City Requirements for Monitoring Access Structures

What is a Monitoring Access Structure (MAS)?
A MAS is a privately owned and secure sampling location that allows city staff safe access to sample a business’s discharge to the public sewer system. The access point is usually a sampling manhole, but other structures are acceptable.

What is the purpose of the MAS Rules?
City Code gives the Bureau of Environmental Services (BES) authority to require a MAS. BES adopted the MAS Rules on September 16, 2016, to clearly define the businesses that are required to install a MAS. The rules set design and location standards businesses must meet to ensure the MAS is secure, provides for collection of representative samples, and is safe to access.

Why is monitoring of discharges necessary?
The federal Clean Water Act (CWA) requires the city to regulate pollutant discharges into the public sewer system from certain businesses. Routine sampling of non-domestic discharges from businesses ensures that pollutant concentrations in those discharges do not:
• Harm the public sewer system or the environment;
• Endanger the life and health of the public or workers in the sewer or at the treatment plant;
• Violate water quality standards.

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Wastewater discharges with high concentrations of pollutants can block pipes, harm the public sewer system, and cause sewage releases into streets, homes or businesses—endangering public health and the environment.
How are the MAS rules of value to the city and customers?
Periodic sampling of commercial and industrial dischargers helps protect the public sewer system, Portland rivers and streams, and the treatment plant. Certain pollutants can damage the collection system and the treatment plant, requiring expensive maintenance, repairs or replacement. Portland’s wastewater collection and treatment system is valued at over $13 billion dollars. Controlling damaging pollutants helps extend the life of this important infrastructure, reduces maintenance costs, saves money for sewer ratepayers, and protects public health and the environment.

The MAS rules provide clear information on access structure requirements, reduce surprises for businesses, and eliminate or reduce costs associated with retrofitting unsafe or inaccessible structures. Monitoring for pollutants enables dischargers and the city to effectively manage sewer discharges, maintain compliance, and avoid financial liabilities. Unregulated discharge of pollutants to the sewer system can result in regulatory penalties or even third-party lawsuits.

Do all businesses need a MAS?
No. The MAS rules apply to specific industrial or commercial customers that discharge, or are expected to discharge, to the public sewer and drainage system. The rules may actually limit the number of businesses required to install a MAS.

Which businesses are required to install a MAS?
- Businesses that have city-issued or city-administered discharge permits
- Regulated businesses with an existing sampling location that does not meet the MAS standards
- Businesses that discharge, or are expected to discharge, on average more than 10,000 gallons per day of wastewater containing pollutants of concern
- Businesses operating at a site that has discharged pollutants that have caused problems in the public sewer or at the treatment plant
- Businesses that discharge pollutants of concern that may adversely impact groundwater, surface water, or the public sewer system
- Businesses that are expected to have discharges that exceed established city pollutant limits or thresholds

How long will businesses have to comply with the rules after their adoption?
The Director of BES adopted the MAS rules on September 16, 2016. Businesses identified by the City during development permit review as needing a MAS after that date will need to install the structure as part of their development project. Existing businesses that do not have a MAS or that have an existing structure that does not meet the MAS requirements will have between six months and two years after September 16, 2016, to upgrade or install a MAS that meets city standards.

How much will it cost to install a MAS?
The cost to install or upgrade a MAS will vary depending on site conditions. Costs could range from a few hundred dollars for upgrades or redesign to around $10,000 for a new installation. BES staff will work with businesses and development staff to give technical assistance to meet the MAS requirements.

To learn more about MAS requirements, visit www.portlandoregon.gov/bes/MAS. You may also contact Environmental Services Pollution Prevention Plan Review at 503-823-7122.