



*Mark R. Wedemeyer, Director*

## Memorandum

**To:** MBIA, Review Agencies and the General Public

**From:** Raghavenderrao Badami, PE, Assistant Director

**Subject:** Low Pressure Sewer

**Date:** March 24, 2022

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### **Background**

Low Pressure Sewer (LPS) is a pressurized sanitary force main connecting multiple grinder pumps or pressure mayo tanks onto a common force main. This force main is smaller than a gravity main due to the solids being grinded in grinder pumps and effluent in mayo tanks being sent through the main via individual pumps. Gravity connections cannot be made to a low pressure force main.

### **Purpose**

The purpose of this document is to provide guidance to all involved in the review, permitting, approval of LPS. This guidance is provided in the form of Frequently Asked Questions (FAQ's) on the county website and the below tables that summarize permitting requirements involving LPS for residential and commercial projects.

### **Residential and Commercial Projects – Guidance**

Please refer to [Residential and Commercial tables](#) and [FAQ's](#) below.

Note that this guidance covers many situations that are commonly encountered with these systems, but this is not an exhaustive list covering all permitting type and scenarios. If there are situations that are not covered by this guidance or there are questions regarding a specific project application, contact Inspections and Permits staff for assistance at 410-222-7790. FAQ's on the website will also be updated as needed.

## Residential

Proposed Work	Low Pressure System (LPS) or Gravity	Building Permit Required	PWA Required <sup>3</sup>	Letter Agreement Required	On-site Plumbing Permit	Plumbing Permit Required	Connection Permit Required
Demolition of existing Single Family Dwelling <sup>1</sup>	LPS	Yes	No	Yes	No	No	No
Demolition of existing Single Family Dwelling <sup>2</sup>	Gravity	Yes	No	No	No	No	No
New SFD	LPS	Yes	Yes	No	No	No	Yes
New SFD	Gravity	Yes	No	No	No	No	Yes
Interior additions & renovations that create more than 4,000sf total habitable area	LPS - requires a second mayo tank or duplex grinder pump	Yes	Yes	No	No	Yes	No
Interior additions & renovations that create more than 4,000sf total habitable area	Gravity - requires a duplex grinder pump	Yes	No	No	No	Yes	No
Replace and relocation of existing mayo tank or grinder pump ONLY	LPS	No	Yes	No	No	No	Yes
Replace and Relocation of existing grinder pump ONLY	Gravity	No	No	No	No	No	Yes
Installation of a private grinder pump only	LPS	No	Yes	No	No	No	Yes
Installation of a private grinder pump only	Gravity	No	No	No	No	No	Yes

### Notes

1. To remove and relocate/replace electrical panel box and service line
2. If the tank or grinder is on-site it will need to be relocated/replaced with a new tank at the property line.
3. All Mayo tank installations require a PWA

## Commercial

Proposed Work	Low Pressure System (LPS) or Gravity	Building Permit Required	PWA Required	Letter Agreement Required	On-site Plumbing Permit	Plumbing Permit Required	Connection Permit Required
Demolition of existing structure	LPS	Yes	No	No	No	No	No
Demolition of existing structure	Gravity	Yes	No	No	No	No	No
New Structure	LPS	Yes	Yes	No	Yes	No	Yes
New Structure	Gravity	Yes	No	No	Yes	No	Yes
Installation of a public grinder pump only	LPS	No	Yes	No	Yes	No	Yes
Installation of a private grinder pump only	LPS	No	Yes	No	Yes	No	Yes
Installation of a private grinder pump (only) that discharges to a gravity cleanout	Gravity	No	No	No	Yes	Yes	Yes

## Notes

- All commercial grinder pumps are Duplex and private
- All commercial Mayo tanks are private with dual tanks require based upon flowuse
- All connections to a county system (gravity or LPS) require a connection permit.
- All Mayo tank installations require a PWA
- PWA required for  $\geq 8''$  service lateral