

RISK

**Winter
2003**

Sewer Back-Up

Claim Reduction Program

PA222

**CLARIFICATION OF
MUNICIPAL LIABILITY**



**Michigan Municipal Risk
Management Authority
DPW Advisory Committee**

SEWER BACK-UP CLAIM REDUCTION PROGRAM

POSITION

If your community has an existing sewer back-up reduction program or is considering development of one, the **DPW Advisory Committee** has developed an outline and resources that are recommended.

Use of these resources and outline will help protect your community from claims with important information on establishing a program.

INTRODUCTION

PA 222 clarifies municipal liability for sewer backups.

The Michigan Legislature acted to make clear when municipalities should be liable for sewer backups by enacting PA 222 which went into effect 12/21/2001.

The act amends the Michigan Governmental Immunity Statue to limit the liability of governmental agencies for sewer backups and establishes a process for affected persons seeking compensation for such events.

Historically, governmental liability for sewer backups in Michigan was not based on any statutory exception to governmental immunity. Instead, governmental agencies were sued for basement flooding on the basis of the judicially created "Trespass Nuisance" doctrine.

PA 222 abolishes common law exceptions to governmental immunity, including the trespass nuisance doctrine and provides the sole remedy for damages or injuries caused by a sewer backup or basement flooding.

As a result, municipalities are now subject to tort liability for the overflow or backup of a "sewage disposal system" only if the provisions of PA 222 are satisfied.

Frequent and costly claims incurred by Michigan Municipal Risk Management Authority (MMRMA) Members have prompted the MMRMA Risk Control and Claims Departments to institute a Sample Sewer Backup Reduction Program to assist Members in reducing potential loss.

Developed with the help of the DPW Advisory Committee, this brochure contains information on identifying hazards and developing inspection/repair and complaint programs. Information on sewer backup valves for new

construction or renovations of existing systems is also included.

The MMRMA DPW Advisory Committee has also developed a sample resident letter as well as clean-up and disease prevention brochures to be given to residents if a sewer backup occurs.

I. SEWAGE DISPOSAL SYSTEM EVENT?

To determine whether the provisions of PA 222 apply, a municipality owning or operating a sewage disposal system must first determine whether a sewage disposal system event occurred.

Under the Act, a "sewage disposal system event" means the overflow or backup of a sewage disposal system onto real property. In three specific circumstances, the overflow or backup is not an event if any of the following was a substantial proximate cause of the overflow or backup:

1. An obstruction in a "service lead" not caused by governmental agency;
2. A connection to the sewage disposal system, including a sump system, building drain, surface drain, gutter or downspout; or
3. An act of war, or an act of terrorism.

II. STANDARD OF LIABILITY

If a sewage disposal system event occurs, a municipality is subject to PA 222 and a "claimant" may seek damages from the municipality for damages or injuries caused by the event if the claimant can prove ALL of the following existed at the time of the event:

1. The governmental agency at the time of the event owned, or operated, or directly or



indirectly discharged into, the portion of the sewage disposal system that allegedly caused damage or injury (an “appropriate government agency”);

2. The sewage disposal system had a construction, design, maintenance, operation, or repair defect (a “defect”);
3. The governmental agency knew, or in the exercise or reasonable diligence should have known, about the defect;
4. The governmental agency, having the legal authority to do so, failed to take reasonable steps in a reasonable amount of time to repair, correct, or remedy the defect; and
5. The defect was 50 percent or more the cause of the event and the damage or injury (a “substantial proximate cause”).

III. NOTICE

To recover damages for a sewage disposal system event under PA 222’s new standard of liability, a claimant must notify the governmental agency within 45 days after the damage or injury was discovered or should have been discovered. PA 222 imposes two obligations on municipalities relating to compliance with the Act’s notice provisions.

First, a governmental agency owning or operating a sewage disposal system must make available public information about the provision to the governmental agency of notice of a sewage disposal system event. The public information should include an explanation of the PA 222’s notice requirements, the name and address of the individual within the governmental agency where written notice of an event may be delivered, and the required content of the notice (see enclosed sample).

To comply with this requirement, municipalities should have this information available for the public upon request. Municipalities could also consider posting such information in public places, providing the information with sewer bills, publishing the information in newsletters, or posting the information on municipal web sites.



Second, if prior to providing the required written notice a person owning and occupying property affected by a sewage disposal system notifies, orally or in writing, the governmental agency, or the individual who may lawfully be served with civil process against the governmental agency, of a sewage disposal system event, the governmental agency must provide the person all of the following information in writing:

1. A sufficiently detailed explanation of the PA 222’s notice requirements to allow a claimant to comply with the requirements (see sample form RC 101);
2. The name and address of the individual within the governmental agency to whom a claimant must send written notice (see sample); and
3. The required content of the written notice, limited to the claimant’s name, address or telephone number, the address of the affected property, the date of discovery of any damages or injury, and a brief description of the claim (see sample).

Municipalities should adhere closely to the requirements as failure to comply could extend the time period during which a claimant may seek compensation for sewage disposal system event.

In two limited circumstances, a claimant's failure to comply with the 45-day notice period does not bar a civil action. If a claimant can show that he or she properly notified a governmental agency prior to the expiration of the 45-day notice period, and that his or her failure to comply with the written notice requirement was the result of the governmental agency's failure to provide required information, the claimant may seek compensation more than 45 days after discovery of an event. Additionally, if a sewage disposal



of affected property may not unreasonably refuse to allow the inspection of damaged property or investigation of a physical injury. This inspection prior to litigation does not prohibit a governmental agency from inspecting property during any subsequent civil action.

system event causes serious physical injury and the claimant seeks noneconomic damages for those injuries, the claimant need not comply with the written notice provisions.

In addition to notice by claimants, PA 222 also includes a provision authorizing one governmental agency to notify another when the first agency believes that a different or additional governmental agency may be responsible for a sewage disposal system event. Such notice must be provided within 15 days of receipt of written notice from a claimant, but is optional.

IV. INSPECTION OF AFFECTED PROPERTY

The notice provisions of PA 222 are intended to allow potentially responsible governmental agencies to inspect affected property before litigation. A claimant or the owner or occupant

V. 45-DAY INSPECTION AND RESOLUTION PERIOD

After providing the required written notice of a sewage disposal system event to a governmental agency, a claimant may not immediately institute a civil action. PA 222 prohibits the filing of a civil action for 45 days after the provision of written notice of an event. This period is intended to allow the investigation of the event, the potential resolution of claims and payment of compensation prior to litigation. Only after a claimant and a governmental agency fail to reach an agreement on the amount of compensation for a sewage disposal system event within the 45-day period may a claimant initiate a civil action.

VI. DAMAGES AVAILABLE

When a claimant can prove governmental liability, PA 222 authorizes damages for property damage or physical injury, economic damages are the only compensation available for a claim arising from an event. Noneco-



conomic damages may not be awarded or paid for such claims.

To recover for damage to personal property, a claimant must show reasonable proof of ownership and value of the damaged personal property, including testimony or records documenting the ownership, purchase price, or value of the property, or photographic or similar evidence showing the value of the property.

VII. NONECONOMIC DAMAGES

A person sustaining serious physical injuries caused by a sewage disposal system event may recover noneconomic damages including pain, suffering, inconvenience, physical impairment, disfigurement, mental anguish, emotional distress, loss of society and companionship, loss of consortium, injury to reputation, humiliation, or other nonpecuniary damages, only if the claimant or individual on whose behalf a claim is filed has suffered death, serious impairment of body functions, or permanent serious disfigurement.

VIII. IDENTIFY YOUR HAZARDS

- **Age of Line:** The older the line, the greater the need may be for inspection.
- **Lift Station:** Loss of power, mechanical pump breakdown, vandalism.
- **Sewer Line:** Sewer and storm lines combined, cross connections.
- **Map Plotting:** Identify problem area (low spots, flood areas, root intrusion) complaints.
- **Hot Spots:** Restaurants, hospitals, prisons, sources of un-metered water, ground water uses.

IX. PREVENTATIVE MEASURES

- **Inspect Lines:** Conduct video, smoke or die test through broken and/or discon-

nected lines, tree roots, and sump-pump use at residential locations on a periodic basis, depending on need.

- **Preventative Maintenance:** Target high frequency areas and hot spots; require back-water valves on all new construction. (See attached on sewer back-water valves).
- **Cleaning/Repair:** Removal of tree roots, materials collected, and development of a priority for cleaning: determine what lines should be serviced, disconnected and repaired.
- **Lift Stations:** Provide on-site backup power supply/pumps; or mobile backup power supply/pumps and emergency alert system for lift station failure, possibly consisting of the following.
 - External Light
 - Audio Sound
 - Telephone Paging System
 - Police Dispatch

The quicker the response, the less chance of a claim.

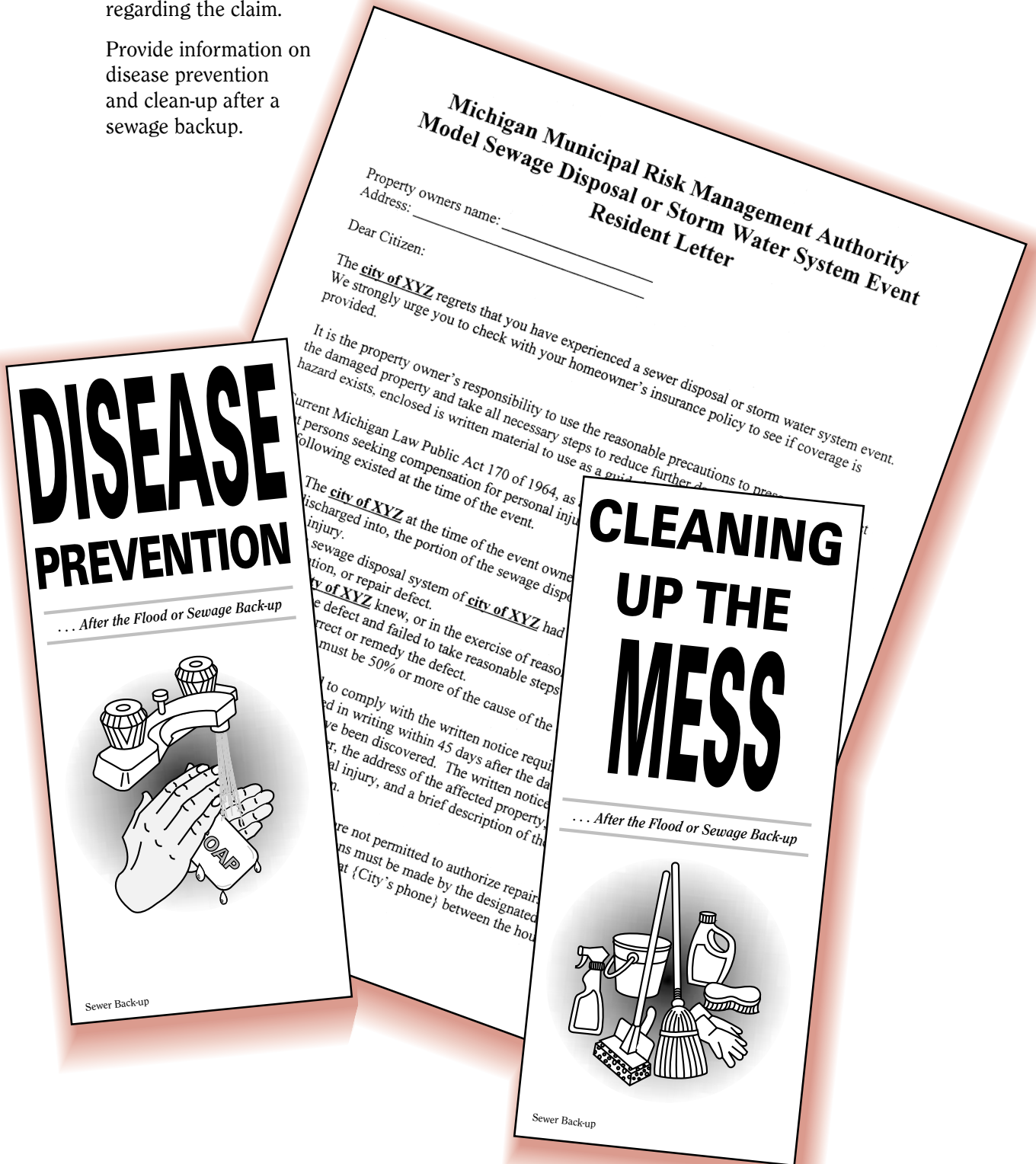
X. COMPLAINT PROGRAM

- **Citizen Complaints:** Have one centralized location for citizens to report sewer backups.
- **Receiving Complaints:** Document and record all sewer backup complaints (please see the enclosed resources for information on complaint forms).
- **Emergency Response:** Develop response procedures to respond to sewer backup situations within a reasonable time. Document (video/pictures) damage as necessary, especially if it involves a residential basement.

XI. RESIDENT LETTER

Information should be provided to the resident making a sewer backup claim, including the community's policy regarding the claim.

Provide information on disease prevention and clean-up after a sewage backup.



XII. BACKFLOW

Explore feasibility of backflow prevention valves in private lines. (See sample - Sewer Backwater Valves Material.)

NOTICE

TO: Plumbing and Building Contractors

DATE:

SUBJECT: Sewer Backwater Valves

In recent years, the (entity) has had instances of sanitary sewer back-up into citizens' homes. This has usually occurred in older residential neighborhoods, however, the potential for back-up is applicable to new construction as well.

1993 BOCA Plumbing Code, Section P-1005-3, addresses *Fixtures Subject to Backflow*. This section requires backwater valves to be installed on sanitary drainage systems for all fixtures or drains located at an elevation below the top of the manhole covers in the street relative to the installed system.

It appears that many contractors are not aware of this code requirement. A copy of the applicable code section and commentary is attached.

Beginning on (date), this department will inspect and require these devices to be installed at the underground or rough-in stage of construction. This includes both new construction and sewer changeovers. Note that this is the **effective enforcement date, not a permit issuance date.**

Because clean-outs are also a code required item, we recommend that the clean-out be installed downstream of the backwater valve. This will allow servicing the drainage system from the building to the street without possible damage/repair to the backwater valve. Should you have further questions, please contact our plumbing inspector (name) at (number) or the undersigned at (number).

Sincerely,

(Entity)

(Signed)

Sewer Back-Up

BACKFLOW PREVENTION SYSTEM

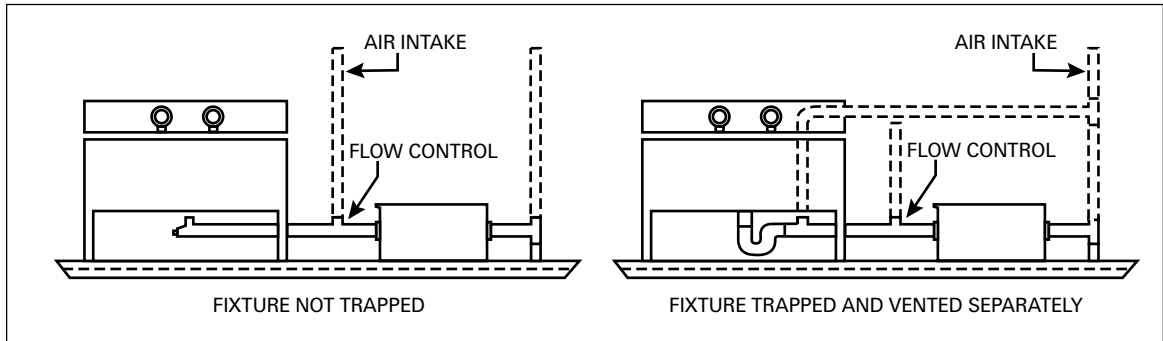


Figure P-1004.12 (1)
TYPICAL SINGLE FIXTURE INSTALLATIONS

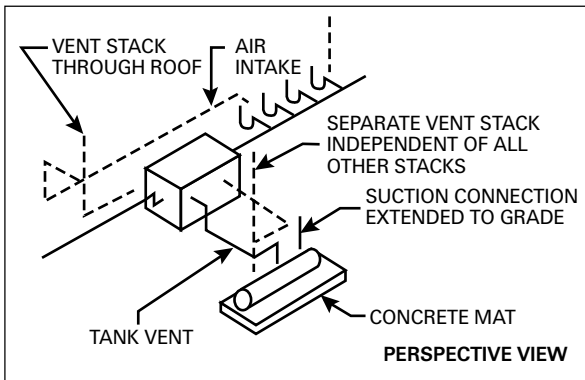
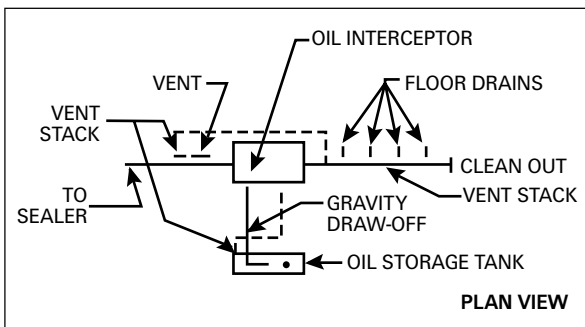


Figure P-1004.12 (2)
VENTING OF INTERCEPTORS AND SEPARATORS

P-1005.1 Approval: Metallic backwater valves shall conform to ASME A112.14.1 listed in Chapter 19. Nonmetallic backwater valves shall conform to CSA CAN3-BB818.1 or CAN/CSA B181.2 (see bibliography, Chapter 19).

- A backwater valve is designed to prevent the backflow of drainage in a piping system. The

valve incorporates a swing check valve on the inlet side. Some valves also have a gate valve that is manually operated to close the outlet side of the valve. Backwater valves equipped with gate valves are typically used in areas subject to severe flooding conditions (see Figure P-005.1).

P-1005.2 Definitions: The following words and terms shall, for the purposes of this section and as stated elsewhere in this code, have the meanings shown herein.

- Definitions of terms that are associated with the content of this section are contained herein. These definitions can help in the understanding and application of the code requirements. It is important to emphasize that these terms are not exclusively related to this section but are applicable everywhere the term is used in the code. The purpose for including these definitions within this section is to provide more convenient access to them without having to refer back to Chapter 2.

For convenience, these terms are also listed in Chapter 2 with a cross reference in this section. Terms that are italicized provide a visual certification throughout the code text that a definition exists for that term.

The use and application of all defined terms, including those defined herein, are set forth in Section P-201.O.

BACKFLOW PREVENTION SYSTEM

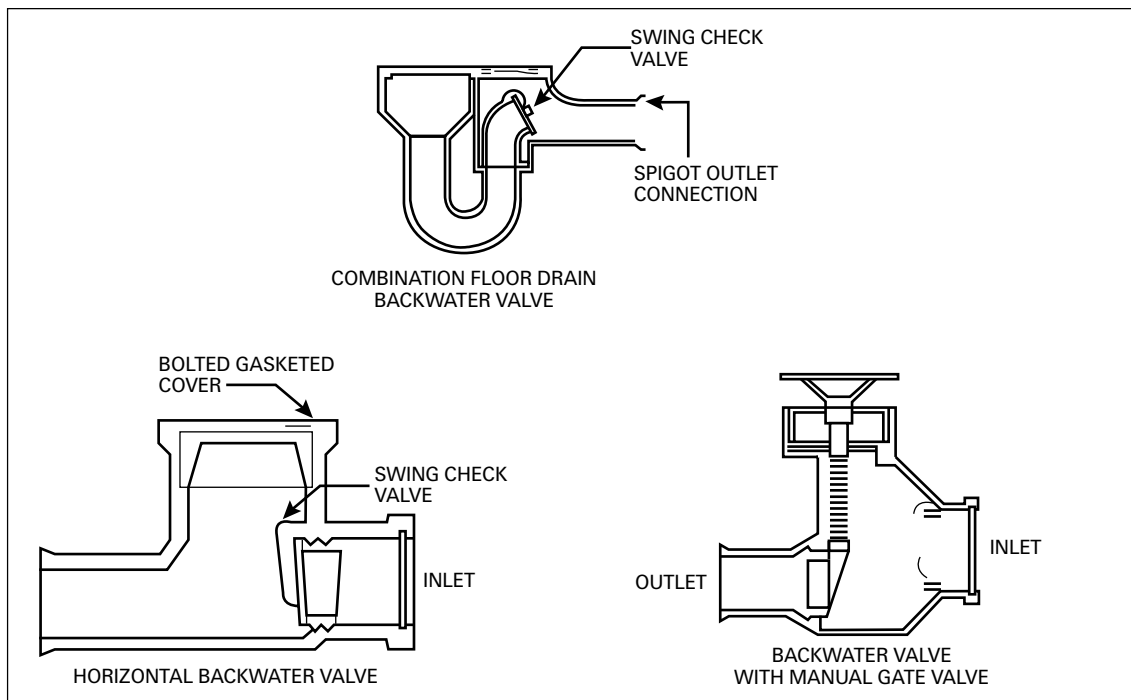


Figure P-1005.1
BACKWATER VALVES

BACKFLOW

- Backflow is a condition found in plumbing systems where the contents of the piping flow in a direction opposite of the intended direction.

Drainage: A reversal of flow in the drainage system.

- Drainage backflow is the flow of waste in the drainage system in the direction opposite the direction intended. Backflow is generally the result of drainage system stoppages or overloads. Drainage backflow can result in interior flooding and contamination of fixtures.

Backwater Valve: A device or valve which is installed in the house drain or sewer pipe where a sewer is subject to backflow, and which prevents drainage or waste from backing into a low level or fixtures and causing a flooding condition.

- Backwater valves are a type of check valve designed for installation in drainage piping.

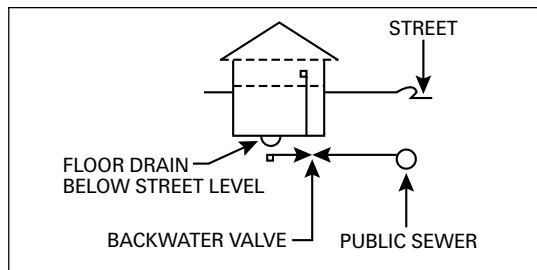


Figure P-1005.3
FIXTURES SUBJECT TO BACKFLOW

The valves have a lower invert downstream of the flapper than upstream so as to help prevent solids from interfering with valve closure (see Figure P-1005.1).

P-1005.3 Fixtures Subject to backflow: A backwater valve shall be installed where plumbing fixtures are subject to backflow from the public sewer.

- A backwater valve is required in areas where the public sewer could back up into

the building through the sanitary drainage system. When the plumbing fixtures are located above the street level, the sewer will back up through the street manhole before entering the building. Backwater valves may be required for storm drainage systems by Section P-807.1 (see bibliography).



Public sewers can become blocked or can be overloaded, which will result in sewage backing up into the manholes and any laterals (taps) connected to the sewer system. The point of overflow for the public sewer will be the top of the manholes in the backed-up portion of the system. This point corresponds to the level of the street, alley or other right-of-way.

Any fixtures or drains that are located at an elevation below the elevation of the tops of the manholes for the relative portion of the sewer system, are subject to backflow and must be protected by backwater valves (see Figure P-1005.3).

P1005.4 Location of backwater

valves: Backwater valves shall be installed so that access is provided to the working parts for service and repair.

- Because a backwater valve has movable parts, there is a possibility of stoppage or malfunction. Access to the valve must be provided in order to permit the necessary maintenance or repairs.

CONCLUSION

The use of this safety brochure will assist members in compliance with Public Act 222 and develop a preventive maintenance program to reduce the potential for sewer back-ups.

Each DPW department has its own characteristics and each community has its own needs, policies, and limitations. Although this outline may be sufficient for your community's needs the committee suggests that you consult with your MMRMA Risk Control Consultant for assistance.

BIBLIOGRAPHY

The following resource materials are referenced in this resource or relevant to the subject matter addressed in this brochure:

ASME A112.14..1-75, *Backwater Valves*. New York: American Society of Mechanical Engineers, 1975.

ASME 1018-86, *Performance Requirements for Trap Seat Primer Valves; Water Supply Fed*—with 1989 Revision. Bay Village, OH: American Society of Sanitary Engineering, 1989.

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