LIQUID WASTE DISPOSAL REGULATIONS

PART I

General Provisions

100. SCOPE. — The Liquid Waste Disposal Regulations shall apply to disposal systems which receive and treat 2,000 gallons or less of liquid waste per day.

101. DEFINITIONS. — As used in the Liquid Waste Disposal Regulations:

A. "Absorption field" means an area in which open joint or perforated piping is laid in gravel-packed trenches or excavations for the purpose of distributing the discharge from a liquid waste treatment unit used as part of a liquid waste system for absorption into the soil;

B. "Aerobic treatment unit" means a watertight tank where air is introduced to the liquid waste by mechanical means;

C. "Alternating fields" means two absorption fields designed to allow one field to dry out while the other field is treating the discharge, where each field is designed to treat the entire design flow;

D. "Arroyo" means a dry wash or draw which has flow only from occasional incident precipitation;

E. "Bed" means an absorption field which is wider than an absorption trench;

F. "Black water" means waste from a liquid flushing toilet or urinal or garbage disposal;

G. "Body of water" means all water including water situated wholly or partly within or bordering upon the state, whether surface or sub-surface, public or private;

H. "Canal" means a ditch or lined channel that carries water for irrigation, flood control or drainage purposes, and is used on a seasonal or intermittent basis, but excludes a ditch or lined channel used to carry water for domestic consumption;

I. "Clay sealant" means a manufactured clay sealant or a naturally occurring clay at the site location which has an annual seepage ratio no greater than 3.0 acre ft/yr/acre (0.1 inch/day);

J. "Cesspool" means a covered or uncovered excavation which receives untreated liquid waste and permits the untreated liquid waste to seep into surrounding soil;

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K. "Curtain drain" means a pipe that is constructed to intercept ground water and carry it away from the absorption field;

L. "Deep trench" means an absorption field constructed with a trench which is deeper or wider than three (3) feet;

M. "Digested humus" means digested organic matter that is the end result of decomposition in composting toilets;

N. "Director" means the director of the Division or his delegated representative;

O. "Disposal system" means a system for disposing of the discharge from a liquid waste treatment unit and includes but is not limited to seepage pits, absorption fields, evapotranspiration systems, or stabilization ponds;

P. "Division" means the Environmental Improvement Division of the New Mexico Health and Environment Department;

Q. "Enclosed system" means a privy or other non-water-carried disposal system for human excreta, or a holding tank;

R. "Evapotranspiration system" means a liquid waste treatment unit and gravel-packed trenches or an excavation designed for the purpose of disposing of the discharge from a liquid waste treatment unit by evaporation into the atmosphere, transpiration by plants, and in certain cases, absorption into the soil;

S. "Grey water" means water carried waste from the kitchen or bathroom sinks, showers, bathtubs, or washing machines;

T. "Ground water table" means the upper surface of ground water in the zone of saturation of a geologic formation;

U. "High nutrient level" means an excessive level of nutrients which can potentially lead to algae blooms and plant overgrowth; and nutrient levels in ground water above the standards established by the New Mexico Water Quality Control Commission;

V. "Holding tank" means a watertight receptacle for the retention of liquid waste either before, during, or after treatment, and is accessible for periodic removal of its contents;

W. "Liquid waste" means grey water and black water;

X. "Liquid waste system" means a system which receives and treats 2,000 gallons or less of liquid waste per day and includes the disposal system and liquid waste treatment unit;

Y. "Liquid waste treatment unit" means a unit designed, constructed, and installed to stabilize liquid waste by biochemical and physical action and includes, but is not limited to: aerobic treatment units, septic tanks, and stabilization ponds;

Z. "Minimum field area" means the minimum amount of contiguous land area within a site location necessary for the installation of a liquid waste system. The minimum field area includes the land area for the liquid waste treatment unit, absorption field, replacement absorption field, and setback distances for property lines and building(s), but does not include the land area necessary to meet the setback distances for watercourses, arroyos, canal and walls; areas where the maximum slope is exceeded, percolation rate is
greater than one hundred and twenty (120) min/inch; seasonal water table is higher than the levels specified in Section 209, flooding potential is greater than once in twenty-five (25) years, depth to bedrock is less than four (4) feet below trench or excavation bottom; and areas where irrigation, driveways, roadways; or buildings exist or are planned:

CONCEPT OF MINIMUM FIELD AREA

ASSUMPTIONS: Trenches: 2' x 70' x 3' Deep
               6' between trenches
AA. "Modify" means to change the method of liquid waste disposal; to enlarge the liquid waste system; to alter the location of or substantially increase the amount of liquid waste received by the liquid waste system;

BB. "Mound" means a disposal system where the absorption field is built above the ground to overcome limits imposed by distances to ground water, bedrock or impervious soils;

CC. "Nutrient" means a substance, such as nitrate or phosphate, which is necessary for and stimulates plant growth;

DD. "Percolation test" means a soil test at the depth of a proposed absorption field to determine the water absorption capability of the soil. The results of an absorption test (percolation rate) are normally expressed as the rate at which water is absorbed into the soil in minutes per inch;

EE. "Person" means any individual, partnership, firm, public or private corporation, association, trust, estate, political subdivision or agency, or any other legal entity or their legal representatives, agents or assigns;

FF. "Plot plan" means an accurate drawing or map of the site location, indicating the layout, acreage, and dimensions; the location of the buildings, property lines, building sewer stub-out, water well, meter, or lines, liquid waste system, watercourses, driveway(s), and utility line(s);

GG. "Private water supply" means a non-public water supply;

HH. "Public water supply" means a water supply for the provision to the public of piped water for human consumption if such system has at least fifteen (15) service connections or regularly services an average of twenty-five (25) individuals at least sixty (60) days out of the year;

II. "Sand filter" means a filtration and absorption device which consists of a wide bed or trench, composed of a number of lines of perforated pipe or drain tile, surrounded by a matrix of clean coarse aggregate containing an intermediate layer of sand as a filtering material, and when appropriate, with a system of underdrains for collection of discharge;

JJ. "Seepage pit" means a pit for disposing of discharge from a liquid waste treatment unit;

KK. "Septage" means the liquid waste removed from a liquid waste treatment unit, when pumped out, or from a holding tank;

LL. "Septic tank" means a watertight tank which is designed and constructed to separate solids from the liquid waste and digest organic matter through a period of detention, and anaerobic digestion, and allow the discharge to go to a disposal system;

MN. "Service connection" means a single physical connection from a water service main which provides water to one or more structure(s);

NN. "Setback distance" means a straight line, horizontal distance measured from the liquid waste system or a portion thereof to the object in question (which includes but is not limited to a water well, building, arroyo, canal);

OO. "Stabilization pond" means a reservoir of diked land which receives liquid waste for treatment or evaporation;

PP. "Suitable soil" means a soil which will act as an effective filter in removal of organisms and suspended solids prior to the discharge reaching ground water or any highly permeable earth such as joints in bedrock, gravels,
or vary coarse soils;

QQ. "Terracing" means building a level area into a slope or on a slope for placing the disposal system;

RR. "Watercourse" means any river, creek, canyon having definite banks and bed with visible evidence of flow of water, but excludes canals and arroyos.

102. LIQUID WASTE SYSTEM PERMIT. —

A. No person shall install or have installed a new liquid waste system or modify or have modified an existing liquid waste system, unless he obtains a permit issued by the Division prior to such installation or modification.

B. Any person seeking a permit shall do so by filing an application with the nearest field office of the Division. The application shall:

1. State the applicant's name and mailing address;
2. State the date of the application;
3. State the location of the property where the liquid waste system is to be installed, or modified, and the type of establishment that will generate the liquid waste;
4. Describe the characteristics of the soil where the liquid waste system is to be installed or modified including soil depth, percolation rate including evidence of percolation test, depth to seasonal high water table, slope and flooding potential;
5. Describe the direction of the expected ground water flow;
6. Include the plot plan and state the size of the minimum field area where the liquid waste system will be installed or modified;
7. State the quantity of liquid waste the system will be receiving (see Appendix A);
8. State the type, size, and dimensions of the liquid waste system to be used and its location on the property where it will be installed or modified;
9. State the location of any bodies of water, watercourses and existing or proposed public or private water supplies and liquid waste systems located within two hundred (200) feet of the property boundary where the liquid waste system will be installed or modified;
10. Contain such other relevant information as the Division may reasonably require;
11. Be signed by the applicant or his authorized representative.

C. The Division shall grant the permit, grant the permit subject to condition, or deny the permit within ten (10) working days of receipt of the completed application.

D. The Division shall deny the permit if it appears that the proposal will not meet the requirements of these regulations.

E. The Division shall maintain a file of all permits issued. The file shall be open for public inspection.

F. The installation or modification of the liquid waste system shall be in accordance with the permit.

G. The Division may cancel a permit where the installation or modification of the permitted liquid waste system has not been completed within six (6) months of the issuance of the permit.
H. The Division may perform a site inspection prior to making a decision on the permit application, during and upon completion of the liquid waste system construction.

103. VARIANCES. —

A. Any person seeking a variance from the requirements contained in these regulations shall do so by filing a written petition with the nearest district office of the Division.

B. The petition shall:
   1. state the petitioner's name and mailing address;
   2. state the date of the petition;
   3. state the period of time for which the variance is desired;
   4. state the reason the petitioner believes the variance is justified;
   5. be accompanied by any relevant documents or materials which the petitioner believes would support his petition;
   6. contain such other relevant information as the Division may reasonably require;
   7. include a completed permit application; and
   8. be signed by the petitioner or his authorized representative.

C. The Division shall grant the variance, grant the variance subject to conditions, or deny the variance within ten (10) working days following receipt of the completed petition.

D. The Division shall deny the variance petition if it appears that:

1. The liquid waste system will be located, operated, or maintained so as to potentially contaminate any drinking water supply, potentially contaminate any drinking water supply, potentially pollute or cause high nutrient levels in any body of water, potentially degrade any recreational resource, create a nuisance, or cause a potential hazard to public health;
2. The petition seeks a reduction in minimum field area and a corresponding reduction in the minimum lot size unless through the use of deep trenches or seepage pits:
   (a) construction of the deep trenches or seepage pits is done in a manner acceptable to the Division;
   (b) the location of the liquid waste treatment unit and the deep trenches or seepage pits on the site meets the minimum setback distances specified in Appendix B; and
   (c) an area is set aside for the trench or pit plus a replacement trench or pit, where the distance(s) between adjacent trenches or pits are three (3) times the width of such excavation. This area shall not contain or plan to contain any buildings or roadways.

3. The petition seeks a reduction in minimum field area unless:
   (a) the minimum field area lies totally within all property line setback distances. In this case a reduction of fifteen (15) percent is allowed for the minimum field area; or
   (b) the location of the liquid waste treatment unit is not adjacent to the absorption field area. In this case a reduction of twenty (20) percent is allowed for the minimum field area.
E. The action taken by the Division shall be by written order, a copy of which shall be sent to the petitioner. Orders shall:
1. state the petitioner's name and mailing address;
2. state the date the order is made;
3. describe the location of the property where the liquid waste system was to be installed;
4. state the lot size and minimum field area where the liquid waste system was to be installed;
5. state the quantity of liquid waste the system was to receive;
6. state the decision of the Division, including, if a variance is granted, the period of time for which it is granted and any conditions which may apply; and
7. state the reason for the decision.

F. The Division shall maintain a file of all orders issued. The file shall be open for public inspection.

104. HEARINGS. —

A. If an applicant for a permit or a petitioner for a variance is dissatisfied with the action taken by the Division, he may request a hearing before the Director. The request must be made in writing to the Director within fifteen (15) days after notice of the Division's action has been received by the person making the request. Unless a timely request for hearing is made, the decision of the Division shall be final.

B. If a timely request for hearing is made, the Director shall hold a hearing within fifteen (15) working days after receipt of the request. The Division shall notify the person who requested the hearing by certified mail of the date, time and place of the hearing. In the hearing, the burden of proof shall be upon the person requesting the hearing.

C. Hearings shall be held at the Division field office designated by the Director in the area where the proposed liquid waste system is to be located.

D. Upon request, the hearing shall be recorded. Recording and transcript costs shall be paid by those persons requesting such recording and transcript.

E. In hearings, the rules of civil procedure and evidence shall not apply, but the hearings shall be conducted so that all relevant views, arguments, and testimony are amply and fairly presented without undue repetition. The Director shall allow the Division and the person who requested the hearing to call and examine witnesses, to submit written and oral evidence and arguments, to introduce exhibits, and to cross-examine persons who testify.

F. Based upon the evidence presented at the hearing, the Director shall sustain, modify, or reverse the action of the Division. The action taken shall be by written order within five (5) working days following the hearing. The order shall state the decision and the reasons therefor and shall be sent by certified mail to the person requesting the hearing.
PART II
Disposal

201. GENERAL REQUIREMENTS.—

A. No person may dispose of liquid waste except into a liquid waste system.

B. No person may use a liquid waste system which, by itself or in combination with other sources, is contaminating any drinking water supply, polluting or causing high nutrient levels in any body of water, degrading any recreational resources, creating a nuisance, or causing a hazard to public health.

C. No person shall install, have installed, modify, or have modified, a liquid waste system after November 1, 1973, or use a liquid waste system installed or modified after November 1, 1973, unless the system is located, operated and maintained so as not, by itself or in combination with other sources, to potentially contaminate any drinking water supply, potentially pollute or cause high nutrient levels in any body of water, potentially degrade any recreational resource, create a nuisance, or cause a potential hazard to public health.

D. No person shall install, have installed, modify, or have modified a liquid waste system after the effective date of these regulations, or use a liquid waste system installed or modified after the effective date of these regulations, unless the system is located, operated, and maintained in accordance with the requirements of Sections 202-209 or a variance issued pursuant to Section 103.

E. No person shall install, have installed, modify, or have modified a cesspool.

F. Compliance with these regulations does not relieve any person from the responsibility of meeting more stringent city or county regulations or ordinances governing the disposal or treatment of liquid waste, or any other requirement of state or federal law.

G. Unless otherwise provided, all liquid waste systems installed after the effective date of these regulations shall be sized for the appropriate design flow specified in Appendix A or other generally recognized reference, as determined by the Division.
202. SEPTIC TANK/ABSORPTION FIELD SYSTEM. —

A. All septic tank/absorption field systems installed or modified after the effective date of these regulations shall be located in a site and consist of a septic tank absorption field which conform to the requirements of this section.

B. 1. The site where the septic tank/absorption field system is installed shall meet the minimum lot size requirements specified in Table 1, and within each lot there shall be a minimum field area, specified in Table 2.

<table>
<thead>
<tr>
<th>SOIL CHARACTERISTICS</th>
<th>Slight Limitations</th>
<th>Mod. Lim.</th>
<th>Severe Lim.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percolation Rate (min/in)</td>
<td>0 - 15</td>
<td>16 - 30</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Slope (Feet/100 Feet)</td>
<td>0 - 8</td>
<td>8 - 25</td>
<td>8 - 25</td>
</tr>
<tr>
<td>Flooding Potential (overflow frequency in yrs)</td>
<td>Less than 1 in 25</td>
<td>More than 1 in 25</td>
<td></td>
</tr>
<tr>
<td>Soil Depth (Feet)</td>
<td>More than 4</td>
<td>Less than 4</td>
<td></td>
</tr>
<tr>
<td>Depth of suitable soil below trench bottom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Flow (GPD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Water and On-Site Sewerage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1000</td>
<td>.50</td>
<td>.75</td>
<td>1.00</td>
</tr>
<tr>
<td>1000 - 1500</td>
<td>1.00</td>
<td>1.20</td>
<td>1.50</td>
</tr>
<tr>
<td>1500 - 2000</td>
<td>1.25</td>
<td>1.50</td>
<td>2.00</td>
</tr>
<tr>
<td>On-Site Water and On-Site Sewerage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 - 1000</td>
<td>.75</td>
<td>1.00</td>
<td>1.25</td>
</tr>
<tr>
<td>1000 - 1500</td>
<td>1.25</td>
<td>1.60</td>
<td>2.50</td>
</tr>
<tr>
<td>1500 - 2000</td>
<td>1.70</td>
<td>2.25</td>
<td>3.25</td>
</tr>
</tbody>
</table>
### Table 2
#### Minimum Field Area

<table>
<thead>
<tr>
<th>Percolation Rate</th>
<th>0 - 15</th>
<th>16 - 30</th>
<th>31 - 60</th>
<th>More than 60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slope (ft/100 ft)</td>
<td>0 - 8</td>
<td>8 - 25</td>
<td>8 - 25</td>
<td>More than 25</td>
</tr>
</tbody>
</table>

#### Design Flows (GPD)  Minimum Field Area (Acres)

<table>
<thead>
<tr>
<th>0 - 500</th>
<th>0.191 Acres (8,320 sq.ft.)</th>
<th>0.253 Acres (11,000 sq.ft.)</th>
<th>0.367 Acres (16,000 sq.ft.)</th>
<th>No Absorption Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 - 1000</td>
<td>0.367 Acres (16,000 sq.ft.)</td>
<td>0.482 Acres (21,000 sq.ft.)</td>
<td>0.700 Acres (30,500 sq.ft.)</td>
<td>Absorption Field</td>
</tr>
<tr>
<td>1000 - 1500</td>
<td>0.528 Acres (23,000 sq.ft.)</td>
<td>0.700 Acres (30,500 sq.ft.)</td>
<td>1.03 Acres (45,000 sq.ft.)</td>
<td></td>
</tr>
<tr>
<td>1500 - 2000</td>
<td>0.700 Acres (30,500 sq.ft.)</td>
<td>0.918 Acres (40,000 sq.ft.)</td>
<td>1.38 Acres (60,000 sq.ft.)</td>
<td></td>
</tr>
</tbody>
</table>

(a) The minimum lot size and field area required for a liquid waste treatment unit and absorption field is determined by the most limiting condition under which a soil characteristic falls.

(b) See Section 202(B)(2) and Table 3 for alternative absorption field methods.

2. If a portion of the soil characteristics listed in Table 1 and 2 cannot be met, Table 3 may be used to determine an appropriate alternative absorption field method. The use of the listed alternative absorption field method shall be limited to remedying only one of the soil characteristics which do not meet Tables 1 and 2.
### TABLE 3
ALTERNATIVE ABSORPTION FIELD METHODS

<table>
<thead>
<tr>
<th>SOIL CHARACTERISTIC</th>
<th>ALTERNATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Depth —</td>
<td>Mounds or sand filters to maintain a suitable soil depth below trench of excavation bottom of at least four (4) feet.</td>
</tr>
<tr>
<td>Percolation Rate —</td>
<td>Alternative fields, seepage pits, deep trenches or beds. The use of the pits or trenches can be done to get below a slow percolation soil. All systems shall prevent surface ponding.</td>
</tr>
<tr>
<td>Between 60 - 120 min/in</td>
<td></td>
</tr>
<tr>
<td>Slope —</td>
<td>Deep trenches or terracing which will not allow any sidewall seepage.</td>
</tr>
<tr>
<td>Between 25 - 50%</td>
<td></td>
</tr>
<tr>
<td>Seasonal Ground Water Table —</td>
<td>Mounds or sand filters which allow compliance with the requirements for seasonal ground water table in Section 209.</td>
</tr>
</tbody>
</table>

C. The septic tank/absorption field system shall be located on the site to meet the minimum setback distances specified in Appendix B and the depth to the seasonal ground water table specified in Section 209, except as provided in Table 3.

D. The septic tank shall be constructed and sized in accordance with the Manual of Septic Tank Practice (U.S. Public Health Service Publication No. 526) or the New Mexico Uniform Building Code or other equivalent criteria determined by the Division, whichever results in a larger sized tank.

E. 1. The absorption field shall be sized in accordance with the following equation:

\[ A = 0.32 \times (Q) \times (v = \frac{t}{c}) \]

Where: 
- \( A \) = Required Absorption Field Area (Expressed in ft\(^2\))
- \( Q \) = Design Flow (Expressed in gallons/day) See Appendix A
- \( t \) = Percolation Rate (Expressed in minutes/inch)

2. The percolation rate shall be determined by using the procedure outlined in the Manual of Septic Tank Practice (U.S. Public Health Service Publication No. 526) or an equivalent procedure as determined by the Division. For purposes of the above equation, the minimum allowable percolation rate shall be three (3) minutes/inch.
3. The required absorption field area shall be comprised of trench bottom area in accordance with the Manual of Septic Tank Practice (U.S. Public Health Service Publication No. 526) for all trenches, and the sidewall area below inlet for all seepage pits. The minimum field width shall be eighteen (18) inches for all trenches.

4. Seepage pits shall be constructed in accordance with the Manual of Septic Tank Practice (U.S. Public Health Service Publication No. 526) or equivalent construction determined by the Division.

203. GREY WATER SYSTEMS. —

A. A grey water system shall be used to treat, store and dispose of grey water, where the black water has been separated and treated by an enclosed system, evapotranspiration system, holding tank, septic tank, or stabilization pond.

B. All grey water systems installed or modified after the effective date of these regulations shall use a septic tank, holding tank, or stabilization pond to separate and treat the solids in the grey water before disposal of the discharge and shall be located and installed in conformance with the requirements of this section.

C. The holding tank or stabilization pond used for grey water shall comply with the appropriate sections on holding tanks or stabilization ponds.

D. The grey water discharge from the tank or pond shall be disposed of by:

1. Land application in a manner acceptable to the Division;
2. Absorption field if:
   (a) the site where the grey water system is installed meets the minimum lot size specified in Section 202, Table 1, and contains a useable area meeting the required setback distances specified in Appendix B plus enough area for the field and replacement field; and
   (b) the grey water system is located on the site to meet the minimum setback distances specified in Appendix B; and
   (c) the absorption field is sized and constructed in accordance with Section 202(E); or
3. Evapotranspiration systems or sealed stabilization pond if the system or pond complies with the appropriate sections on evapotranspiration systems and stabilization ponds.

204. EVAPOTRANSPIRATION SYSTEMS. —

A. Evapotranspiration systems may be used for the treatment, storage, and disposal of liquid waste.

B. All evapotranspiration systems installed or modified after the effective date of these regulations shall be located and installed or modified in conformance with the requirements of this section.

C. The site where the evapotranspiration system is installed shall contain an area that meets the required setback distances specified in Appendix B plus enough area for the evapotranspiration bed plus an additional one-half bed.
D. The evapotranspiration system shall be located on the site to meet the minimum setback distances specified in Appendix B.

E. The evapotranspiration system shall be sealed in a manner acceptable to the Division unless:
   1. depth to seasonal water table complies with Section 209; and
   2. depth to fissured bedrock is greater than four (4) feet from bottom of trench or excavation.

205. AEROBIC TREATMENT UNIT/DISPOSAL SYSTEMS. —

A. All aerobic treatment units and disposal systems installed or modified after the effective date of these regulations shall be located and installed or modified in conformance with the requirements of this section.

B. The aerobic treatment unit and the disposal system shall be located on the site to meet all appropriate minimum setback distances specified in Appendix B.

C. All aerobic treatment units shall conform to the following conditions:
   1. The unit shall operate efficiently and reliably, as evidenced by the National Sanitation Foundation Certification of Performance, or equivalent testing procedure to meet N.S.F. Standard No. 40;
   2. The unit shall have a service warranty for the service life of the unit; and
   3. The unit shall be kept in operating condition.

D. The discharge from the aerobic treatment unit shall be disposed of by:
   1. Sealed stabilization ponds, if the requirements specified in Section 207 are met;
   2. Discharge beneath the surface of the ground, if the conditions for the septic tank/absorption fields as specified in Section 202 are met;
   3. Discharge into a watercourse, arroyo, or canal, if the conditions specified by the federal Environmental Protection Agency and New Mexico Water Quality Control Commission for such discharge can be met; or
   4. Land application in a manner acceptable to the Division.

E. The discharge from the aerobic treatment unit shall be retained upon the owner's property, unless permitted by the Division to be piped or conveyed by an approved means to an approved disposal site.
C. Privies may be used to treat excreta if the following conditions are met:
   1. Distance from pit bottom to bedrock or impermeable layer is at least four (4) feet;
   2. Distance from pit bottom to ground water complies with the conditions for seasonal ground water specified in Section 209;
   3. The privies are constructed to prevent access by flies and located to assure protection from flooding; and
   4. There is an area on the site for two (2) additional pits.

D. Composting toilets may be used for the treatment of black water if the following conditions are met:
   1. All electrical and gas connections and ventilation piping conform to all state and local building and plumbing codes;
   2. The composting toilet is of a watertight construction;
   3. The digested humus or liquid is disposed of by burial in accordance with Section 206(C) or other means acceptable to the Division; and
   4. For composting toilets with internal heating source, there shall be sufficient ventilation. They shall not be used in a permanent year-round residence unless they are provided with a constant heat source.

E. Holding tanks, including manufactured oil-flushing systems, may be used for holding black and grey waters if the septage is disposed of in accordance with Section 208.

F. The disposal of grey water shall be in accordance with the requirements for grey water disposal specified in Section 203.

G. This section does not apply to enclosed system(s) on water craft.

207. STABILIZATION PONDS. —

A. Stabilization ponds may be used for the treatment, storage and disposal of liquid waste.

B. All stabilization ponds installed or modified after the effective date of these regulations shall be located and installed or modified in conformance with the requirements of this section.

C. The stabilization pond shall be located on the site to meet the minimum setback distances specified in Appendix B.

D. The stabilization pond shall meet the following conditions:
   1. Be sealed with impervious synthetic liner, concrete, gunite, or clay sealant;
   2. Be fenced or located so as not to provide a public or attractive nuisance;
   3. Be designed with a maximum organic loading of fifty (50) pounds of BOD/acre/day; and
1. Have a minimum liquid depth of two (2) feet and maximum liquid depth of five (5) feet.

E. Stabilization ponds shall not have a discharge unless the discharge is to an absorption field in conformance with the requirements of Section 202.

F. Stabilization ponds shall not be used on sites which are less than five (5) acres in size.

208. DISPOSAL OF SEPTAGE. — All septage from liquid waste treatment units, holding tanks, or stabilization ponds shall be disposed of in a manner acceptable to the Division.

209. SEASONAL GROUND WATER TABLE. —

A. All liquid waste systems discharging liquid waste into the soil, installed or modified on sites equal to or less than 2.5 acres in size shall be installed at a location on the site where:

1. The distance between the bottom of the trench or excavation and the documented seasonal high ground water table is at least six (6) feet; or

2. In the absence of a documented seasonal high ground water table, the distance between the bottom of trench or excavation and the seasonal high ground water table is at least ten (10) feet.

B. All liquid waste systems discharging liquid wastes into the soil installed or modified on sites greater than 2.5 acres in size shall be installed at a location on the site where the distance from the bottom of the trench or excavation to the seasonal high ground water table, as determined by the Division, is at least four (4) feet.

C. The seasonal high ground water table shall be determined by:

1. Persons having professional training and expertise in the science and technology of geohydrological assessment, including but not limited to: professional geohydrologists, soil scientists, professional engineers, and appropriate Division personnel; or

2. The Division, after review of data accumulated by governmental agencies which clearly depicts acceptable seasonal high ground water tables for the particular area being considered for installation of the liquid waste system.
PART III

Miscellaneous

300. CONSTRUCTION. — The Liquid Waste Disposal Regulations shall be liberally construed to carry out their purpose.

301. TEMPORARY PROVISIONS. — All registration certificates, permits, orders, rulings, and variances, issued pursuant to the Regulations Governing Water Supplies and Sewage Disposal — Sewage Disposal Regulations, June 28, 1937, or the Environmental Improvement Board's Liquid Waste Disposal Regulations, September 14, 1973, shall remain in full force and effect after the effective date of these regulations until repealed, replaced, superceded, or amended pursuant to these regulations.

302. SEVERABILITY. — If any part or application of the Liquid Waste Disposal Regulations is held invalid, the remainder, or its application to other situations or persons, shall not be affected.


304. SAVINGS CLAUSE. — The repeal of the Environmental Improvement Board’s Liquid Waste Disposal Regulation, September 14, 1973, shall not abate any violations of those regulations or any action for the enforcement thereof.
## DESIGN FLOW

### APPENDIX A

<table>
<thead>
<tr>
<th>TYPE OF ESTABLISHMENT</th>
<th>GALLONS/PERSON/DAY</th>
<th>LBS. 5 DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GALLONS/UNIT/DAY</td>
<td>BOD/PERSON/DAY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BOD/UNIT/DAY</td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotels &amp; Motels without private baths</td>
<td>50</td>
<td>.15</td>
</tr>
<tr>
<td>Hotels &amp; Motels with private baths</td>
<td>50</td>
<td>.15</td>
</tr>
<tr>
<td>Multiple family dwelling or apartments</td>
<td>75</td>
<td>.20</td>
</tr>
<tr>
<td>Rooming Houses</td>
<td>50</td>
<td>.15</td>
</tr>
<tr>
<td>Single Family dwelling</td>
<td>(including mobile homes)</td>
<td>75</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airline catering per meal served</td>
<td>3</td>
<td>.03</td>
</tr>
<tr>
<td>Airports (per passenger, not incl. food)</td>
<td>5</td>
<td>.02</td>
</tr>
<tr>
<td>Airports (per employee)</td>
<td>10</td>
<td>.06</td>
</tr>
<tr>
<td>Bus service areas not incl. food</td>
<td>5</td>
<td>.02</td>
</tr>
<tr>
<td>Country Clubs not incl. food</td>
<td>30</td>
<td>.02</td>
</tr>
<tr>
<td>Day workers at offices</td>
<td>15</td>
<td>.06</td>
</tr>
<tr>
<td>Drive-in theaters (not incl. food-per space per day)</td>
<td>10</td>
<td>.06</td>
</tr>
<tr>
<td>Factories and plants (exclusive of industrial wastes)</td>
<td>35</td>
<td>.08</td>
</tr>
<tr>
<td>Laundries self-service (gal. per washer)</td>
<td>400</td>
<td>2.00</td>
</tr>
<tr>
<td>Movie theaters (not incl. food)(per aud. seat)</td>
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<td>.03</td>
</tr>
<tr>
<td>Restaurants (toilet &amp; kitchen wastes per patron)</td>
<td>10</td>
<td>.06</td>
</tr>
<tr>
<td>(additional for bars and cocktail lounges)</td>
<td>2</td>
<td>.02</td>
</tr>
<tr>
<td>Restaurants (kitchen waste per meal served)</td>
<td>3.0</td>
<td>.03</td>
</tr>
<tr>
<td>Restaurants (with paper service per meal served)</td>
<td>1.5</td>
<td>.01</td>
</tr>
<tr>
<td>Stores (per public toilet)</td>
<td>400</td>
<td>2.00</td>
</tr>
<tr>
<td>Work or construction camps (semi-permanent)</td>
<td>50</td>
<td>.17</td>
</tr>
<tr>
<td>(with flush toilets)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work or construction camps (semi-permanent)</td>
<td>35</td>
<td>.02</td>
</tr>
<tr>
<td>(without flush toilets)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel trailer parks with individual water</td>
<td>100</td>
<td>.50</td>
</tr>
<tr>
<td>and sewage hook-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel trailer parks without individual water</td>
<td>50</td>
<td>.17</td>
</tr>
<tr>
<td>and sewage hook-up</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospitals (per bed space)</td>
<td>250</td>
<td>.20</td>
</tr>
<tr>
<td>Institutions other than hospitals (per bed space)</td>
<td>125</td>
<td>.17</td>
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<tr>
<td>Mobile home parks, independent</td>
<td>75</td>
<td>.20</td>
</tr>
<tr>
<td>Schools, Boarding</td>
<td>100</td>
<td>.17</td>
</tr>
<tr>
<td>Schools, day (without cafeterias, gym, and shower)</td>
<td>15</td>
<td>.04</td>
</tr>
<tr>
<td>Schools, day (with cafeterias, but not gym or shower)</td>
<td>20</td>
<td>.08</td>
</tr>
<tr>
<td>Schools, day (with cafeterias, gym and shower)</td>
<td>25</td>
<td>.10</td>
</tr>
</tbody>
</table>

EIB/79-7-2 -17-
APPENDIX A (Continued)

DESIGN FLOW

<table>
<thead>
<tr>
<th>TYPE OF ESTABLISHMENT</th>
<th>GALLONS/PERSON/DAY</th>
<th>GALLONS/UNIT/DAY</th>
<th>LBS. 5 DAY BOD/PERSON/DAY</th>
<th>BOD/UNIT/DAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreational &amp; Seasonal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camps, tourist, trailer or campground</td>
<td>100</td>
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<td>.50</td>
<td></td>
</tr>
<tr>
<td>Cottages &amp; small dwellings (seasonal occupancy)</td>
<td>50</td>
<td></td>
<td>.17</td>
<td></td>
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<tr>
<td>Parks, picnic with bathhouses, showers and flush toilets</td>
<td>15</td>
<td></td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Parks, picnic (toilet wastes only)</td>
<td>5</td>
<td></td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Swimming pools and bathhouses</td>
<td>10</td>
<td></td>
<td>.06</td>
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</table>
### APPENDIX B

#### REQUIRED SETBACK DISTANCES (FT)

<table>
<thead>
<tr>
<th></th>
<th>Liquid Waste Treatment Unit</th>
<th>Absorption Field Including Alternative Methods</th>
<th>Enclosed Systems (Privies/Holding Tanks)</th>
<th>ET beds Stabilization pond (Lined)</th>
<th>ET Beds/ Stabilization pond (Unlined)</th>
<th>Seepage Pits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Line</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>Building</td>
<td>5</td>
<td>20</td>
<td>15</td>
<td>15&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20&lt;sup&gt;a&lt;/sup&gt;</td>
<td>20</td>
</tr>
<tr>
<td>Water Line (under pressure)</td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>10</td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Water Supply (Private) (including water suction or supply lines)</td>
<td>50</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Water Supply (Public) (including water suction or supply lines)</td>
<td>200</td>
<td>200</td>
<td>100</td>
<td>100</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Watercourse</td>
<td>100</td>
<td>100</td>
<td>50</td>
<td>50</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Arroyo&lt;sup&gt;b&lt;/sup&gt;</td>
<td>25+Depth</td>
<td>25+Depth</td>
<td>15+Depth</td>
<td>15+Depth</td>
<td>25+Depth</td>
<td>25+Depth</td>
</tr>
<tr>
<td>Canal Lined</td>
<td>10+Depth</td>
<td>10+Depth</td>
<td>10+Depth</td>
<td>10+Depth</td>
<td>10+Depth</td>
<td>10+Depth</td>
</tr>
<tr>
<td>Canal Unlined</td>
<td>25+Depth</td>
<td>25+Depth</td>
<td>15+Depth</td>
<td>15+Depth</td>
<td>25+Depth</td>
<td>25+Depth</td>
</tr>
</tbody>
</table>

---

**a. Stabilization ponds shall be a minimum of 300 feet from a building used as a residence.**

**b. Edge of arroyo shall be determined as follows:**

1. Visible evidence of debris from previous highwater flows; or
2. Slope greater than 25%; or
3. Definite change in vegetation or stream bed material; or
4. Definite edges.

The most conservative of the above distances will be used to determine the edge and depth of the arroyo.