

Wastewater Installers

Spray Irrigation



Spray irrigation heads for wastewater effluent.
Photo by Richard Grabert

A spray irrigation system is a type of dispersion system that promotes evaporation and soil infiltration of the effluent. It is highly recommended that effluent from a mechanical septic system be chlorinated in a chlorine contact chamber prior to spray irrigation. This system uses an electric pump where a float switch activates the pump to force the effluent through piping to pop-up or elevated rotating-type sprinkler heads to distribute to the yard.

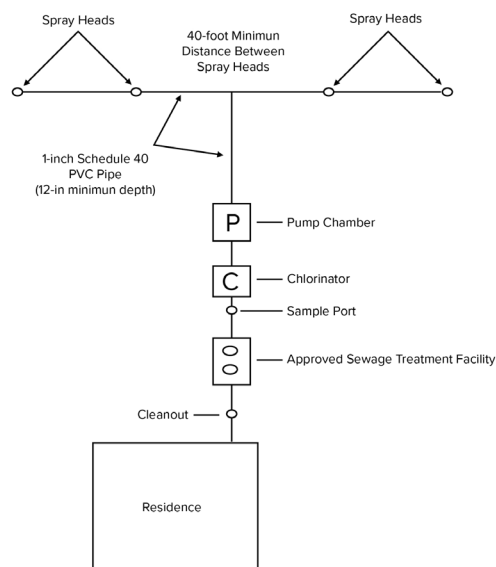
Design Specifications

To properly install a spray irrigation system, the pumps must comply and be sized according to the provision in the [Public Health – Sanitary Code](#). The minimum pump for the system should be a one-half horsepower motor that provides a minimum flow of 12 gallons per minute at 25 pounds per square inch at all sprinkler heads. A minimum of three 4-inch sprinkler heads, coded for wastewater effluent, should be spaced 40 feet apart as part of the requirement. Pumping

chambers will be activated by a high/low water switch through an automatic on/off switch. The pump must be deactivated through a low-volume cut-off switch to prevent operating issues. For these pumps, time cycling devices may be used to program sprinklers for early morning or evening irrigation, but pumping chambers should have adequate capacity to maintain water levels while sprinklers are off. For all areas that host spray irrigation, the land should be sloped to facilitate drainage away from water wells or water courses to prevent public health hazards.

Schematic shows 4 spray heads - minimum of 3 spray heads required

Perimeter of Spray Area Shall Be At Least 10 Feet From Property Lines/Structure



Minimum Standard Layout for
Spray Irrigation Process
Utilizing Four Spray Heads

Drawing not to Scale

Additional Requirements

- The spray irrigation sprinklers shall comply with American Society of Agricultural Engineers Standard S398.1 – Procedure for Sprinkler Testing and Performance Reporting.
- The edge of the spray and its drainage must be a minimum of:
 - 50 feet from any private water wells
 - 10 feet from any property line
 - 100 feet from public water supply wells
 - 25 feet from potable water (pressure) lines
- Any exceptions due to lot size, topography or other constraints may be authorized by the sanitarian parish manager with written notification and must be approved prior to installation.

References

- <https://www.doa.la.gov/media/j3hnpfdy/51.pdf>
- <https://ldh.la.gov/assets/oph/Center-EH/sanitarian/onsitewastewater/7608.pdf>
- <https://ldh.la.gov/page/wastewater>

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