewer or watercourse any substance other than storm water, except as follows:

(1) Water line flushing or other potable water discharges, irrigation or lawn watering, diverted stream flows, rising ground water, uncontaminated ground water infiltration, uncontaminated pumped ground water, foundation or footing drains, water from crawl space pumps, air conditioning condensation, springs, individual residential vehicle washing, natural riparian habitat or wetland flows, dechlorinated swimming pool discharges, water from fire fighting activities, and any other water source not containing pollutants.

(2) Discharges specified in writing by the Public Works Director or his designee as being necessary to protect public health and safety.

(3) Any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharge is in full compliance with all requirements of the permit, waiver, or order and other applicable laws and regulations.

(d) Prohibition of Certain Connections. The construction, use, maintenance or continued existence of any drain or conveyance, whether on the surface or subsurface, which allows a prohibited substance to enter a public storm sewer or watercourse is prohibited. This prohibition expressly includes, without limitation, connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection. When a prohibited connection is discovered, the Public Works Director will provide written notice to the property owner ordering its disconnection from the storm sewer system or watercourse. No person, firm or corporation shall fail to eliminate such connection(s) to the storm sewer or watercourse within thirty days after being ordered to do so as provided herein.

(e) Inspection of Storm Sewers. After a connection to a public storm sewer is built, and before it is covered, it shall be inspected and approved by the Public Works Director or his designee.

(f) Prohibition of Curb Line Discharges. No roof downspout, sump drain, or other surface or groundwater drainage line may be constructed to discharge directly into the curb line of any public street. This prohibition expressly includes, without limitation, any curb line discharge established in the past, regardless of whether its construction was permissible under law or practices applicable or prevailing at the time. When such a curb line discharge is discovered, the Public Works Director will provide written notice to the property owner ordering its disconnection from the curb line. No person, firm, or corporation shall fail to eliminate such curb line discharge(s) within 30 days after being ordered to do so as provided herein.

(g) Erosion and Sediment Control. To minimize the entry of sediment and other pollutants into the City's storm sewer system that is caused by construction site runoff, erosion and sediment control measures must be provided on all new development and redevelopment projects. These measures are to be shown in a sedimentation plan that has been prepared in accordance with the applicable requirements of the subdivision rules and regulations.

(h) Maintenance Responsibility for Detention/Retention Basins.

(1) Commercial, industrial, multi-family residential property. The property owner(s) shall fully maintain detention/retention basins located on private commercial, industrial, or multi-family residential property, whether such basins are located within a public easement or not. This maintenance responsibility shall include both routine maintenance such as mowing, cleaning, debris removal, and erosion repair and non routine maintenance such as the repair or replacement of damaged or missing structural components.

(2) Single family residential property. The property owner(s) and/or homeowner's association shall be responsible for routine maintenance such as mowing, cleaning, debris removal, and erosion repair for detention/retention basins located on private single family residential property, whether such basins are located within a public easement or not. The City shall be responsible for non-routine maintenance such as the repair or replacement of damaged or missing structural components of such basins.

(3) Notification. When the maintenance of a detention/retention basin is found to be in violation of this subsection, the Public Works Director will provide written notice to the appropriate property owner(s) and/or homeowner's association ordering that the necessary maintenance be performed within a reasonable period of time. No person, firm or corporation shall fail to perform the required maintenance within the required period after being ordered to do so as provided herein.

(Ord. 127-03. Passed 8-11-03.)

(i) Storm Water Quality Management Plan. As a requirement of the City's NPDES Phase II Storm Water Permit, Council hereby adopts the "Storm Water Quality Management Plan" dated January 2005, prepared by City staff as the City's official planning document for addressing storm water quality and pollution prevention. All subsequent amendments to the "Storm Water Quality Management Plan" shall also be adopted by legislative action of Council. A copy of this plan is on file in the office of the Clerk of Council.

(Ord. 20-05. Passed 2-14-05.)

(j) Violation and Enforcement Costs. In addition to other penalties listed in this chapter, any person, firm or corporation who violates any provision of this chapter shall be liable to the City for any expense, loss or damage resulting from the cleaning, repair or replacement work caused by the

violation. Any person, firm or corporation who violates any provision of this chapter shall also be liable for any fine or penalty incurred by the City caused by their violation. Any person, firm or corporation who must be monitored by the City for enforcement and/or compliance shall be liable for the associated costs.

(k) Compliance with Other Regulations. Compliance with the provisions of this chapter or other sections of City Code does not relieve the site owner from obtaining all other necessary permits and/or approvals from federal, state and/or county agencies. If requirements vary, the most stringent requirement shall apply.

(Ord. 127-03. Passed 8-11-03.)

CHAPTER 1117
Storm Drainage and Sediment Control

- 1117.01 Definitions.
- 1117.02 General requirements.
- 1117.03 Flooding restrictions.
- 1117.04 Drainage plan.
- 1117.05 Design of storm sewers.
- 1117.06 Sedimentation plan.
- 1117.07 Detention/retention of storm water.
- 1117.08 Use of drywells.

CROSS REFERENCES

Storm drain conductors and leaders - see OAC 4101:2-51-69

Water backflow prevention - see S.U.&P.S. 921.12

Sanitary sewers - see S.U.&P.S. Ch. 925

Excavation and fill - see P. & Z. Ch. 1196

Lands subject to flooding - see P. & Z. Ch. 1199

1117.06 SEDIMENTATION PLAN.**(a) Intent.**

(1) No change shall be made in the contour of the land; no grading, excavating, removal or destruction of the topsoil, trees, or other vegetative cover of the land shall be commenced until such time that a plan for minimizing erosion and sedimentation has been processed with and approved by the City Engineer or Public Works Director or there has been a determination by the Planning Commission that such plans are not required.

(2) No subdivision shall be approved unless:

A. There has been a plan approved by the City Engineer or Public Works Director that provides for minimizing erosion and sediment as consistent with the intent of this chapter, and performance bond or other acceptable securities are deposited with the City in the form of escrow guarantee which will insure installation and completion of the required improvements; or

B. There has been a determination by the Planning Commission that such plans are not required.

(b) Performance Principles and Standards.

(1) The following principles are effective in minimizing erosion and sedimentation and shall be included where applicable in the control plan.

A. Stripping of vegetation, regrading or other development shall be done in such a way that will minimize erosion. Whenever feasible, natural vegetation shall be retained, protected and supplemented.

B. Development plans shall preserve salient natural features, keep cut-fill operations to a minimum, and ensure conformity with topography so as to create the least erosion potential.

C. The smallest practical area of land shall be exposed at any one time, the topsoil shall be preserved and returned to the surface areas to be revegetated.

D. Disturbed soils shall be stabilized as quickly as practicable with temporary vegetation and/or mulching to protect exposed critical areas during development.

E. The permanent final vegetation and structural erosion control and drainage measures shall be installed as soon as practical in the development.

F. Provisions shall be made to effectively accommodate the increased run-off caused by changed soil and surface conditions during and after development. Where necessary, surface water run-off shall be structurally retarded.

G. Sediment in the run-off water shall be trapped until the disturbed area is stabilized by the use of debris basins, sediment basins, silt traps or similar measures.

(2) The following standards shall be followed in all water management and sediment control plans:

A. All lots shall be graded to provide proper drainage away from buildings and to dispose of it without ponding. All land within a development shall be graded to

drain and dispose of surface water without ponding, except where waived by the Planning Commission.

B. All drainage provisions shall be of such design to adequately handle the surface run-off and to carry it to the nearest suitable outlet such as a curbed street, storm drain, or natural watercourse. Where drainage swales are used to divert surface waters away from buildings, they shall be sodded, planted or paved as required and shall be of such slope, shape and size as to conform with the requirements of the City.

(Ord. 167-95. Passed 11-13-95.)

C. The installation of the specified water management and sediment control measures shall be accomplished in accordance with the most recent standards and specifications available from the Ohio Department of Natural Resources. A copy of such standards and specifications will be kept on file in the offices of the Public Works Director and Development Services Director.

(Ord. 127-03. Passed 8-11-03.)

(3) The approved plan for water management and sedimentation control required of the landowner or his agent shall include, but not be restricted to, the following requirements:

A. Location of any buildings, structures, utilities, sewers, water and storm drains on the site where the work is to be performed.

B. Location of any building or structure on land of adjacent property owners within 100 feet of the site.

C. Elevations and/or contours, dimensions, location and extent of all work proposed to be done, and the existing elevations and/or contours of the land all in two foot increments.

D. A certification of the quantity of excavation and fill involved.

E. Detailed plans of all drainage provisions, retaining walls, cribbing, vegetative practices, erosion and sediment control measures, location of proposed fences around sediment basins, steep excavations, or ponding areas, and other protective devices to be constructed in connection with, or as a part of the proposed work, together with a map showing the drainage area of land tributary to the site, and estimated cubic foot per second run-off of the area served by any drain, computed in accordance with current City storm drainage criteria.

F. A timing schedule and sequence indicating the anticipated starting and completion dates of the development; stripping and/or clearing, rough grading and construction, final grading and vegetative establishment, and maintenance and the time of exposure of each area prior to the completion of effective erosion and sediment control measures.

G. The estimated cost of the grading and/or filling and the cost of the required erosion controls.

(c) Approval Procedures.

(1) Three backline copies of complete plans shall be filed with the office of the City Engineer.

(2) In order to insure that emergency measures could be taken by the City if the water management and sediment control measures were not implemented according to the

agreed upon plan and schedule, a performance bond in the amount of the cost of the water management and sediment control measures shall be required to be filed with the City. Such performance bond shall authorize immediate payment to the City upon certification of the Planning Commission that necessary emergency work must be done immediately to ensure proper water management and sediment control as a result of the landowner's failure to complete or adhere to the approved water management and sediment control plan.

(3) The Planning Commission and the City Engineer shall make a continuing review and evaluation of the methods used and overall effectiveness of the storm water management and sediment control program.
(Ord. 167-95. Passed 11-13-95.)

(d) Enforcement.

(1) The Public Works Director or his designee shall enforce compliance with the approved sediment control plans for projects that involve the construction of public infrastructure, including residential and commercial subdivisions.

(2) The Development Services Director or his designee shall enforce compliance with the approved sediment control plans for individual lot development projects.

(3) The Public Works Director and Development Services Director have the authority to issue stop work orders to any person, firm or corporation performing work where sediment and erosion control measures are not provided in accordance with the approved site development plans.
(Ord. 127-03. Passed 8-11-03.)

1117.07 DETENTION/RETENTION OF STORM WATER.

Detention/retention of storm water shall be required for each subdivision unless specifically exempted by the Planning Commission.

The objective of a detention/retention facility is to regulate the run-off from a rainfall and to control discharges to downstream areas in order to reduce the impact on downstream drainage systems.

(a) **Definitions.** Unless the context specifically indicates otherwise, the meaning of the terms used in this section shall be as follows:

(1) "Storm water detention/retention facility" means any structure or facility used to detain storm water run-off, and gradually release the stored run-off at an acceptable rate.

(2) "Detention basin" means dry surface areas created by constructing an excavated or embankment basin.

(3) "Retention basin" means permanent ponds where additional storage capacity is provided above the normal water level.

(4) "Storm water run-off" means that portion of rainfall that is not lost to infiltration, surface storage or evaporation.

(b) **Exemptions to Detention/Retention Requirements.** The developer may apply to the Planning Commission for exemption from construction of detention/retention facilities. Each request will be reviewed on its own merit and as it affects the entire drainage area in which it lies and into which it flows.

(c) **Design.**

(1) **Quantity of run-off.** The peak rate of run-off during the 100 year post development storm cannot exceed the peak rate of run-off during the two year pre-development storm. For those areas where a study of the downstream area indicates the extended time of high discharge and/or velocity due to restricted release rate and storage may cause flooding and/or excessive erosion, the City Engineer may require additional controls.

(d) **Submission Requirements.** Plans and supporting data to verify storage volumes, release dates, etc., shall be submitted to the City Engineer. The submission shall include, but is not limited to, the following:

(1) A plan prepared by a registered professional engineer which may be the improvement plan, drainage and grading plan or similar plan at a scale of one inch to 100 feet or larger, shall be submitted and contain at least the following information:

A. All existing and proposed drainage facilities.

B. Existing and proposed contours.

C. Existing structures.

D. The detention/retention facility with outlet structures.

E. Cross section through detention/retention facility.

F. Pertinent elevations, e.g., water surface, flowline of flow control devices, etc.

G. Emergency spillway designed to pass a 100 year storm and with a minimum

depth of one foot.

H. Any other information required by the City Engineer to clarify intent or design features.

(2) All calculations, outlines and designation of drainage areas, and other supporting data in sufficient detail and form to facilitate an expedient and accurate review.

(e) Fees. Review work performed by professional consultants and other costs incurred by the City may be charged to the applicant at their billed cost plus ten percent (10%). The fee must be paid in full prior to approval of the plans by the Planning Director.
(Ord. 167-95. Passed 11-13-95.)

CHAPTER 1182
Detention/Retention Requirements

- 1182.01 Introduction.
- 1182.02 Exemptions to detention/retention requirements.
- 1182.03 Design.
- 1182.04 Submission requirements.
- 1182.05 Fee.

CROSS REFERENCES

- Storm drain conductors and leaders - see OAC 4101:2-51-69
- Special storm sewer rules - see S.U. & P.S. 925.07
- Storm drainage and sediment control - see P. & Z. Ch. 1117

1182.01 INTRODUCTION.

(a) Detention/retention of stormwater refers to storage of excess runoff on the site of a development and gradual release of the stored runoff at an acceptable rate.

(b) Detention basins are dry surface areas created by constructing an excavated or embankment basin.

(c) Retention basins are permanent ponds where additional storage capacity is provided above the normal water level.

(d) The objective of a detention/retention facility is to regulate the runoff from a rainfall and to control discharges to downstream areas in order to reduce the impact on downstream drainage systems.

(e) Detention/retention of stormwater will be required for each subdivision or land development unless specifically exempted. (Ord. 94-84, Passed 7-9-84.)

1182.02 EXEMPTIONS TO DETENTION/RETENTION REQUIREMENTS.

(a) The developer may apply to the City Engineer for exemption from construction of detention/retention facilities.

(b) Each request will be reviewed on its own merit and as it affects the entire drainage area in which it lies and into which it flows.

(c) If an exemption is granted by the City Engineer, the developer shall be required to pay a fee in lieu of the construction of the detention/retention facilities. The fee shall be 75 cents per cubic foot of detention/retention volume that would have been required if an exemption had not been granted. This fee must be paid to the City prior to recording of the plat of a subdivision or issuance of the building permit if no subdivision plat is involved.

(d) The developer may appeal the denial of an exemption to the Board of Zoning Appeals. (Ord. 30-00. Passed 3-13-00.)

1182.03 DESIGN.

(a) Runoff and Volume Calculation Methods. The methods outlined in the City Subdivision Rules and Regulations shall be used to determine the runoff and storage volumes.

(b) Quantity of Runoff.

(1) The peak rate of runoff during the 100 year post development storm cannot exceed the peak rate of runoff during the two year pre-development storm.

(2) For those areas where a study of the downstream area indicates the extended time of high discharge and/or velocity due to restricted release rate and storage may cause flooding and/or excessive erosion, the City Engineer may require additional controls.

(c) Basin Construction.

(1) The side slopes of a detention/retention basin shall not exceed four to one and shall be seeded or sodded.

(2) The bottom of the basin shall be seeded or sodded and sloped to the outlet flow control device. A method of carrying low flow through the basin shall be provided and include appropriate erosion control.

(3) The maximum water depth for detention basins shall be six feet.

(4) The top of the embankment shall have a minimum width of eight feet.

(5) Outlet flow control devices may be either single-stage or multi-stage.

(6) Other requirements may be imposed for specific cases.

(Ord. 94-84. Passed 7-9-84.)

1182.04 SUBMISSION REQUIREMENTS.

Plans and supporting data to verify storage volumes, release rates, etc., shall be submitted. The submission shall include, but is not limited to, the following:

- (a) A plan, which may be the Improvement Plan, Drainage and Grading Plan, or similar plan at a scale of 1" - 100' or larger, shall be submitted and contain at least the following information:
 - (1) The outline and designation of the drainage area(s).
 - (2) All existing and proposed drainage facilities.
 - (3) Existing and proposed contours.
 - (4) Existing structures.
 - (5) The detention/retention basin with outlet structures.
 - (6) Pertinent elevations (e.g. water surface, flowline of flow control devices, etc.)
 - (7) A recommendation from a soils engineer for the foundation and design of the embankment to be used for the retention/detention basin.
 - (8) Any other information required by the City to clarify intent or design features.
- (b) All calculations and other supporting data in sufficient detail and form to facilitate an expedient and accurate review.

(Ord. 94-84. Passed 7-9-84.)

1182.05 FEE.

Work performed by professional consultants and other costs incurred by the City will be charged to the applicant at their billed cost plus ten percent (10%). The fee must be paid in full prior to approval of the plans by the City Engineer.
(Ord. 94-84. Passed 7-9-84.)

CHAPTER 1192
Source Water Protection Program

- 1192.01 Definitions.
- 1192.02 Designation of protection areas.
- 1192.03 Regulated substances.
- 1192.04 General provisions.
- 1192.05 Regulated substance storage provisions: above ground storage.
- 1192.06 Underground storage tanks.
- 1192.07 Management of other potential pollution sources.
- 1192.08 Violation, penalty and administrative remedies.
- 1192.09 Variance and appeals under the Source Water Protection Program.
- 1192.10 Regulated substances list.

1192.01 DEFINITIONS.

The following terms shall have the following meanings within the context of this Chapter:

(a) **ABOVEGROUND STORAGE TANK (AST).**

This term, as it applies to Source Water Protection, refers to any non-portable container and supporting structure, excluding all pipes connected thereto, which is used to store an accumulation of Regulated Substances and in which more than 90 percent of the final volume of the storage container is at or above the final ground elevation.

(b) **BEST MANAGEMENT PRACTICES (BMP).**

This term, as it applies to Source Water Protection, refers to schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of the environment. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills, and leaks.

(c) **BOREHOLE.**

This term, as it applies to Source Water Protection, refers to a hole drilled/cored into the ground to obtain geological information, release water, etc.

(d) **BUSTR.**

This term, as it applies to Source Water Protection, refers to the Ohio Bureau of Underground Storage Tank Regulations.

(e) **CERCLA.**

This term, as it applies to Source Water Protection, refers to the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 et seq., Pub. L. 96-510, December 11, 1980), as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Pub. L. 99-499, October 17, 1986; 100 Stat. 1613). All references to CERCLA within this regulation are meant to indicate CERCLA, as amended by SARA.

(f) **CITY.**

This term, as it applies to Source Water Protection, refers to the City of Fairfield and any of its designated agents.

(g) **DRY WELL.**

This term, as it applies to Source Water Protection, refers to a type of drainage well used for the underground disposal of storm water runoff from paved areas, which include parking lots, streets, highways, residential subdivisions, and building rooftops; agricultural areas; and industrial areas.

(h) **EPCRA.**

This term, as it applies to Source Water Protection, refers to the Emergency Planning and Community Right-To-Know Act of 1986, also known as the Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 (Pub. L. 99-499, 42 U.S.C. 960).

(i) **EXISTING FACILITY or EXISTING STORAGE UNIT.**

This term, as it applies to Source Water Protection, refers to any Facility or Regulated Substance storage unit in operation or for which construction commenced on or before the effective date of this Chapter. Construction of a Facility or Regulated Substance storage unit has commenced if:

- (1) The owner or operator has obtained the Federal, State and local approvals or permits necessary to begin physical construction; and either
- (2) A continuous on-site, physical construction program has begun; or the owner or operator has entered into contractual obligations for physical construction of the Facility or Regulated Substance storage unit which cannot be canceled or modified without substantial loss.

(j) EXTREMELY HAZARDOUS SUBSTANCE.

This term, as it applies to Source Water Protection, refers to any substance listed by the United States Environmental Protection Agency under 40 CFR Part 355 appendixes A and B; and any substance listed by the commission pursuant to divisions (B)(4) and (C)(5) of Section 3750.02 of the Ohio Revised Code.

(k) FACILITY.

This term, as it applies to Source Water Protection, refers to all contiguous land and related structures, appurtenances, and improvements on land with the same Facility Operator. A Facility may consist of several operations. For these purposes, contiguous land shall include land separated by a public right-of-way so long as such land would otherwise be contiguous. The term Facility includes all principal and accessory uses, including residential uses.

(l) FACILITY OPERATOR.

This term, as it applies to Source Water Protection, refers to the person or designee in possession or control of a Facility or Regulated Substance storage unit, regardless of whether such person is the owner, lessee, or other possessor. The term also includes contractors or site managers at construction sites who are responsible for the general management of Regulated Substances located on site.

(m) GREAT MIAMI BURIED VALLEY AQUIFER.

This term, as it applies to Source Water Protection, refers to a regionally extensive groundwater aquifer system providing drinking water to communities throughout central and southwest Ohio. The Great Miami Buried Valley Aquifer is a designated Sole Source Aquifer under the federal Safe Drinking Water Act, signifying a protected status as a valued natural resource.

(n) GEOHERMAL WELL.

This term, as it applies to Source Water Protection, refers to well(s) that have been drilled to access and utilize heat sources from within the earth.

(o) GROUNDWATER.

This term, as it applies to Source Water Protection, refers to all the water naturally occurring beneath the surface of the ground, excluding those waters in underground piping for water, wastewater, and/or storm water distribution/collection systems.

(p) HAMILTON TO NEW BALTIMORE GROUNDWATER CONSORTIUM.

This term, as it applies to Source Water Protection, refers to a consortium of seven public and industrial groundwater suppliers and users in the Hamilton to New Baltimore area of Butler and Hamilton Counties, Ohio. Members are: Greater Cincinnati Water Works, The City of Fairfield, The City of Hamilton, Southwest Regional Water District, Millercoors LLC, Butler County Water and Sewer Southwestern Ohio Water Company, and their successors.

(q) IMPERVIOUS SURFACE.

This term, as it applies to Source Water Protection, refers to any surface which prevents the absorption of Regulated Substances into surrounding soils or other pervious surface areas, and which will not react with the Regulated Substance being stored in such a way that the surface will deteriorate and no longer be impervious.

(r) NEW FACILITY OR NEW STORAGE UNIT.

This term, as it applies to Source Water Protection, refers to any Facility or Regulated Substance storage unit beginning operation after the effective date of this chapter.

(s) NON-CONFORMING FACILITY or NON-CONFORMING STORAGE UNIT.

This term, as it applies to Source Water Protection, refers to any existing Facility or Regulated Substance storage unit which, as of the effective date of this ordinance, would otherwise be prohibited within a designated TOT.

(t) OAC.

The Ohio Administrative Code.

(u) OHIO EPA.

The Ohio Environmental Protection Agency.

(v) PERMANENT.

This term, as it applies to Source Water Protection, refers to more than ninety (90) consecutive days.

(w) PESTICIDE.

This term, as it applies to Source Water Protection, refers to (1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest as defined in Section 2 (t) of the Federal Insecticide, Fungicide, and Rodenticide Act (P.L. 100-64, 100-464, to 100-526 and 100-532); and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. The term shall include all fungicides, insecticides, nematicides, or other substances used for the control of pests.

(x) PRIMARY CONTAINMENT.

This term, as it applies to Source Water Protection, refers to the first level of containment, i.e., the inside portion of a container or storage device which comes into immediate contact on its inner surface with a Regulated Substance.

(y) PRINCIPAL.

This term, as it applies to Source Water Protection, refers to the primary, predominant, or foremost use or activity at a Facility.

(z) PROCESS.

This term, as it applies to Source Water Protection, refers to the incorporation of a Regulated Substance into a product. Includes making mixtures, repackaging, or using a Regulated Substance as a feedstock, raw material, or starting material for making another chemical.

(aa) RAIL SWITCH YARD.

This term, as it applies to Source Water Protection, refers to any area or railroad center where trains/railroad cars are made up, serviced, switched from track to track, or stored.

(bb) RCRA.

This term, as it applies to Source Water Protection, refers to the Resource Conservation and Recovery Act of 1976 (Pub. L. 94-580; 42 U.S.C. 6901 et seq.), as amended.

(cc) REGULATED SUBSTANCES.

This term, as it applies to Source Water Protection, refers to those substances identified in Subsection 1192.10(a) of this Chapter which are regulated under the Source Water Protection Program.

(dd) REGULATED SUBSTANCE STORAGE AREA.

This term, as it applies to Source Water Protection, refers to that area where Regulated Substances are stored. A Regulated Substance storage area can include single or multiple Regulated Substance storage units.

(ee) REGULATED SUBSTANCE STORAGE UNIT.

This term, as it applies to Source Water Protection, refers to any underground storage tank, aboveground storage tank, drum, carboy, or other container used for the storage of one or more Regulated Substance(s), including silo, bag, tank wagon, box, glass, cylinder, tote bin, and truck body, rail car, or tanker when used for the permanent or temporary storage of Regulated Substances.

(ff) RELEASE.

This term, as it applies to Source Water Protection, refers to the spilling, leaking, pumping,

pouring, emitting, emptying, or dumping of Regulated Substances upon or into any land or water. Release includes, without limitation, leakage of such materials from failed or discarded containers or storage systems and disposal of such materials into any on-site sewage disposal system, dry-well, catch basin, or landfill. The term "release" when used and applied in this Chapter does not include the following:

(1) Disposal, in accordance with all applicable legal requirements and in accordance with the requirements of RCRA regulations, of hazardous wastes in a Facility that has received and maintained all necessary legal approvals for that purpose;

(2) Disposal or release of any substance in compliance with applicable legal requirements, including without limitation, the terms and provisions of a valid municipal, State, or Federal permit if such permits are required by applicable environmental laws;

(3) Disposal, in accordance with all legal requirements, of any substance to a sanitary sewer system that has received and maintained all necessary legal approvals for that purpose;

(4) Disposal, in accordance with all legal requirements, of "sanitary sewage" to subsurface sewage disposal systems as defined and permitted by state or county health departments;

(5) Any discharge of a petroleum substance in a quantity less than twenty-five (25) gallons unless such petroleum discharge enters a dry well, storm sewer, test well, monitoring well, abandoned well or surface water body; or

(6) Any discharge of hazardous materials listed in SARA Title III or CERCLA when the discharge is less than twenty-five (25) pounds within a twenty-four (24) hour period in the one (1) and five (5) year time-of-travel zone, or less than one hundred (100) pounds within a twenty-four (24) hour period in the ten (10) year time-of-travel zone; or

(7) The application of agricultural chemicals, fertilizers, mineral acids, organic sulfur compounds, etc. as used in routine agricultural operations and applied under best management practices as indicated by soil tests, the Ohio State University Cooperative Extension Service, the Soil and Water Conservation District, and label directions approved by the United States Environmental Protection Agency or the Ohio Department of Agriculture.

(gg) REPLACEMENT.

This term, as it applies to Source Water Protection, refers to the physical removal of a Regulated Substance storage unit for installation of a new Regulated Substance storage unit.

(hh) RESTRICTED USE PESTICIDE.

This term, as it applies to Source Water Protection, refers to any pesticide or pesticide use classified by the administrator of the United States Environmental Protection Agency for use only by a certified applicator or by an individual working under the direct supervision of a certified applicator.

(ii) SALVAGE YARD.

This term, at it applies to Source Water Protection, refers to a location where wrecked or decommissioned vehicles and machinery are brought; their usable parts are sold, while the unusable metal parts, known as scrap metal parts, are sold to metal-recycling companies.

(jj) SECONDARY CONTAINMENT.

This term, as it applies to Source Water Protection, refers to containment external to and separate from primary containment designed to contain a release from a primary containment unit. Secondary containment may include, but is not limited to, double walls, dikes, vaults, or impervious liners (both natural and synthetic).

(kk) SENSORY RECEPTORS.

As a part of the body's nervous system, sensory receptors are responsible for processing obtained information from the surrounding environment.

(ll) SOURCE WATER PROTECTION PROGRAM (SWPP).

In 1996, the Safe Drinking Water Act was amended again. Section 1453 was added, providing states with federal funding to complete source water assessments for their public water systems. At that time, the program was extended to include surface water systems and was renamed "Source Water Protection". Also an additional piece of information was required in an assessment- A susceptibility analysis. It is the intent of Congress that public water systems use the information in their source water assessment to develop a drinking water Source Protection Plan.

(mm) STORM WATER MANAGEMENT PLAN.

This term, as it applies to Source Water Protection, refers to the Ohio Environmental Protection Agency requirements to control pollutants in storm water discharge from municipal separate storm sewer systems, industrial storage facilities and construction activities. OEPA requirements include such activities as training, planning, maintenance, construction and facilities management with a common focus on water quality issues.

(nn) STORM WATER MANAGEMENT ZONE.

This terms, as it applies to Source Water Protection, refers to any area applicable to the Storm Water Management Plan.

(oo) TEMPORARY.

This term, as it applies to Source Water Protection, refers to a period of ninety (90) consecutive days or less. Regulated Substances and the individual storage units containing such substances that are used on site as part of regular business operations are not to be considered temporary storage.

(pp) TIME OF TRAVEL ZONE (TOT).

This term, as it applies to Source Water Protection, refers to the advective travel time for water to flow through an aquifer and reach a well or wellfield.

(qq) UNDERGROUND STORAGE RELEASE COMPENSATION BOARD (USRCB).

The Ohio Petroleum Underground Storage Tank Release Compensation Board (The Board) consists of government and industry representatives and has the primary responsibility of administering the Petroleum Financial Assistance Fund. The Fund is a source of income derived from mandatory per-tank fees and is available to eligible underground storage tank owners to reimburse petroleum release clean up costs.

(rr) UNDERGROUND STORAGE TANK (UST).

This term, as it applies to Source Water Protection, refers to one or any combination of tanks, including the underground pipes connected thereto, that are used to contain an accumulation of Regulated Substances the volume of which, including the volume of the underground pipes connected thereto, is 10% or more beneath the surface of the ground. For the purposes of this Chapter, the term does not include:

- (1) Pipeline facilities, including gathering lines, regulated under the "Natural Gas Pipeline Safety Act of 1968", 82. Stat, 720, 49 U.S.C.A. 2001, as amended;
- (2) Surface impoundments, pits, ponds, or lagoons;
- (3) Storm or waste water collection systems;
- (4) Flow-through process tanks;
- (5) Septic tanks;
- (6) Storage tanks located in underground areas when the tanks are located on or above the surface of the floor and the integrity of the tank is periodically visually evaluated; or
- (7) Liquid traps or associated gathering lines directly related to oil or gas production or gathering operations.

(ss) USE or OTHERWISE USE.

This term, as it applies to Source Water Protection, refers to handling, transferring, processing,

packaging, treating, emitting, discharging, or disposal of Regulated Substances at a Facility.

(tt) WELLFIELD.

A tract of land that contains one or a number of wells (wellheads) for use in public water supplies.

(uu) WELLHEAD.

An individual well for supplying water.

(vv) SOURCE WATER PROTECTION AREA (SWPA).

The surface and subsurface areas supplying water to wells or wellfields through which contaminants are likely to move and reach such wells or wellfields. The Source Water Protection Area includes the one (1), five (5), and ten (10) year time- of-travel zones.

(ww) SOURCE WATER PROTECTION PROGRAM (WHPP).

A program established by Section 1428 of the Safe Drinking Water Act of 1986 (Public Law 93-523) designed to minimize the potential for contamination of groundwater being used as a source of public drinking water.

(Ord. 120-11. Passed 11-28-11.)

1192.02 DESIGNATION OF PROTECTION AREAS.**(a) Source Water Protection Areas Established.**

(1) Certain areas of the City of Fairfield are hereby delineated into the following districts for the protection of groundwater resources and shall be collectively referred to as the "Source Water Protection Area" (SWPA). A map of the SWPA (SWPA map) is on file in the City Planning Department and the office of the Clerk of Council, which map is hereby incorporated herein by reference.

(2) **One (1) Year Time-of-Travel (TOT) Zone.** The one (1) year TOT zone is that area around the well or wellfield from which groundwater will be drawn for use in a public water supply in a one (1) year or less time period. The one (1) year TOT is hereby established in those areas of the City of Fairfield as illustrated in Exhibit A of this Chapter.

(3) **Five (5) Year Time-of-Travel (TOT) Zone.** The five (5) year TOT zone is that area located outside the one (1) year TOT zone but within the boundaries of the five (5) year TOT zone from which groundwater will be drawn for use in a public water supply in a five (5) year or less time period. The five (5) year TOT is hereby established in those areas of the City of Fairfield as illustrated in Exhibit A of this Chapter.

(4) **Ten (10) Year Time-of-Travel (TOT) Zone.** The ten (10) year TOT zone is that area located outside the one (1) and five (5) year TOT zones but within the boundaries of the ten (10) year TOT zone from which groundwater will be drawn for use in a public water supply in a ten (10) year or less time period. The ten (10) year TOT is hereby established in those areas of the City of Fairfield as illustrated in Exhibit A of this Chapter.

(b) Redelineation of the SWPA.

(1) **Procedure for Proposals Respecting Changes/Redelineation of SWPA Designation.** Any change in the boundary of a SWPA resulting from redelineation of a SWPA shall be effective after approval of the redelineation by Fairfield City Council. Public notice of the change shall be provided in accordance with requirements for the City of Fairfield but shall include no less than the following:

A. Notification through publication of the change for one (1) day in at least one (1) newspaper with general circulation in the community; and

B. Notification via first class mail to those registered Facility Operators in the pre-existing SWPA whose location in a TOT zone has changed as a result of the redelineation, and any non-residential property owners in the newly delineated portions of the updated SWPA. Said notification shall be mailed, via first class mail, no less than thirty (30) days prior to the public hearing date and the notification shall be in the form of a letter stating the results of the redelineation and any subsequent change in the facility's regulatory status.

(c) Impact on SWPA Facilities.

(1) Where an existing facility required to comply with the provisions set forth herein is no longer located in a SWPA as a result of the redelineation, the facility is no longer subject to compliance with the requirements of this Chapter.

(2) Any facility previously located outside the boundary of the SWPA that is located inside the boundary of the SWPA as a result of the redelineation must be registered in accordance with Subsection 1192.04(d) of this Chapter and must comply with those provisions required of existing facilities for the TOT zone in which the facility is located as applicable and in accordance with the time frames specified for those applicable provisions.

(3) Any registered facility whose classification within a TOT zone is changed to a different TOT zone as a result of the redelineation must submit an amended facility registration to the

Development Services Director or Designee in accordance with Subsection 1192.04(d)(7) of this Chapter and must comply with those provisions required of existing facilities as applicable for the new TOT zone in which that facility is now located in accordance with the time frames specified for those applicable provisions.

(d) Prohibitions in the Source Water Protection Area.

(1) One (1) Year TOT Prohibitions. Establishment of the following new activities/land uses is prohibited in the one (1) year TOT as of the effective date of this Chapter:

- A. Commercial junk and salvage yards;
- B. Commercial sanitary/solid waste/construction and demolition debris landfills;
- C. The disposal of shingles, asphalt, asbestos and/or lead-based or lead containing materials in an unlicensed landfill;
- D. The manufacturing, processing, or recycling of Regulated Substances as the principal activity where storage, handling, or use of a Regulated Substance exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- E. Commercial establishments for gasoline and or diesel fuel dispensing service stations, motor vehicle repair/service shops and/or body repair where storage or use of a Regulated Substance exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- F. Trucking or bus terminals where storage or use of a Regulated Substance exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- G. Animal feedlots exceeding one thousand (1,000) animal units;
- H. Primary metal product industries where storage or use of a Regulated Substance exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- I. Metal plating, polishing, etching, engraving, anodizing, or similar processes where storage or use of a regulated substance exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- J. Lawn, garden, pesticide, and agricultural services with on-site bulk mixing or blending of fertilizers, pesticides, and other industry-related chemicals for commercial application when quantities of concentrated fertilizers, pesticides, and other industry-related chemicals stored on site exceed fifty-five (55) gallons aggregate for liquid materials or four hundred forty (440) pounds aggregate for dry weights;
- K. Permanent storage of regulated substances in trucks, trailers, tankers, or rail cars not meeting conditions specified in Subsection 1192.05(b)(3) of this Chapter where storage of the Regulated Substance(s) exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- L. Use of oil, waste oil, or similar liquid petroleum-type products for dust suppression;
- M. Use of fly ash or other ash material for fill material. This prohibition does not apply where fly ash is used as a component in cement, concrete, or cinder block;
- N. Dry cleaning facilities with on-site dry cleaning service where storage or use of a Regulated Substance(s) exceeds fifty-five (55) gallons aggregate for liquid materials or four-hundred forty (440) pounds aggregate for dry weights;
- O. Installation of underground storage tanks except as permitted in Subsection 1192.06(d) of this Chapter; and
- P. Temporary or permanent storage of regulated substances other than vehicle fuels, vehicle

lubricants, and fuel for building and/or process heating in new underground storage tanks (USTs), except as permitted in Subsection 1192.06(d) of this Chapter.

- Q. Rail switch yards and container ports.
- R. The application of sewage sludge solids.
- S. All oil and gas drilling and exploration.

(2) Five Year TOT Prohibitions. Establishment of the following new activities/land uses is prohibited in the five-year TOT zone as of the effective date of this chapter:

- A. Points A. - D., K., L., O., P., Q., R., and S. in Subsection 1192.02(d)(1).

(3) Ten Year TOT Prohibitions. Establishment of the following new activities/land uses is prohibited in the ten-year TOT zone as of the effective date of this provision:

- A. Points B., C., K., L., O., P., Q., R., and S. in Subsection 1192.02(d)(1).

(4) Conditional Uses Applicable to all Source Water Protection Time- of- Travel (TOT) Zones. The following land uses/activities will only be permitted within specified TOTs based on case-by-case review by the Board of Zoning Appeals. Each case must be submitted as a variance request to the Board of Zoning Appeals in accordance with Section 1137.05 of these Codified Ordinances:

A. Use of fly ash as fill material as described in Subsection 1192.02(d)(1)M. at any facility or property located in the ten-year TOT zone. This prohibition does not apply where fly ash is used as a component in cement, concrete or cinder block.

B. Lawn, garden, pesticide, and agricultural services, located in the five-year TOT zone, which have on-site bulk mixing or blending of fertilizers, pesticides, and other industry-related chemicals for commercial application when quantities of concentrated fertilizers, pesticides, and other industry-related chemicals stored on site meet or exceed five hundred (500) gallons aggregate for liquid materials or four thousand (4,000) pounds aggregate for dry weights.

(e) General Applicability.

(1) Unless specified otherwise, all provisions of this Chapter apply to any Facility Operator of any real property or business in the City of Fairfield when storing or otherwise using Regulated Substances as defined in Subsection 1192.10(a) of this Chapter, or conducting any activity regulated under Section 1192.07 herein, and located within a Source Water Protection Area as established in Subsection 1192.02(a) of this Chapter. It is the responsibility of the Facility Operator to determine the applicability of this Chapter to his or her property and/or business, and to comply with all requirements established in this rule as applicable to the Facility. Failure to do so shall not excuse any violations of this Chapter.

(2) Limited Exemptions. The following are exempt from the provisions set forth herein except for compliance with Subsections 1192.04(d) through 1192.04(i) of this Chapter:

A. Indoor storage/use of Regulated Substance(s) in an area capable of fully containing a total release of the Regulated Substance(s) within the facility or draining the release to a wastewater treatment system capable of and permitted to/agreeable to treating the released substance(s). Septic tank systems do not qualify as a wastewater treatment system under this exemption;

B. Sale/storage of Regulated Substances packaged as consumer products in original containers when the aggregate quantity on site meets or exceeds those thresholds established in Subsection 1192.10(a)(3) of this Chapter;

- C. Current hazardous waste storage areas at RCRA permitted facilities;
- D. Radioactive materials regulated by the U.S. Nuclear Regulatory Commission;

E. Aboveground storage tanks in the five (5) year TOT used exclusively for the storage of residential quantities of Grade 1 or Grade 2 heating fuels and diesel fuel; and

- F. Oil/water separator underground storage tanks.

(3) Full Exemptions. The following uses of Regulated Substances are exempt from the provisions set forth herein.

- A. Laboratory activities;
- B. Chemical storage tanks containing pressurized gases such as chlorine, propane, hydrogen, and nitrogen;
- C. Household use of Regulated Substances packaged for consumer use in original pre-packaged containers;
- D. Excavation or removal of earth materials;
- E. Office and maintenance/janitorial use of Regulated Substances packaged as consumer products. This exemption does not apply to hydrocarbon or halogenated hydrocarbon solvents;
- F. Oils and fluids within electrical utility transformers/switches except when stored in quantities meeting or exceeding thresholds established in subsection 1192.10(a)3 of this chapter;
- G. Materials present as a solid inside of a manufactured item;
- H. Transport of Regulated Substances in trucks, trailers, tankers, or rail cars to facilities through the Source Water Protection Area, provided the Regulated Substances are fueling the transporting vehicle, or the transporting vehicle is in continuous transit, making a delivery, or is stopped for a period of time not to exceed twenty- four (24) hours;
- I. Sale/storage of Regulated Substances packaged as consumer products in original containers when the aggregate quantity on site is less than those thresholds established in Subsection 1192.10(a)3 of this Chapter.

(Ord. 120-11. Passed 11-28-11.)

1192.03 REGULATED SUBSTANCES.**(a) Regulated Substances.**

(1) **Defined.** Regulated Substances shall be those substances listed in Subsection 1192.10(a)(1) herein when storage or use at a facility at any time of the year meets or exceeds those thresholds specified in Subsection 1192.10(a)(2). A Facility Operator may, at their choice, calculate the quantity of Regulated Substances stored or used on site as follows:

A. **Maximum amount at any one time.** The Facility Operator may report the quantity of Regulated Substances stored or otherwise used on site as the maximum amount found on site at any one time during the course of a year. Where there are seasonal fluctuations in Regulated Substance use, the amount should be based on storage or use of Regulated Substances during peak times of the year; or

B. **Monthly daily average.** The Facility Operator may calculate the daily average of Regulated Substance storage or use on site over the course of a month. The Facility Operator must calculate this average using the anticipated quantity of Regulated Substances storage or use during peak months at the facility.

(b) Exemptions from the Regulated Substance Listing.

(1) A substance listed in Subsection 1192.10(a)(1) may be partially or fully exempt from regulation under this Chapter if use or storage of the Regulated Substance is exempted under Subsections 1192.02(e)(2) or (3) of this Chapter, or if the Facility Operator can provide proper documentation to the Development Services Director or Designee that a Regulated Substance does not present a threat to groundwater due to the nature of the substance. Information from the substance manufacturer or other qualified, verifiable source indicating that the substance does not present a threat to groundwater shall be considered proper documentation.

(c) Additions/Deletions to the Regulated Substance List.

(1) The Development Services Director or Designee reserves the right to designate additional substances or remove substances from the list of Regulated Substances in Subsection 1192.10(a)(1) as necessary for the protection of the groundwater resource. Public notice of changes to the Regulated Substance list shall be provided by the Development Services Director or Designee in accordance with public notice requirements for the City of Fairfield but shall include no less than:

A. Notification of the intent to remove or add a Regulated Substance to the list via mail to all registered Facility Operators no later than thirty (30) days prior to action by the Development Services Director or Designee;

B. Notification through publication of the change for one (1) day in at least one (1) paper with general circulation in the community; and

C. Notification via first-class mail to all registered Facility Operators no later than thirty (30) days after removal or addition of Regulated Substances to the list by the Development Services Director or Designee.

(Ord. 120-11. Passed 11-28-11.)

1192.04 GENERAL PROVISIONS.**(a) Purpose.**

(1) The purpose of this Chapter is to safeguard the public health, safety, and welfare of persons and property in the City of Fairfield by protecting designated groundwater supplies from degradation resulting from the improper storage, use, or discharge of Regulated Substances in and around existing and future wellfields and their recharge areas, and to promote the economic viability of the City of Fairfield by balancing the protection of groundwater with the promotion of the economy of the City.

(b) Compliance with Existing Federal, State and Local Regulations.

(1) Facility Operators subject to regulation under this Chapter must comply fully with all existing applicable federal, state, and local regulations in addition to any of the requirements established in this Chapter.

(c) Continuation of Existing Non-conforming Facilities and Non-conforming Uses of Land.

(1) Where, at the effective date of the adoption of, or amendment to, the provisions set forth herein, lawful use of land exists that is no longer permissible under the provisions of Subsection 1192.02 (d) of this Chapter as enacted or amended, such use may be continued, so long as it remains otherwise lawful, subject to provisions of this Chapter.

(2) Any non-conforming use of land, building, or regulated substance storage unit existing as of the effective date of adoption of, or amendment to, the provisions set forth herein and which operates within a Source Water Protection Area Time-of-Travel Zone is permitted to continue operation as a non-conforming existing land use, building, or regulated substance storage unit provided it remains otherwise lawful and complies with the provisions of this Chapter which apply to existing facilities.

(3) An existing use made non-conforming solely by application of the Source Water Protection provisions set forth herein shall be treated as non-conforming only as to those uses prohibited by these Source Water Protection provisions. As to existing uses not prohibited or otherwise regulated by these Source Water Protection provisions, those uses remain conforming such that they may be expanded or otherwise altered without violation of this Chapter.

(d) Facility Registration.

(1) Registration. Facility registration is required once every two (2) years for any facility where on site storage or use of Regulated Substances meets or exceeds those quantities established in Subsection 1192.10(a)(2) of this Chapter, or for any activity identified as a regulated activity under Section 1192.07 of this Chapter or for any active ground water monitoring or remediation system regulated by the USEPA, Ohio EPA or BUSTR. A Facility Operator may register the facility or, at the request of the Facility Operator, the Development Services Director or Designee may register the facility. The Development Services Director or Designee shall conduct any facility registration in the following manner:

A. The Development Services Director or Designee shall provide written notice of the intent to register the facility no less than fourteen (14) days prior to the registration date;

B. The registration shall be conducted at reasonable times during normal business hours. To help ensure accuracy of the registration and safety of the persons involved, the Facility Operator or designee must accompany the Development Services Director or Designee during the registration;

C. The registration will not unreasonably interfere with facility operations; and

D. The scope of the registration will be limited to gathering information necessary to complete the registration required by this Section.

All facility registrations must be completed and, where applicable, submitted to the

Development Services Director or Designee within one hundred eighty (180) days of the date a property becomes subject to regulation under this Chapter, and by July 1 of every second year thereafter. A Facility Operator choosing to have their facility registered by the Development Services Director or Designee must contact the Development Services Director or Designee no less than ninety (90) days before a registration is due to ensure completion of the registration by the required due date.

(2) Registration Requirements. Facility registration will include, but is not necessarily limited to, information on the following:

A. Name, address, and phone number of the registered Facility;

B. Facility Operator name and number;

C. Emergency contact, address, and phone;

D. Primary and, where applicable, secondary business activities at the Facility, including Standard Industrial Classification codes or Chemical Abstract Service (CAS) number and a brief description of how Regulated Substances are used at the Facility;

E. The types, quantity, and location of Regulated Substances stored or otherwise used on-site. Where the Regulated Substance is identified by a common trade name or a mixture, the primary chemical component(s) must be identified;

F. The manner of Regulated Substance storage (i.e., ASTs, fifty-five (55) gallon drums, totes, etc.). AST registration will include information on current tank status, contents, volume, construction, and age;

G. A general description of any secondary containment or other spill containment and/or spill prevention measures used at the Facility for Regulated Substance storage units or storage areas;

H. A general description of Regulated Substance waste disposal methods. Where applicable, the Facility's hazardous waste generator identification number must be provided;

I. Where applicable, location of any groundwater monitoring equipment on the Facility's property;

J. Where applicable, the location of any dry wells on the Facility property; and

K. Where applicable, the type of septic system used on site and type of waste treated.

L. Where applicable, the location of any production wells used for potable and non-potable use on the facility (property) or any unused well of any type.

M. For facilities located in approved storm water management zones and the approved storm water management plans; compliance with such a plan must be in addition to compliance with the requirements of this Source Water Protection Program.

Any person identified as the emergency contact for a Facility under Subsection 1192.04(d)(2) C. must have authority to provide additional information about the Facility and materials stored or otherwise used on site when requested and to authorize the use of response personnel, including hazardous materials contractors, in the event of a release at the Facility. The Facility Operator must notify the Development Services Director or Designee of any change in name, phone number, and/or address of the emergency contact person no later than two (2) weeks after any change.

(3) Operator Signature. The Facility Operator must sign the completed facility registration. The Facility Operator's signature shall serve as acknowledgment of the accuracy of the registration and compliance with the following, where applicable:

A. Storage Unit Inspections - compliant with Subsection 1192.05(b)(1)E.

B. Development and implementation of a Spill Control Plan - compliant with Subsection 1192.05(g).

Any Facility Operator whose Facility is registered by the Development Services Director or Designee must submit a copy of the signed registration to the Development Services Director or Designee no later than two (2) weeks after the registration date.

(4) Use of Existing Registration Information. Any Facility Operator required to register a Facility or Regulated Substance storage unit under another federal, state, or local program may submit a copy of that registration to the Development Services Director or Designee to expedite the registration process. Any existing registration information should be presented to the Development Services Director or Designee prior to or at the time of facility registration.

(5) New Facility Registration. Any Facility subject to regulation under this Chapter that begins operation or commences conduct governed by this Chapter after the effective date of this Chapter must be registered in accordance with Subsection 1192.04(d)(1) no later than one hundred eighty (180) days after beginning operation.

(6) Registration of Previously Exempt Facilities. Any previously exempt Facility that becomes subject to the requirements of this Chapter due to changes at the Facility must be registered in accordance with Subsection 1192.04(d)(1) no later than one hundred eighty (180) days after becoming subject to regulation under the Chapter. A previously exempt Facility becomes subject to regulation under this Chapter when:

A. A new AST or UST system subject to regulation under this Chapter is installed at the Facility;

B. There is a permanent change in the type and/or volume of Regulated Substances stored or otherwise used at the Facility that results in the storage or use of Regulated Substances in quantities meeting or exceeding the thresholds established in Subsection 1192.10(a)(2) and/or

C. There is a change in the delineated TOTs as specified in Subsection 1192.02(b) of this Chapter.

(7) Amending Existing Facility Registrations. A Facility Operator must amend an existing Facility registration, or may request that the Development Services Director or Designee amend the registration, no later than sixty (60) days after any:

A. Change in ownership or management of the Facility;

B. Installation, return to service, or removal of an AST or UST system subject to regulation under this Chapter;

C. Permanent on-site storage or use of a previously unregistered Regulated Substance in quantities meeting or exceeding the thresholds established in Subsection 1192.10(a)(2) and/or

D. Change in the delineated TOTs as specified in Subsection 1192.02(b) of this Chapter.

And no later than ninety (90) days after:

E. Permanent cessation of regulated operations or storage of Regulated Substances as specified in Subsection 1192.04(f).

A Facility Operator choosing to have their facility registration amended by the Development Services Director or Designee must contact the Development Services Director or Designee no less than thirty (30) days before a registration is due to ensure completion of the registration within the allowed sixty (60) day time frame when meeting Subsections A. through D. above. The Facility Operator is responsible for amending a registration under the Subsection E. above.

(8) Registration of Multiple Facilities. Any person owning and/or operating more than one facility subject to regulation under this Chapter must register each regulated facility separately in accordance with the provisions of this Chapter.

(e) Temporary Storage of Regulated Substances.

(1) Applicability. This Section applies to the temporary storage of Regulated Substances at new and existing non-residential facilities in the Source Water Protection Area when the Regulated Substances:

A. Are stored or otherwise used in quantities meeting or exceeding the quantity thresholds

established in Subsection 1192.10(a)(2); and

B. Do not meet any of the exemption criteria specified in Subsection 1192.05(e)(1).

(2) Conditions. Temporary storage subject to regulation under this Chapter must meet the following conditions when aboveground:

A. The Regulated Substance storage unit(s) must meet the general container requirements specified in Subsections 1192.05(b)(1) through (3) of this Chapter; and

B. When possible, the temporary storage unit(s) should be located in a non-hazardous area (i.e., where the unit(s) are not generally exposed to routine vehicular traffic, flammables, or other hazards).

Any Regulated Substance release meeting or exceeding the release notification criteria in Subsection 1192.04(g)(1) must be reported and remediated in accordance with Subsection 1192.04(g) of this Chapter.

(3) Temporary Storage Extensions. Temporary storage of Regulated Substances beyond ninety (90) days is permitted provided compliance with the following requirements.

A. The Facility Operator must notify the Development Services Director or Designee of the need to continue temporary storage of the Regulated Substance(s) prior to expiration of the temporary storage period. The Facility Operator shall submit notification to the Development Services Director or Designee on a prescribed form supplied by the Development Services Director or Designee at the request of the Facility Operator. The notification shall specify:

1. Facility name, address, and telephone;
2. Facility Operator name and twenty-four (24) hour emergency contact. Designation of an emergency contact must be done in accordance with Subsection 1192.04(d)(2);
3. Regulated Substance(s) temporarily being stored at the Facility;
4. The manner in which the Regulated Substances are stored; and
5. The anticipated date when temporary storage will cease.

B. The Regulated Substance continues to be stored in compliance with Subsections 1192.05(b)(1) through (3) when aboveground.

(f) Facility Closure.

(1) Applicability. This Section applies to any non-residential Facility subject to regulation under this Chapter that becomes unoccupied or where operations are permanently discontinued for a period greater than ninety (90) consecutive days any time after the effective date of this Chapter. Facility Operators subject to compliance with any federal, state, or local facility closure program addressing the storage or handling of Regulated Substances at a closing facility are exempt from the requirements in this Section except for compliance with Subsection 1192.04(f)(3).

(2) Removal of All Regulated Substances. Except in the case of seasonal discontinuation of operation, the Facility Operator must remove all Regulated Substances other than those used exclusively for heating, cooling, and providing electrical lighting for the premises from the property no later than ninety (90) days after the date the property initially became unoccupied or operation was permanently discontinued.

(3) Closure Notice. Any Facility Operator permanently discontinuing operation of a Facility subject to regulation under this Chapter must submit an amended Facility registration to the Development Services Director or Designee in accordance with Subsection 1192.04(d)(7). The amended Facility registration shall include the date on which operations will or have ceased; the current operator's new phone number and address; and the fate of Regulated Substances stored or otherwise used on site. Any Facility Operator required to submit a closure notification under any federal, state, or local closure program may copy the Development Services Director or Designee on that notification in

lieu of submitting an amended Facility registration.

(4) **Facility Security.** Upon permanent closure of a facility, the Facility Operator must take reasonable steps to secure all Regulated Substance storage units or Regulated Substance storage areas against vandalism. Compliance with Subsections 1192.05(b)(1) through (3) and maintenance of all security measures implemented in accordance with this Section are required until all Regulated Substances are removed from the site.

(g) **Regulated Substance Releases.**

(1) **Release Notification Required.** Any release of a Regulated Substance within a Source Water Protection Area, if such release:

- A. originates from an underground storage tank; or
- B. contacts a pervious ground surface; and
- C. is not immediately and completely remediated within twenty-four (24) hours; or
- D. enters a surface water body; or

E. enters a dry well, monitoring well, abandoned well or storm sewer must be reported to the Development Services Director or Designee or on-duty drinking water treatment plan operator or ground water consortium manager within twenty-four (24) hours of discovery by the Facility Operator or any other party responsible for the storage unit from which the release occurred. Such notification in no way alleviates other federal, state, or local reporting obligations imposed by law.

(2) **Notification Contents.** Initial notice shall include, at a minimum, information related to the following:

- A. Location of the release (Facility name, address, and phone);
- B. Facility/responsible party's name, address, and phone;
- 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) released.
- E. Description of preliminary release control and mitigation efforts.

(3) **Regulated Substance Release Report.** Within seven (7) days of a reported release, the responsible party must submit to the Development Services Director or Designee a Regulated Substance Release Report providing any additional detail on the nature and management of the release, including control and corrective actions taken, fate of the released material, and, where applicable, the name of the contractor responsible for removal of released substances. Information submitted in the Regulated Substance Release Report shall be used by the Development Services Director or Designee to determine if and where any additional follow-up work needs to be completed to assess the potential pollution impact of the release.

(4) **Remediation of Release.** Upon discovery of a release, the Facility Operator or other responsible party must take appropriate reasonable actions to mitigate the potential impact of the release on groundwater and remediate the release. Remediation must be conducted in a timely manner and in accordance with applicable law. Wastes generated during remediation of a Regulated Substance release must be handled in accordance with Subsections 1192.05(b)(1) through (3) when the quantity of regulated wastes generated meet or exceed the quantity thresholds established in Subsection 1192.10(a) (2) in addition to all applicable legal requirements. Storage of these materials for a period of greater than ninety (90) days must be reported to the Development Services Director or Designee by the Facility Operator in accordance with Subsection 1192.04(e)(3)A.

(5) **Submission of Additional Information.** The responsible party must copy the Development Services Director or Designee on all correspondence submitted to federal, state, or local agencies related to site assessment and site remediation. The Development Services Director or Designee may request, if

deemed necessary; that:

A. The Fire Department provide a copy of the department's Ohio Fire Incident Reporting System report to the Development Services Director or Designee;

B. The Ohio EPA provide a copy of the agency's Emergency Response Section Incident Report to the Development Services Director or Designee; and/or

C. The Facility Operator develop and implement procedures to minimize the likelihood of reoccurrence of such a release. The Facility Operator must submit procedures developed under this provision to the Development Services Director or Designee no later than sixty (60) days after being required, and implemented no later than one hundred eighty (180) days after approval by the Development Services Director or Designee.

(6) Liability. The City is authorized to order the cleanup or abatement, or take such other actions as may be necessary to cause cleanup or abatement, of any hazardous material release to soils, surface water, and/or groundwater in or near a SWPA which may present a threat to groundwater quality or violate Ohio's water quality standards. The entity or person responsible for the release shall be liable for any reasonable expense, loss, or damages attributable to the release incurred by the City in response to such an incident, in addition to any fines imposed under Ohio and Federal law, and these Codified Ordinances.

(h) Records Retention.

(1) The Facility Operator must retain all records, reports, or other documentation related to the requirements of this Chapter on site for a minimum of five (5) years from the original date of the record, report, or document.

(i) Inspection.

(1) The Development Services Director or Designee shall inspect all facilities subject to regulation under this Chapter no less than once every two (2) years for compliance with the provisions of this Chapter. Any inspection shall be conducted under the conditions listed in Subsection 1192.04(d) (1)A. through D.

(j) Severability.

(1) Each provision of this Chapter shall be construed as separate, to the end that if any part of it is held invalid for any reason, the remainder shall continue in full force and effect.

(k) Confidentiality.

(1) Information contained in any documentation collected by or submitted to the Development Services Director or Designee under the provisions of this Chapter that is designated as confidential by a Facility Operator shall be considered confidential only to the extent allowable under Ohio Public Records Law and other applicable federal and state laws.

(Ord. 120-11. Passed 11-28-11.)

1192.05 REGULATED SUBSTANCE STORAGE PROVISIONS: ABOVE GROUND STORAGE.**(a) Applicability.**

(1) This Section applies to the above ground storage of Regulated Substances in the Source Water Protection Area in quantities meeting or exceeding those specified in Subsection 1192.10(a)(2).

(b) General Container and Regulated Substance Handling Requirements at Non-residential Facilities.

(1) All containers subject to regulation under this Chapter used for the storage or use of Regulated Substances at new and existing non-residential facilities must be:

A. Product-tight and free of any defects which may result in a release of the contained Regulated Substance;

B. Made of or lined with materials which will not react with and are otherwise compatible with the Regulated Substance stored;

C. Individually and clearly labeled with the contents of the container. If a Regulated Substance is being stored on site under the temporary storage provisions in Subsection 1192.04(e), the Regulated Substance storage unit must also be labeled with the date on which temporary storage began.

D. Stored on or above an impervious surface at all times that is free of any gaps, cracks, or other effects of deterioration that would allow for the penetration of Regulated Substances stored on that surface into surrounding soils, or, if stored on a pervious surface, stored with secondary containment in the form of a dike, containment pallet, or other containment unit capable of containing a release from the Regulated Substance storage unit. Existing ASTs are exempt from this requirement; and

E. Visually inspected weekly by the Facility Operator for any evidence of leaks, improper storage, or potential hazards that may result in a release of materials being stored in or transferred into the storage unit. Aisle space between containers must be adequate to allow for inspections. Where applicable, any leak detection or early warning system associated with an AST also must be inspected on a weekly basis. The Facility Operator must maintain a record of inspections and the findings of those inspections, and made available on request by the Development Services Director or Designee. Any weekly inspection log maintained by a Facility Operator under another federal, state, or local program shall satisfy the requirements of this subsection provided the inspection includes those Regulated Substance storage units regulated under this Chapter.

Any Facility Operator installing an impervious surface or providing secondary containment under subsection (b)(1)D. hereof must do so no later than one hundred eighty (180) days after becoming subject to regulation under subsection (b)(1)D. hereof. Continued storage of Regulated Substances on a pervious surface beyond this one hundred eighty (180) day period is permitted only if granted a temporary variance.

(2) Defective Storage Units. A Facility Operator must remove defective storage units from service immediately and repair or replace the defective units if needed. Defective storage units permanently taken out of service must be decontaminated and disposed of in accordance with applicable federal, state, and local waste management standards.

(3) Storage in Trucks, Trailers, Tankers, or Rail Cars. Any truck, trailer, tanker, or rail car used for the storage of Regulated Substances within the Source Water Protection Area must:

A. Be structurally stable and free of any defects that may result in a release of the Regulated Substances stored in the truck, trailer, tanker, or rail car;

B. Be clearly labeled with the contents;

C. Be visually inspected weekly by the Facility Operator for any evidence of leaks, improper storage, or potential hazards that may result in a release of materials being stored in or transferred into or out of the storage unit; and

D. Have all doors, valves, or other openings through which a release could occur locked or otherwise secured when not in use so as to prevent a release of the Regulated Substance through the opening(s)

(4) Spill Control Plan. Permanent storage or use of Regulated Substances subject to regulation under this Chapter at new and existing facilities in a storage unit where a release from the storage unit would reach a pervious soil surface, dry well, storm sewer, or surface water body requires the development of a Spill Control Plan in accordance with Subsection 1192.05(g). A Facility Operator is exempt from this requirement if the storage unit or storage/usage area is secondarily contained.

(c) Residential Regulated Substance Storage Units.

(1) All containers subject to regulation under this Chapter used for the storage or use of Regulated Substances at new and existing residential facilities must be:

- A. In compliance with Subsections 1192.05(b)(1)A. through D.;
- B. Visually inspected by the Facility Operator on a monthly basis. Where applicable, any leak detection or early warning system associated with an AST also must be inspected at that time; and,
- C. Provided with a Spill Control Plan in accordance with Subsection 1192.05(g)(5), where applicable.

(d) Aboveground Storage Tank (AST) Installation.

(1) Installation of New ASTs. This Section applies to the installation of ASTs at new or existing facilities after the effective date of this Chapter when the capacity of the AST meets or exceeds the quantity thresholds established in Subsection 1192.10(a)(2). All new ASTs must be registered in accordance with Subsection 1192.04(d)(1) and meet the general handling requirements specified in Subsection 1192.05(b) in addition to the following:

A. Bottom Clearance. All ASTs must have ground clearance of no less than two (2) inches from the outermost wall of the AST to allow for visual inspection of the underside of the AST. This requirement may be waived if the size of the AST prevents raising the tank as required or the AST is a concrete vaulted tank.

B. Secondary Containment. Unless required under Subsection 1511.01(c)(18) of these Codified Ordinances, all ASTs meeting or exceeding the thresholds established for secondary containment in Subsection 1192.05(e)(2) herein must be installed with secondary containment meeting or exceeding those requirements specified in Subsections 1192.05(e)(3) through (5).

C. Barriers. Any AST meeting or exceeding the thresholds established for secondary containment in Subsection 1192.05(e)(2) and which is installed in an area where the AST is open to vehicle damage must be protected against impact with physical barriers meeting the approval of the Development Services Director or Designee. Any impervious dike utilized as secondary containment meets the requirements for a physical barrier.

(2) Replacement of Existing ASTs. Replacement of an existing AST after the effective date of this Chapter with any new or used AST is considered installation of a new system and therefore subject to any federal, state, and local regulations for the installation of new ASTs in addition to the provisions of this Chapter, unless specified otherwise.

(e) Secondary Containment Requirements.

(1) Exemptions. Unless required under Subsection 1511.01(c)(18) of these Codified Ordinances, the following are exempt from the secondary containment requirements in this Chapter:

A. Storage of Regulated Substance(s) indoors in an area capable of fully containing within the Facility a total release of the Regulated Substance(s) for which the exemption is being claimed, or

draining the release to a wastewater treatment system capable of treating the released substance(s).
NOTE: Septic tank systems do not qualify as a wastewater treatment system under this exemption;

- B. Storage of Regulated Substances as consumer products packaged in original containers;
- C. Storage of Regulated Substances in storage units/areas with secondary containment comparable to or exceeding that required in Subsections 1192.05(e)(3) through (5) herein; and
- D. ASTs located in the 10 year TOT.

(2) Secondary Containment Requirements for ASTs. Unless exempted under Subsection 1192.05(e)(1), secondary containment is required as follows for ASTs installed after the effective date of this Chapter:

- A. All ASTs installed in the one (1) year TOT with a capacity exceeding fifty-five (55) gallons; and
- B. All ASTs installed in the five (5) year TOT with a capacity of five hundred (500) gallons or more when storing petroleum or petroleum-based products, or two hundred and fifty (250) gallons or more when storing all other Regulated Substances.

(3) Construction. Secondary containment systems must be constructed of or lined with materials compatible with the Regulated Substance stored. Secondary containment must be of sufficient thickness, density, and composition so as not to be structurally weakened from contact with the Regulated Substance or precipitation, and must be free of cracks, joints, gaps, or other imperfections which would allow leakage through the containment.

(4) Double Walls and Diking. An AST must have at least one of the following at the choice of the Facility Operator:

- A. Double Walls: designed as a containment area and providing the Facility Operator with manual or electronic interstitial space monitoring capabilities. Laminated, coated, or clad materials shall be considered single-walled and shall not be construed to fulfill the requirement for double walling; or
- B. Diking: capable of containing one hundred and ten percent (110%) of the total volume of the tank. If the storage area contains multiple ASTs, the secondary containment must be large enough to contain one hundred and fifty percent (150%) of the volume of the largest AST placed in it, or ten percent (10%) of the aggregate internal volume of all ASTs in the storage area, whichever is greater.

(5) Precipitation.

A. If an AST using a dike as a secondary containment system is exposed to and subject to accumulation of precipitation within the dike, the dike must be designed and operated as follows:

1. The base of the dike must be sloped to a collection point or sump to allow for controlled removal of accumulated storm water or spilled regulated materials; and
2. If the dike is penetrated by a drainage pipe, the pipe must have a lockable valve. This valve shall be kept closed and locked under normal conditions until a determination is made by the Facility Operator that the discharge of storm water is acceptable pursuant to subsection (e)(5)B. hereof.

B. Storm water accumulated within secondary containment that is known or suspected to contain a release from the primary containment unit must be handled in accordance with applicable federal, state, or local laws. No potentially contaminated stormwater may be discharged to a sanitary sewer without approval of the Development Services Director or Designee. The Development Services Director or Designee may require analysis of the stormwater before allowing discharge to the sanitary sewer if the released substance could present a treatment problem at the wastewater treatment plant. The Facility Operator must take all reasonable steps to neutralize the stormwater before discharging the stormwater to any septic system, dry well, sewer, soil, or surface water body.

(f) Temporary Placement Out of Service of ASTS.

- (1) Removal from Service. Any Facility Operator intending to place an AST system out of

service for less than one (1) year must remove the system from service in accordance with Chapter 1301:7-7-28, Section FM- 2807.2.1 of the State Fire Code in addition to any other applicable federal, state, or local regulations. Any AST meeting any of the secondary containment exemption criteria in Subsection 1192.05(e)(1) or any heating fuel AST taken out of use for seasonal conditions, is exempt from this requirement.

(2) Returning the Tank to Service. Unless required otherwise under another applicable federal, state, or local regulation, any AST placed out of service for more than ninety (90) consecutive days but less than one (1) year which is to be brought back into service must be brought back into service by the Facility Operator in accordance with Chapter 1301:7-7-28, Section FM- 2807.2.1 of the State Fire Code. Any AST meeting any of the secondary containment exemption criteria in Subsection 1192.05(e)(1) is exempt from this requirement.

(g) Spill Control Plans.

(1) Non-Residential Facilities. Facility Operators required to develop a Spill Control Plan (SCP) must complete the plan no later than one hundred eighty (180) days after becoming subject to this requirement. The Development Services Director or Designee may provide, at the request of the Facility Operator, a template of the SCP to facilitate development of the SCP. The SCP does not require the signature of a professional engineer. The SCP must be stored on site and made available on request to the fire department or other inspection authority. Any SCP developed in compliance with other federal, state, or local regulatory programs may satisfy the requirements of this provision provided that SCP contains all information specified in Subsection 1192.05(g)(2). Any deficient information must be amended into the existing SCP to be considered compliant with this Section. If a pre-existing SCP is being used to satisfy this requirement, only compliance with Subsections 1192.05(g)(3) and (4) is required. Where applicable, one (1) copy of the SCP must be kept in the Facility's repository box (lock box).

(2) Content of the Spill Control Plan. The SCP must specify all of the following:

- A. Facility name, address, and phone;
- B. Facility Operator name and phone;
- C. Emergency contact and phone. Designation of an emergency contact must be done in accordance with Subsection 1192.04(d)(2);
- D. A brief description of the type of business conducted at the Facility;
- E. The location of the Regulated Substance storage area(s) for which the SCP is being developed;
- F. The type(s) and normally anticipated quantity of Regulated Substance(s) stored in the Regulated Substance storage area(s) for which the plan is being developed;
- G. Potential hazards (including activities) to the Regulated Substance(s) stored in the area;
- H. All openings/routes through which a release from the storage area(s) would potentially flow into the Facility's property and within five hundred (500) feet beyond the property line, including floor drains, doorways, storm sewers, dry wells, streams, and other openings/routes;
- I. Emergency response procedures to be followed in the event of a release, including specific points of contact for releases, evacuation procedures, and emergency notification procedures for appropriate federal, state, and local agencies; and
- J. Emergency equipment available to the Facility Operator and location of equipment.

(3) Employee Training. A Facility Operator must train all employees annually on the release procedures outlined in the SCP. The Facility Operator must maintain a log of employee training and make the log available to the Development Services Director or Designee upon request. Copies of the SCP must be readily available for employee use in work areas in or near Regulated Substance storage areas.

(4) Updating the SCP. A Facility Operator must review and amended the SCP as necessary every two (2) years and when any of the following occur:

A. There is a change in ownership or management at the Facility;

B. An out-of-service AST system lacking secondary containment comparable to that required in Subsection 1192.05(e) is returned to service; and/or

C. Changes, structural or otherwise, are made at the Facility that will affect the anticipated flow direction of any release from the storage area or unit (ex: regrading of property, paving, building additions).

(5) Residential Spill Control. Any residence with a Regulated Substance storage unit required to have a Spill Control Plan shall receive information from the Development Services Director or Designee on how to respond to a release from the storage unit as those units are registered. This information shall be provided in an easy to follow format. The owner of the Regulated Substance storage unit must keep any information related to spill control readily available in the event of a release.

(Ord. 120-11. Passed 11-28-11.)

1192.06 UNDERGROUND STORAGE TANKS.**(a) Applicability.**

(1) This Section applies to any person currently owning and/or operating or intending to own and/or operate any underground storage tank (UST) with a capacity exceeding fifty-five (55) gallons when located within the one (1) or five (5) year time-of-travel zone (TOT), or with a capacity meeting or exceeding five hundred (500) gallons or more when located within the ten (10) year TOT.

(b) Exemptions.

(1) The following USTs are exempt from regulation under this Section:

A. USTs containing de minimis quantities of a Regulated Substance.

A de minimis quantity is one (1) inch or less. Any claim that a UST contains de minimis quantities when storing more than one (1) inch of Regulated Substance shall be determined by the Development Services Director or Designee on a case-by-case basis. A Facility Operator must submit verification to the Development Services Director or Designee that the UST contains a de minimis quantity of a Regulated Substance when making any de minimis claim.

(c) Registration of UST Systems.

(1) Registration. All UST systems subject to regulation under this Section must be registered in accordance with Subsection 1192.04(d)(1) of this Chapter. Any Facility Operator required to annually register a UST system with the State Fire Marshal under OAC 1301:7-9-04 may provide a copy of that registration to the Development Services Director or Designee to satisfy this registration requirement.

(2) Information. UST registration shall include, but is not limited to, information on the following:

- A. Facility name, address, and phone;
- B. Facility Operator, address, and phone;
- C. Number, size, construction, date of installation, and location of USTs;
- D. Regulated Substances stored in the UST; and
- E. Brief description of the type of monitoring equipment used for tanks.

(3) New UST Registration. Any new UST system subject to regulation under this Section that is installed at a facility beginning operation after the effective date of this Chapter must be registered in accordance with Subsection 1192.04(d)(1) no later than one hundred eighty (180) days after beginning operation.

(4) Registration of Previously Exempt Facilities. Any previously exempt Facility that becomes subject to regulation under this Section due to:

- A. Installation of an UST subject to regulation under this Section;
- B. Return to service of any temporarily abandoned UST or UST containing de minimis quantities of Regulated Substances; and/or
- C. Changes in the delineated Source Water Protection Area as specified in Subsection 1192.02(b) of this Chapter must be registered in accordance with Subsection 1192.04(d)(1) no later than one hundred eighty (180) days after becoming subject to regulation under this Section.

(5) Amending Registrations. A Facility Operator must amend, or at the request of the Facility Operator, the Development Services Director or Designee must amend an existing UST registration no later than sixty (60) days after any:

- A. Replacement of an existing UST system;
- B. Change in ownership or management of the Facility;

C. Return to service of any temporarily abandoned UST or UST containing de minimis quantities of Regulated Substances;

D. Permanent abandonment and/or removal of a UST; and/or

E. Change in the delineated Source Water Protection Area as specified in Subsection 1192.02(b) of this Chapter.

A Facility Operator choosing to have their facility registration amended by the Development Services Director or Designee must contact the Development Services Director or Designee no less than thirty (30) days before a registration is due to ensure completion of the registration within the allowed sixty (60) day time frame.

(6) Registration of Multiple Facilities. Any person owning and/or operating more than one Facility subject to regulation under this Section must register each regulated Facility separately in accordance with the provisions of this Section.

(d) UST Installation Requirements.

(1) BUSTR Sensitive Area USTs. All USTs subject to regulation under the BUSTR Sensitive Area regulations (OAC §1301:7-9-10) must be installed in accordance with those requirements when installed in the Source Water Protection Area.

(2) Underground Storage Release Compensation Board. All petroleum UST systems subject to SWPA provisions must hold a current and valid certificate of coverage from the State of Ohio Petroleum Underground Storage Tank Release Compensation Board.

(3) Heating Fuel USTs; Diesel Fuel USTs. Heating fuel and diesel fuel USTs subject to regulation under this Section must be vaulted in accordance with Subsection 1192.06(d)(4) herein.

(4) Other USTs. UST systems installed for permanent storage, use, or handling of Regulated Substances other than vehicles fuels, vehicle lubricants, and fuel for building and/or process heating must be vaulted in accordance with Subsection 1192.06(d)(4) herein.

(5) Vaulted USTs. Vaults must meet the criteria specified in OAC 1301:7-9- 10(C)(2)(a) and (c). The Facility Operator must inspect the vaulted UST at least once every thirty (30) days for visible signs of leaks, cracks, or other structural defects that may result in the release of the substance into the vault or surrounding soils.

(6) Any UST system which, on the effective date of this Chapter,

A. is being installed;

B. has received approval from the State Fire Marshal or Ohio EPA to be installed; or

C. is being reviewed by the State Fire Marshal or Ohio EPA for a permit to install is considered an existing UST system for the purposes of this Section.

(e) Upgrading/Replacement of UST Systems.

(1) For the purpose of this Section, replacement of an existing UST shall be considered installation of a new system and required to comply with any applicable federal, state, and local regulations for the installation of new USTs in addition to the provisions of this Section, unless specified otherwise.

(f) Temporary Placement Out-of-Service, Temporary Closure, Abandonment, Removal, and Change in Service of UST Systems.

(1) Compliance. Facility Operators must comply with all applicable federal, state, and local regulations for the temporary placement out of service, closure, abandonment, removal, or change in service of any UST system in addition to any requirements set forth in this Section.

(2) Abandonment of UST Systems. No UST system located in the Source Water Protection Area may be abandoned in place unless approved by a certified fire safety inspector or the State Fire Marshal. The Facility Operator must copy the Development Services Director or Designee on any closure assessment and other information related to the closure and abandonment in place of the UST system as the information is submitted to the Bureau of Underground Storage Tank Regulations, the State Fire Marshal, or Ohio EPA.

(g) Tank Tightness Testing.

(1) Exemptions. The following USTs are exempt from the tank tightness testing provisions required by this Section:

A. USTs regulated under and operated in compliance with the BUSTR Sensitive Area Requirements (OAC Chapter §1301:7-9-10);

B. USTs vaulted in accordance with Subsection 1192.06(d)(4); and

C. USTs with a capacity of less than five hundred (500) gallons used exclusively for holding diesel fuel and heating fuel oil grades no. 1 and 2 .

(2) Tightness Testing. Any UST not exempt under Subsection 1192.06(g)(1) must be tested for tightness as follows:

A. Prior to the conveyance of real property by sale or otherwise on which an UST is located, the grantor shall have each UST located thereon tested for tightness in accordance with OAC Chapter 1301:7-9-07(E)(3) and (F)(2), provided no such UST shall be subject to testing more than three (3) times in the same ten (10) year period.

B. Where a conveyance of real property on which an UST is located has not occurred within any consecutive ten (10) year period, commencing from the effective date of this Chapter, the owner shall cause each UST located thereon to be tested for tightness in accordance with OAC Chapter 1301:7-9-07(E)(3) and (F)(2) within such period.

Testing results shall be submitted to the Development Services Director or Designee no later than thirty (30) days after completion of the test. A tightness test is not required if the UST will be removed in conjunction with sale of the property or where a test has been completed for a UST within one (1) year prior to sale or transfer of ownership of a property.

(3) Failure of a Tank Tightness Test. If a UST fails a tank tightness test, the Facility Operator must determine if a release has occurred. If a release is confirmed, the release must be reported and remediated in accordance with Subsection 1192.04(g).

(Ord. 120-11. Passed 11-28-11.)

1192.07 MANAGEMENT OF OTHER POTENTIAL POLLUTION SOURCES.**(a) Land Application of Pesticides and Fertilizers.**

(1) **Applicability.** This Section applies to the application of restricted use pesticides as identified by the United States Environmental Protection Agency at existing and new commercial, recreational, and agricultural facilities in the one (1) and five (5) year TOT.

(2) **Registration of Restricted Use Pesticides.** Facility Operators applying restricted use pesticides within the one (1) and five (5) year TOT in any quantity must register the application of those restricted use pesticides with the Development Services Director or Designee within one hundred eighty (180) days of the effective date of this Chapter and by March 1 of every second year thereafter. Any Facility Operator required to maintain records of restricted use pesticide application under any other federal, state, or local program may submit a copy of those records to the Development Services Director or Designee to satisfy this registration requirement. A Facility Operator may request that the registration be completed by the Development Services Director or Designee. A Facility Operator choosing to have their facility registered by the Development Services Director or Designee must contact the Development Services Director or Designee no less than ninety (90) days before a registration is due to ensure completion of the registration by the required due date.

(3) **Registration Information.** Registration will include, but is not necessarily limited to, general information on the facility and the application of restricted use pesticides at the facility.

(4) **Registration of Previously Exempt Facilities.** Any previously exempt Facility that becomes subject to regulation under this Section due to:

A. Changes in the types of pesticides applied at a Facility from non- restricted to restricted use pesticides; and/or

B. Changes in the delineated Source Water Protection Area as specified in Subsection 1192.02(b) must be registered in accordance with Subsection 1192.07(a)(2).

(b) Road Salt Storage.

(1) **New Facilities.** All road salt stored at new facilities in the one (1) year and (5) year TOT must be stored under a covered shelter on an impervious surface and capable of catching, diverting, and controlling storm water run- off. This requirement does not apply to salt prepackaged for consumer use.

(2) **Registration.** Any Facility in the one (1) year TOT storing road salt outdoors in quantities meeting or exceeding one thousand (1,000) pounds must be registered in accordance with Subsection 1192.04(d)(1).

(c) On-Lot Sewage Systems.

(1) **Registration.** Any on-lot sewage system in the Source Water Protection Area used for the disposal of process waters other than sanitary wastes must be registered in accordance with Subsection 1192.04(d)(1). Any Facility Operator required to register such disposal to any other federal, state, or local authority may submit a copy of that registration to the Development Services Director or Designee to satisfy the registration requirements of this Subsection. The Development Services Director or Designee reserves the right to ask for additional information when deemed necessary.

(2) **Cessation of On-Site Disposal.** Any Facility Operator permanently ceasing disposal of process wastes on site through an on-lot sewage system must submit an amended facility registration no later than sixty (60) days of ending disposal in accordance with Subsection 1192.04(d)(7).

(d) Commercial Junk and Salvage Yards.

(1) All commercial junk and salvage yards in the Source Water Protection Area must be registered in accordance with Subsection 1192.04(d)(1) and must comply with the following as

applicable: Subsection 1192.04(f) (Facility Closure); Subsection 1192.04(g) (Release Notification); and Subsection 1192.05(b) (General Container and Regulated Substance Handling Requirements).

(2) Fluid Management. Scrap vehicles or other units brought into a commercial junk yard located within the Source Water Protection Area must have all fluids removed in accordance with current federal, state, and local regulations before on-site crushing and/or storage of the vehicle or unit. All Regulated Substances removed from a vehicle or other unit must be handled and stored in accordance with current federal, state, and local regulations in addition to the provisions of this Chapter as required.

(e) Dry Wells.

(1) Registration of New Dry Wells. The Development Services Director or Designee must be notified of the installation of any new dry well within the Source Water Protection Area no later than sixty (60) days after installation of the new dry well. Notification shall be provided on a standard form supplied by the Development Services Director or Designee at the request of the registrant. The registration shall include information including, but not limited to, the location and design of the new dry well(s). One registration form may be submitted for the installation of multiple dry wells with the same design at a site.

(2) Use of Existing Registration Information. Any municipality or Facility Operator required to register or report a dry well or dry well system to any other federal, state, or local authority may submit a copy of that registration or report to the Development Services Director or Designee to satisfy the registration requirements of this Section. The Development Services Director or Designee reserves the right to request additional information when deemed necessary.

(3) Inspection and Maintenance Schedule. Any municipality, developer, or facility using dry wells for storm water management in the one (1) and five (5) year TOT must development and implement a schedule for the regular inspection and maintenance of those dry wells. All new dry wells shall have limited, controlled access, and be posted with signage indicating: "No dumping, drains to drinking water aquifer" as defined in this chapter.

(f) Landfills.

(1) Registration. All commercial landfills in the Source Water Protection Area must be registered in accordance with Subsection 1192.04(d)(1). Any releases meeting criteria specified in Subsection 1192.04(g)(1), or any release to groundwater detected through a groundwater monitoring network associated with the site, must be reported to Development Services Director or Designee in accordance with Subsection 1192.04(g). The Development Services Director or Designee shall make all reasonable effort to register former unlicensed landfills in addition to commercial landfills or open dumpsites.

(g) Wells or Boreholes.

(1) Applicability. This Section applies to any existing or new well or borehole in a SWPA used for the production of groundwater that does not require plan approval by the Ohio EPA. This includes any well or borehole used for producing water not intended for human consumption.

(2) Installation and Maintenance. Any well or borehole subject to regulation under this Section installed after the effective date of this chapter must be installed in accordance with Chapter 3745-9-05 of the Ohio Administrative Code. All new wells and boreholes must be registered by the well or borehole owner with the Development Services Director or Designee no later than fifteen (15) days prior to installation of the well or borehole. All new wells or boreholes must be installed by a State-recognized well driller. All new wells or boreholes must be installed in accordance with the State of Ohio Technical Guidance for Well Construction and Ground Water Protection.

(3) Abandonment of Wells or Boreholes. All wells or boreholes which are not maintained for production, standby, or observation purposes are to be permanently sealed according to the State of Ohio Technical Guidance Manual for Sealing Abandoned and Unsealed Wells or Boreholes developed by the State Coordinating Committee on Ground Water. The Facility Operator must notify the Development Services Director or Designee no later than fifteen (15) days prior to abandonment of the well or borehole and all paperwork associated with the well or borehole abandonment process must be filed with the Ohio Department of Natural Resources and the City of Fairfield Building and Zoning Division.

(4) Geothermal Wells or Boreholes. Any geothermal well or borehole installed in any SWPA must do so in accordance with the State of Ohio Technical Guidance for Installation of Geothermal Wells.

(h) Fill Operations. All fill operations shall use clean, hard fill materials and shall be approved by the administering authority prior to the commencement of fill activities.

(1) Fill dirt shall not contain fly ash, sewage, sludge, asphalt, shingles, construction debris or any other material prohibited by any local, state or federal regulation.

(2) All fill operations must comply with local, state, and federal law including, but not limited to, ORC Chapter 3714, and OAC Chapter 3745. In accordance with OAC Chapter 3745-400-05, a written notice of "intent to fill" shall be filed with the City of Fairfield as required by this rule and shall also be filed with the administering authority. Such notice is required to be filed seven days prior to the commencement of fill operations.

(3) All fill sites shall have limited, controlled access, and be posted with signage indicating: "Source Water Protection Area. Fines will be imposed for illegal dumping of fill materials. No asphalt, shingles, construction debris, or any other prohibited material." The site must be secured during unauthorized times with emergency contact information posted.

(4) Any violation of this section shall be subject to the penalty provisions of Section 1192.08.

(Ord. 120-11. Passed 11-28-11.)

1192.08 VIOLATION, PENALTY, AND ADMINISTRATIVE REMEDIES.

(a) Violations and Penalties.

(1) No person shall knowingly submit false or inaccurate information to the Development Services Director or Designee or City of Fairfield, or violate, disobey, omit, neglect, or refuse to comply with any provision of this Chapter or order issued pursuant to this Chapter. Any person doing so shall be subject to penalty under Section 1135.99 of these Codified Ordinances.

(Ord. 120-11. Passed 11-28-11.)

1192.09 VARIANCE AND APPEALS UNDER THE WELLHEAD PROTECTION PROGRAM.**(a) Appeal.**

(1) Any person aggrieved by any order issued by the Development Services Director or Designee under the provisions of this Chapter may appeal such decision to the City of Fairfield Board of Zoning Appeals in accordance with established filing procedures.

(2) Source Water Protection Appeals Advisory Board Established. The member communities of the Hamilton to New Baltimore Groundwater Consortium and their surrounding jurisdictions have established a Source Water Protection Appeals Advisory Board (SWPAAB) for the technical review of any variance or appeals request submitted under the Source Water Protection Program. The SWPAAB shall consist of representatives from communities in the Hamilton to New Baltimore area as selected by City Council or other designated authority for that community. The SWPAAB shall operate in accordance with the bylaws developed by and for the group.

(3) SWPAAB Review. Before action on any variance or appeal under this Chapter by the City of Fairfield Board of Zoning Appeals, the SWPAAB shall review any variance or appeal request to ensure that the request, if granted, will not present a contamination threat to groundwater. The SWPAAB shall provide a recommendation on the variance or appeal request to the Board of Zoning Appeals. In doing so, they may include with the recommendation any such alternatives or modifications to the request as necessary to minimize the potential for groundwater contamination. The SWPAAB shall have thirty (30) days from receiving a variance or appeals request to make a recommendation to the Board of Zoning Appeals. This thirty (30) days period shall be inclusive within, not in addition to, the allowed time frame for review by the Board of Zoning Appeals. (Ord. 120-11. Passed 11-28-11.)

1192.10 REGULATED SUBSTANCES LIST**(a) Regulated Substance List.**

(1) The substances to be regulated ("Regulated Substances") are those chemicals, mixtures, and other substances, or components thereof, that are known or suspected (as classified by EPA standards) carcinogens, toxic or highly toxic agents, corrosives, or which otherwise have been determined to be a health hazard or require monitoring as a primary or secondary contaminant under the Safe Drinking Water Act of 1986 (Public Law 93- 523), as amended. These substances shall be regulated when the concentration of Regulated Substances stored or otherwise used on site meets or exceeds those quantities specified in Subsection 1192.10(a)(2). Regulated Substances include:

- A. Petroleum or petroleum-based products, including fuels, fuel additives, lubricating oils, motor oils, hydraulic fluids, and other similar petroleum-based products;
- B. Antifreeze, transmission fluids, brake fluids, and coolants;
- C. Solvents (raw or spent), including cleaning solvents, degreasing solvents, stripping compounds, dry cleaning solvents, painting solvents, and/or hydrocarbon or halogenated hydrocarbon solvents;
- D. Inks, printing and photocopying chemicals, and waste rags used for solvent-based cleaning;
- E. Organic pigments;
- F. Liquid storage batteries;
- G. Non-aerosol, non-latex based paints, primers, thinners, dyes, stains, wood preservatives, varnishing and cleaning compounds, paint sludges, and paint filters;
- H. Corrosion and rust prevention solutions;
- I. Industrial and commercial cleaning supplies, including drain cleaners;
- J. Sanitizers, disinfectants, bactericides, and algacides;
- K. Pesticides, herbicides, and fertilizers;
- L. Acids and bases with a pH less than or equal to 2 or greater than or equal to 12.5;
- M. Aqueous metals;
- N. Road salt (only when stored in the 1 and 5 year TOT);
- O. Or any other material containing one percent (1%) or more by weight of a hazardous raw or waste product that is regulated: as an Extremely Hazardous Substance under Section 302 of the Emergency Planning and Community Right-to-Know Act (EPCRA) (OAC Chapter 3750-20); as a Hazardous Substance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) (OAC Chapter 3750-30); or as a Toxic Chemical regulated under Section 313 of EPCRA (OAC 3745-100).

(2) A substance listed above may be exempted from regulation under this Chapter if the Regulated Substance does not present a threat to groundwater due to the nature of the substance, and the Facility Operator claiming this exemption for a specific Regulated Substance shows the Development Services Director or Designee proper documentation from the chemical manufacturer or other qualified, verifiable source that the Regulated Substance does not present a threat to groundwater.

(3) Chemicals which are regulated by SWDA, TSCA, RCRA, OSHA, CERCLA, SARA, FIFRA or other State and/or Federal Environmental Laws and Regulations, or for which there is scientific evidence such as the contaminant candidate list (CCL) under the USEPA that indicate acute or chronic health effects can result from exposure including carcinogens, toxic and highly toxic agents, reproductive toxins, teratogens, endocrine disruptors, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, obnoxious substances causing odor and taste problems, and agents which damage the lungs, skin, eyes, or mucous membranes;

(4) Baseline Quantity Thresholds. Substances listed in Subsection 1192.10(a)(1) shall be considered regulated when, at any time of the year, the concentration of Regulated Substances Stored or used at a facility meets or exceeds the lesser of the following quantities:

A. When located within the one (1) and five (5) year TOT, in amounts exceeding fifty-five (55) gallons aggregate for liquid materials or four hundred forty (440) pounds aggregate for dry weights;

B. When located within the ten (10) year TOT, in amounts meeting or exceeding one thousand (1,000) gallons aggregate for liquid materials or eight thousand (8,000) pounds aggregate for dry weights when stored aboveground, or five hundred (500) gallons aggregate for liquid materials when stored in an underground storage tank.

(5) Regulated Substances for Consumer Purchase. Storage of Regulated Substances packaged as consumer products in original containers for consumer purchase shall be regulated under this Chapter only when storage meets or exceeds five (500) hundred gallons aggregate for liquid materials or four thousand (4,000) pounds aggregate for dry weights, whichever is less, in the one (1) and five (5) year TOT, or one thousand (1,000) gallons aggregate for liquid materials or eight thousand (8,000) pounds aggregate for dry weights, whichever is less, in the ten (10) year TOT. (Ord. 120- 11. Passed 11-28-11.)

CHAPTER 1309
Permits

- 1309.01 When required.
- 1309.02 Form; deposit.
- 1309.03 Plans.
- 1309.04 Plot plans.
- 1309.05 Time limit on applications.
- 1309.06 Examination of plans.
- 1309.07 Affidavits.
- 1309.08 Action on application.
- 1309.09 Conditions of permit.
- 1309.10 Plans to be kept at site.
- 1309.11 Permits issued on affidavit.
- 1309.12 Foundation permits.
- 1309.13 Shell permit.
- 1309.14 Violation of this Code.
- 1309.15 Maintenance of permit premises.

CROSS REFERENCES

- Fees - see BLDG., Ch. 1311
- Craft license - see BLDG., Ch. 1315
- Board of Building Appeals - see BLDG. Ch. 1317

1309.15 MAINTENANCE OF PERMIT PREMISES.

(a) Every person, firm or corporation to whom a building permit has been issued under this Code shall until the issuance of a final occupancy permit be responsible for and shall cause the permit premises to be maintained at all times in accordance with the following requirements:

(1) All paper, trash, plastic and any other material which is subject to being blown about or off the permit premises shall at all times be placed or secured in such a manner that it does not blow about or off the permit premises.

(2) All uprooted trees and bushes, branches, limbs, trash, construction debris and litter as defined in Section 557.02(b) shall be removed from the permit premises at least once in every two week period and shall not be burned or buried on the permit premises. Such trash, construction debris and litter shall be removed to an appropriate landfill or other approved facility. The building permit holder shall be responsible at all times for controlling such material on-site and ensuring that there are no adverse impacts to water quality.

(3) Sedimentation control devices and measures shall be installed and maintained at all times in accordance with the approved plot plan, if any, and in such a manner that all mud and sediment is contained on the permit premises and not permitted to escape onto adjoining property or public right of way. These sedimentation control measures shall include, but are not limited to, a driveway base or temporary construction entrance for each lot under development. On residential development lots, the driveway base should be established no later than during the foundation construction phase using ODOT Type 304 aggregate base material (or approved equivalent). On commercial/industrial development lots, a temporary construction entrance should be established during the initial site grading operation using 2-inch stone (or approved equivalent).

(4) The building permit holder shall be responsible under the provisions of Section 905.03(b) for the immediate removal and cleaning and/or the cost of such removal and cleaning of all mud and other sediment which comes from the permit premises by any means onto any street, alley or public ground.

(b) As provided in Section 1305.07, the Building Superintendent has the authority to issue a stop work order for failure to maintain any site in accordance with the requirements listed above. (Ord. 7-05. Passed 1-24-05.)

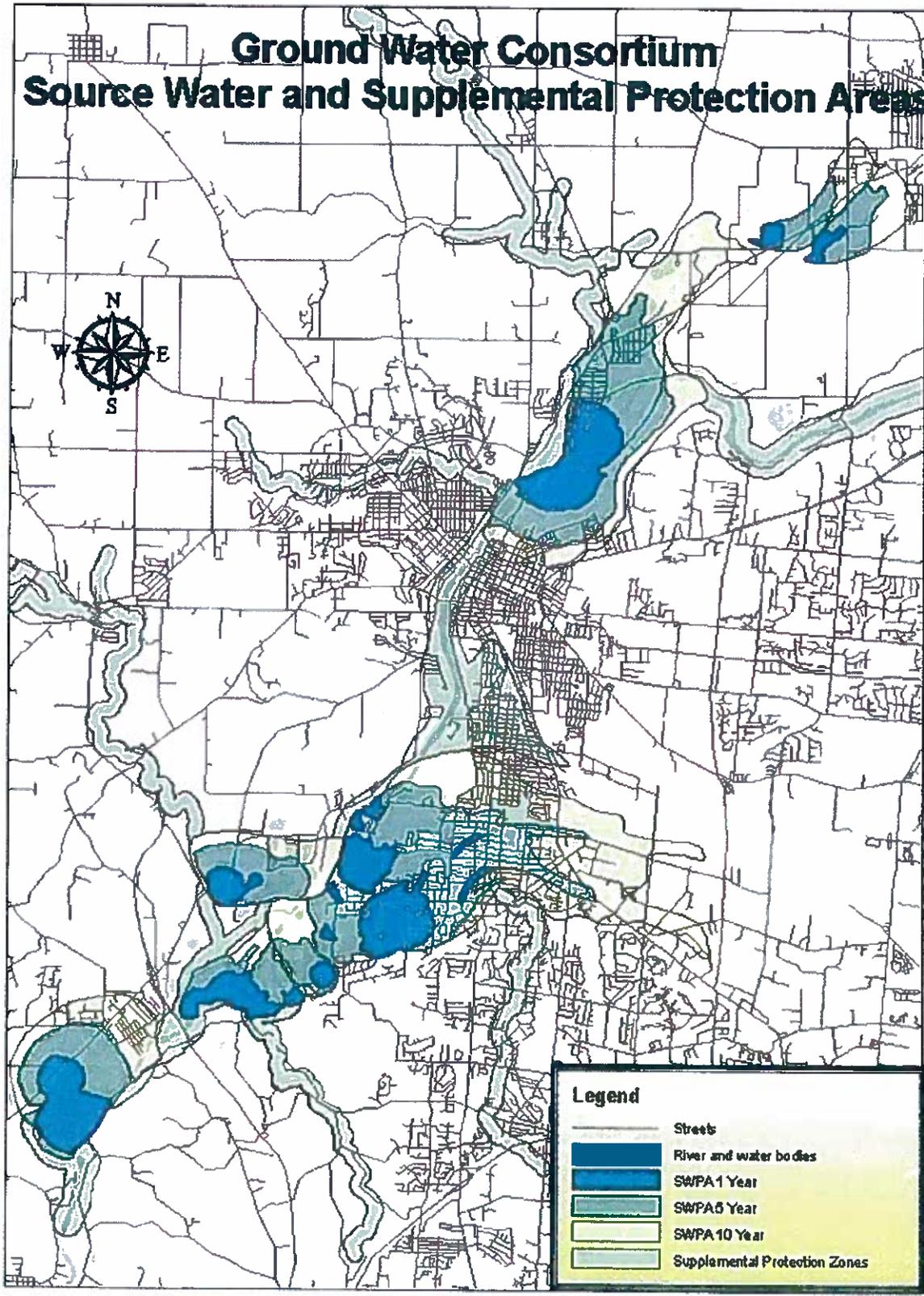
Appendix B

Revised City Ordinances

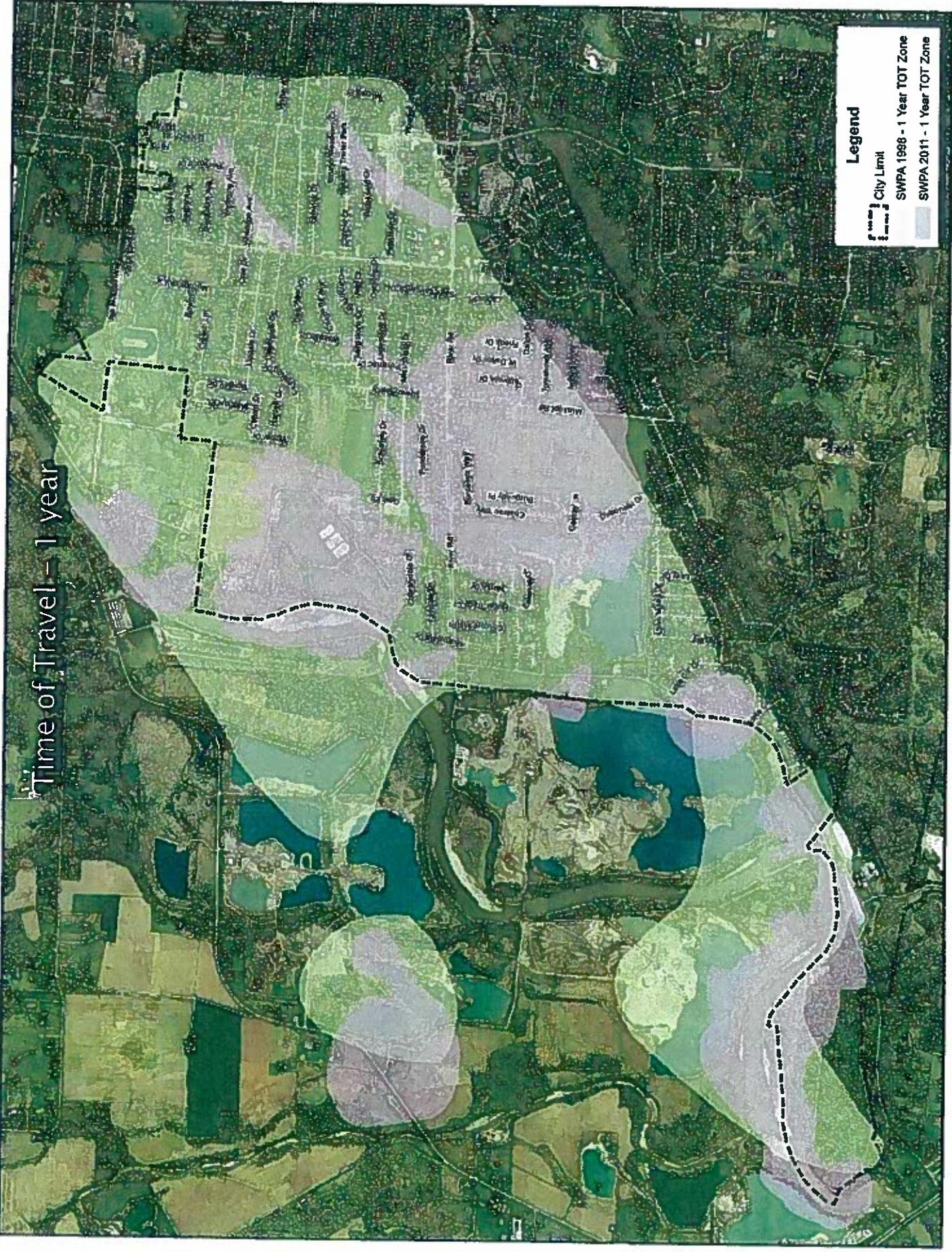
Appendix C

Figures

Ground Water Consortium Source Water and Supplemental Protection Areas



Time of Travel - 1 year



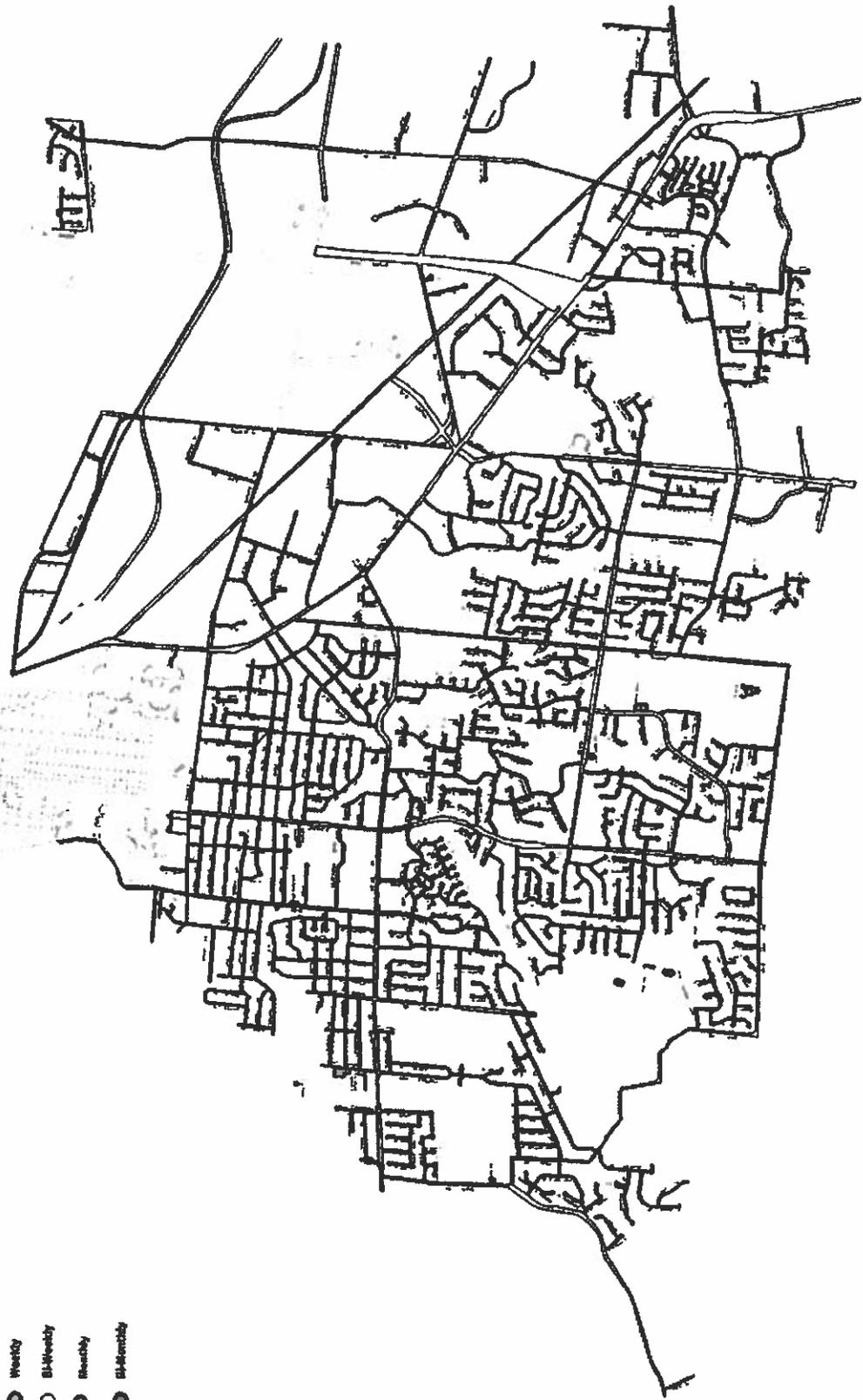
Legend

- City Limit
- SWPA 1998 - 1 Year TOT Zone
- SWPA 2011 - 1 Year TOT Zone

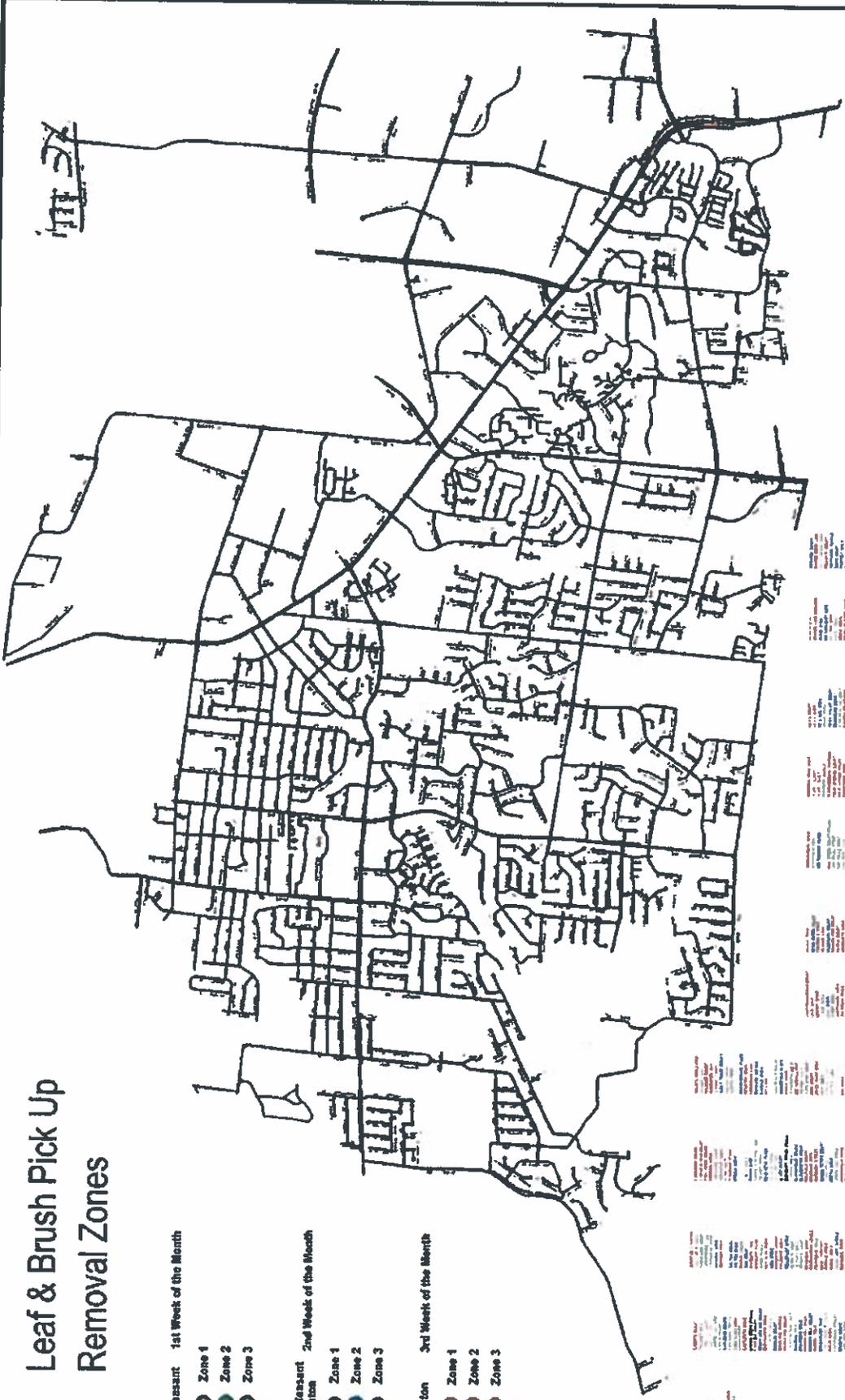
City of Fairfield, Ohio Street Sweeping Map

Street Sweeping

- Weekly
- Bi-Weekly
- Monthly
- Bi-Monthly



Leaf & Brush Pick Up Removal Zones



West of Pleasant 1st Week of the Month

- Zone 1
- Zone 2
- Zone 3

Between Pleasant and Whitson 2nd Week of the Month

- Zone 1
- Zone 2
- Zone 3

East of Whitson 3rd Week of the Month

- Zone 1
- Zone 2
- Zone 3

Zone	Week	Area	Street	Start	End
Zone 1	1st Week	West of Pleasant	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	2nd Week	Between Pleasant and Whitson	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	3rd Week	East of Whitson	Whitson	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
Zone 2	1st Week	West of Pleasant	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	2nd Week	Between Pleasant and Whitson	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	3rd Week	East of Whitson	Whitson	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
Zone 3	1st Week	West of Pleasant	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	2nd Week	Between Pleasant and Whitson	Pleasant	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	
	3rd Week	East of Whitson	Whitson	1st	1st
			2nd	2nd	
			3rd	3rd	
			4th	4th	

Appendix D

Table of Organization

Table of Organization City of Fairfield

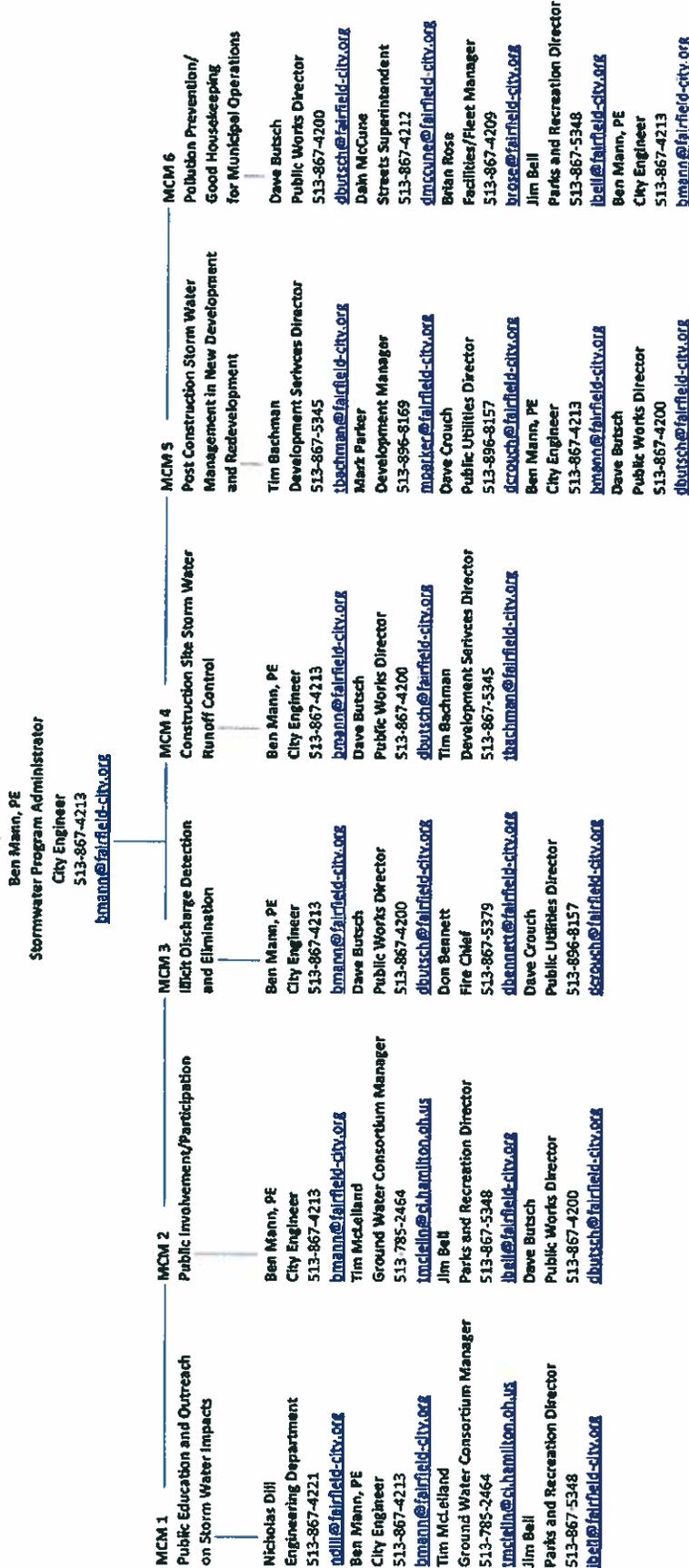


Figure 1

1

| GREG KOTTNER
| 5419 EASTGATE LLC
| 7843 CAPE COD CT
| WEST CHESTER, OH 45069

2

| JOHN MUELLER
| MUELLER ENTERPRISES LLC
| 9858 KITTYWOOD DR
| CINCINNATI, OH 45252

3

| ROY R. PAYNE JR
| PRIMARY PROPERTY MGMT LLC
| PO BOX 18343
| FAIRFIELD, OH 45018

4

| HENRY YONG
| KINGS PROPERTIES LLC
| 5602 WILLIAMSBURG WAY
| FAIRFIELD, OH 45014