

## SECTION 3.6 - PROPERTIES REQUIRING GRINDER PUMPS

- (a) **INTRODUCTION** – It may be determined that sewage grinder pumps are required to convey wastewater from certain properties to the Authority’s sewer system. Prior to installation of a grinder pump unit, written approval of the Authority is required. Upon requesting approval to utilize a grinder pump, the Owner shall demonstrate to the Authority’s satisfaction that alternate gravity service is not feasible.

Most of the Authority’s Sewer System is designed so that Wastewater flows by gravity from Improved Properties to the Regional System. However, when Improved Properties are located in areas where gravity flow is not possible, the Authority may provide and operate pressure sewer lines to carry Wastewater from Improved Properties to gravity flow lines. DEP approval is required for the construction and operation of pressure sewer lines. DEP will not approve pressure sewer lines unless the Authority assumes certain responsibility for assuring that the pressure sewer lines and the pumps, tanks, and other facilities used with them will form a pressure system which will function effectively and in case of malfunction will be repaired or replaced immediately to avoid all health hazards and nuisances. The Authority has adopted these rules and regulations to meet DEP’s permit conditions for pressure sewer systems. Compliance with these rules and regulations by all Owners of Improved Properties served by pressure sewer lines is a continual prerequisite for service to such properties.

- (b) **MATERIALS, INSTALLATION AND TESTING** – Where the grinder pump unit will be located outside the building, the Building Drain and Building Sewer from the building to the grinder pump tank shall be installed and tested in accordance with these Sewer Connection Specifications.

The grinder pump, tank, valves and other related appurtenances shall be provided, installed and tested in conformance with the latest edition of the Authority’s “Standard Construction and Material Specifications for Sanitary Sewer System Extensions”, with Exhibit D, Pressure Lateral Detail, and with the manufacturer’s recommendations.

Shop drawings and product data shall be submitted to and approved by the Authority prior to installation of the grinder pump unit and pressure lateral. Installation and testing shall be subject to inspection by the Authority’s Sewer Inspector.

The pressure lateral shall be 1 ½-inch SDR 26 PVC pipe with rubber gasket joints, buried a minimum of four feet. Thrust blocks shall be provided for all fittings and at all locations where horizontal and/or vertical deflections are made. Bedding and backfill shall be in accordance with Sections 3.2 (e) and 3.2 (g), respectively. Earth dams shall be provided in the pressure lateral trench at locations required by the Authority's Sewer Inspector. Pressure lateral testing shall be as follows:

- (1) The pressure lateral shall be isolated for testing by removing the grinder pump from the grinder pump basin and closing the ball valve at the curb stop.
  - (2) The lateral shall be filled with clean water and the hydrostatic test pressure shall be raised to 55 psig using a hydrostatic pump. A preliminary test period for the removal or absorption of air in the lateral, before measuring leakage, shall be permitted.
  - (3) The test pressure shall be maintained for a period of not less than 30 minutes. If the measured leakage in 30 minutes exceeds 10 gallons per day, per mile, per inch of pipe diameter (.01 ounces per foot in 30 minutes for a 1 ½-inch diameter pipe), the pressure lateral shall have failed the test.
- (c) **STORAGE** – Adequate storage volume shall be provided so that, in the event of a power failure or mechanical failure, sewer service to the building can be maintained for one day.
- (d) **DUPLEX GRINDER UNIT** – If the grinder pump is expected to convey more than 1,000 gallons of sewage per day, the Owner shall install a duplex grinder pump system. Each pump must be of the same type and model as the pump approved for the simplex units (Hydromatic Hydro-O-Grind SPG 200, or approved equal). The pump tank, discharge piping, valves, electrical controls and other appurtenances relative to the duplex grinder pump system shall be in accordance with the manufacturer or supplier's recommendations. The pumps should alternate operation to minimize wear on any single pump. Liquid level sensors should be adjusted so that the two pumps do not routinely operate simultaneously.
- (e) **OPERATION AND MAINTENANCE / DUTIES OF OWNER** – Operation, maintenance, repair and replacement of the grinder pump system, pressure lateral and other related appurtenances located on the Owner's property outside of public rights-of-way, shall be the sole responsibility of the owner.

Any costs borne by the Owner for installation, operation, maintenance, repair and replacement of the Owner's facilities shall be separate from the Tapping Fee, Inspection Fee and Quarterly Sewer Rentals paid to the Authority.

It shall be the duty of the Owner of every Improved Property served by pressure sewer lines to inspect, maintain, repair, and replace such Owner's part of the pressure sewer system so as to avoid clogging the Authority's lines and to prevent all health hazards and nuisances. In the event of any malfunction of a pressure sewer system, the Owner of every Improved Property served thereby at such Owner's expense shall (1) immediately notify the Authority and the other users of the system of the malfunction, (2) promptly prevent or abate any health hazard or nuisance which may result or has resulted from such malfunction, and (3) repair or replace any defective part of the system located on such Owner's property.

- (f) ***INSPECTION BY AUTHORITY*** – The Authority reserves the right to make periodic inspections of the grinder pump unit on each Improved Property served by the Authority's pressure sewer lines. Such inspections will be in addition to those required of the Owner and will be done at the expense of the Owner. Defects discovered through such inspections will be reported to the Owner for prompt correction at the Owner's expense.

The Authority shall have the right of access to every Improved Property with a pump, which discharges Wastewater to any of the Authority's pressure sewer lines. Such right of access shall extend to the agents, contractors, subcontractors, employees, and officials of the Authority when acting for the Authority. Such right of access shall be for the purposes of inspecting, maintaining, repairing, and replacing any part of a pressure sewer system located on the Improved Property and for the purpose of preventing or abating any health hazard or nuisance arising from a malfunction of a pressure sewer system.

- (g) ***SUBSTITUTED PERFORMANCE AND COSTS*** – If the Owner of an Improved Property fails to perform any act to be performed by such Owner under these Special Rules And Regulations for Pressure Sewer Systems to the reasonable satisfaction of the Authority, the Authority reserves the right to perform for such Owner. Such Owner shall reimburse the Authority on demand for all costs incurred by the Authority in the exercise of that right.
- (h) ***OTHER RULES AND REGULATIONS*** – Service to every Improved Property served by the Authority's pressure sewer lines also shall be subject to all the rules and regulations applicable to properties served by the Authority's gravity sewer lines.

- (i) **AGREEMENT OF OWNER** – Pressure sewer line service shall not be furnished to any Improved Property the Owner of which has refused to agree in writing to be legally bound by these Special Rules And Regulations For Pressure Sewer Systems.
  
- (j) **ESCROW ACCOUNTS** – The Authority requires a minimum of Two Hundred Dollars (\$200.00) for residential and Four Hundred Dollars (\$400.00) for commercial escrow accounts; pertaining to submittals for pressure sewer systems to cover any costs incurred by the Authority for engineering, legal or other related fees.
  
- (k) **PRESSURE SEWER SYSTEM PERMIT APPLICANT’S PROCEDURE** – The following steps must be followed when a Pressure Sewer System is being installed:
  - (1) Establish an Escrow Account.
  - (2) Provide Cut Sheets and Plans to be reviewed by the Authority’s Engineer.
  - (3) After approved is received from the Authority’s Engineer, sewer permits may be obtained.
  - (4) Construction shall not commence until a sewer permit is obtained.
  - (5) If sewer billing is being based on water usage, a water meter must be purchased from the authority.

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As an Owner of an Improved Property to which a grinder pump is required, the undersigned hereby agrees to be legally bound by the foregoing Special Rules and Regulations, or revisions thereof, for pressure sewer systems.

**DATE:** \_\_\_\_\_

**PENN TOWNSHIP MUNICIPAL AUTHORITY**

**BY:** \_\_\_\_\_

**Authorized Signature**

\_\_\_\_\_

**Property Owner**

**BY:** \_\_\_\_\_

**Authorized Signature**