

Building Development Division Residential Policies and Procedures Inspections/Plumbing

Grinder Pump Tank Installation Third Party Inspection Program

Issued by: Eric M Mays, P.E.

Building Official

Effective: August 19, 2016

Purpose

The purpose of this Program is to address the significant number of premature failures of residential grinder pump/tank installations from improper placement of the base, anchoring and backfill materials supporting the grinder pump tank. This Program applies to new construction and replacement grinder pump tank installations.

Permits

A Plumbing Permit is required for the installation of a grinder pump/tank. On the Plumbing Permit Application, indicate the number of "Sewer Ejector/Tank" being installed. If a new electrical circuit is installed, an Electrical Permit is required.

Installation

Tank Size: For a typical residential use, the minimum tank size is 150 gallons. If the proposed tank size is less than 150 gallons, a Plumbing Plan Review is required to confirm the smaller tank size is adequate for the proposed installation. (NOTE: There is no Residential Plan Review Filing Fee for this Plan Submission.)

Exterior Installation: The grinder pump tank shall be installed a minimum of ten (10) feet away from the house's foundation wall in undisturbed soil. If the grinder pump tank is proposed to be installed in fill material and/or closer than ten (10) feet to the house's foundation, a Professional Engineer's Report evaluating the soil conditions and building surcharge (if applicable) must be submitted for review/approval by the Building Plan Review Branch. The installation shall be in accordance with the manufacturer's instructions.

Interior Installation: The grinder pump tank shall have a gasket sealed top and shall be independently vented through the roof with a minimum of 1-¼" pipe. The location and installation shall be in accordance with the manufacturer's instructions.

Tank Discharge Pipe Male Adapter: The Plumbing Code allows for the installation of a Schedule 40 PVC Male Adapter. However, based on the observed failures, the County recommends the installation of a Schedule 80 PVC, brass or stainless steel Male Adapter. (Note: Galvanized material is not approved for use in building sanitary drainage systems.)

Development Services



Building Development Division Residential Policies and Procedures Inspections/Plumbing

Plumbing Inspection Process

A County Approved Third Party Inspector is required to inspect, test and certify the installation of the grinder pump tank's base, anchoring and backfill materials to ensure the installation is in accordance with the manufacturer's instructions. Please refer to the <u>Approved Third Party Inspectors - Building</u> for the list of approved Professional Engineers.

At the time the backfill is installed up to the underside of the grinder pump tank's inlet/outlet pipes, schedule the 405R Sewer/Water Service Inspection for the grinder pump and tank inspection. The County Inspector will verify the location of tank, the condition of the installation and verify the sewer pipe pressure test.

During the Final Inspection, the grinder pump tank lid is required to be removed for a visual inspection of the tank. The Plumbing Contractor, Electrical Contractor (if applicable) and County Approved Third Party Inspector must complete the <u>Grinder Pump Tank Inspection Certification (Residential)</u>. The certification must be uploaded to the permit via the ePortal prior to the Final Inspection for all contractor managed projects. For homeowner managed projects, the certification may be left on site for the inspector or uploaded to the permit. Please note that Certification Superscripts 1, 2 and 3 correspond to the work being certified by each of the responsible parties.

Attachment/Hyperlinks

- Approved Third Party Inspectors Building
- Grinder Pump Tank Inspection Certification (Residential)
- Inspections Certifications Electronic Submissions