Date Received_____ Check#_____
Cash_____

NEWTON COUNTY HEALTH DEPARTMENT
P.O. Box 447
NEOSHO, MO 64850
417-451-6549
417-451-1852 FAX

LPP System Checklist of the permit application for:

Name_____ Address_____

Installer_____ Date Reviewed_____

LPP System Constants for Newton County

1 ½ inch lateral line size Sch. 40
2 inch manifold line size Sch. 40
3 foot pressure head
5/32 hole diameter every 5 foot
5 foot minimum spacing of trenches
ball valves

( ) Owner's name/address/signature
( ) Precise directions to site
( ) Installer's name/signature/phone number
( ) Legal description of property
( ) E911 address of property
( ) Number of bedrooms
( ) Number of persons served
( ) Loan

CHECKLIST

Depth of trench_____ Distance between trenches_____

Slope_____ Elevation of highest point of supply line___

Daily waste flow_____ Pump tank (elevation)_____

Septic tank size_____ Septic tank manufacturer_____

Pumping tank size_____ Brand of **effluent** pump and size_____

Pumping tank manufacturer_____ Brand of filters in pump tank_____

Total lateral line length_____ Number of lateral lines_____

Dosing Volume_____ Total Square feet_____

TDH_____ _____ GPM at _____ ft. of head

Measured length + fittings loss = _____

Pumping uphill or downhill (circle one) Is installer doing electrical connections? Y or N

Curtain drain? Y or N Check valve? Y or N

Completed worksheet? Y or N

_____ Signature of Environmental Public Health Specialist

LPP WORKSHEET

Absorption Area

Step 1 is calculating daily waste flow

_____ Bedrooms at 120 gal/day/bedroom = _____ gal/day

Step 2 Determine loading rate (1st page of site evaluation)

_____ gal/day per sq. ft.

Step 3 Total area needed for absorption area =

_____ gal/day divided _____ (loading rate) = _____ total sq. ft. needed in absorption area
gal/day per sq. ft.

Step 4 Determine total length of lateral lines. Spacing between trenches is 5' minimum to prevent Overloading. Divide total square feet by 5 to get total length of lateral lines.

_____ sq. ft. divided by 5 foot = _____ linear feet of lateral lines

***Remember..... lateral lines <u>can not</u> exceed 70 feet.**

Number of lateral lines _____.

Dosing Rate

<u>Use Constants</u>

5/32" hole diameter
5' hole spacing
3' pressure head

Step 1 Calculate the number of holes

_____ ft. lines divided by 5' spacing = _____ holes per line

_____ holes x _____ lines = _____ total number of holes

Step 2 Flow rate is measured in gallons per minute

Flow rate per hole – Use <u>Table 2</u> for flow rates
<u>At 3' pressure head + 5/32" holes = .50 gallons per minute</u>

.50 GPM x _____ total holes = _____ gallons per minute

Pump Selection

Use Table 3 for pipe friction

Total Dynamic Head (TDH)

Static Head + Operating Head + Friction head = TDH

Static head = vertical distance from pump turn off level to the point of discharge

Operating (pressure) head = 3 ft. (this is a constant)

Friction head = Resistance to flow from fittings (measured length & loss from fittings) Use Table 6

1. Static head_____
2. Operating head 3'
3. Friction head = _____ measured length + _____ loss from fittings.

Divide total from (3) above by 100 (_____ divided by 100 =) _____ per 100'
This gives you feet in 100' increments.

Using Table 3 Multiple your friction head per 100' increments by the figure in table 3 at _____gal/min in 2" pipe.

_____ X _____ = total ft. in friction head _____

Then add your static head _____ + operating head_____ + friction head_____ = TDH

***Make sure you use the right pump curve that goes with your individual pump.**

***Compare the TDH in feet by the total gallons per minute, to get the correct pump size.**