**MDE GUIDANCE ON WASTEWATER FLOWS FOR USE IN DESIGNING ON-SITE SYSTEMS**

<table>
<thead>
<tr>
<th>ESTABLISHMENT</th>
<th>GPD PER UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIRPORT, per passenger</td>
<td>5</td>
</tr>
<tr>
<td>Per employee</td>
<td>15</td>
</tr>
<tr>
<td>(Add for food service facility)</td>
<td></td>
</tr>
<tr>
<td>ANIMAL SHELTER/KENNELS/VETERINARIAN</td>
<td></td>
</tr>
<tr>
<td>Per run (pen, cage, stall etc.)</td>
<td>25</td>
</tr>
<tr>
<td>Per grooming station</td>
<td>250</td>
</tr>
<tr>
<td>Per procedure room</td>
<td>250</td>
</tr>
<tr>
<td>(Consider Waste handling &amp; strength in design)</td>
<td></td>
</tr>
<tr>
<td>ASSISTED LIVING/HOMES FOR THE AGED, per bed space</td>
<td>100</td>
</tr>
<tr>
<td>(Consider more flow for Assisted Living facilities that provide more extensive care)</td>
<td></td>
</tr>
<tr>
<td>BARBER SHOP, per seat (station)</td>
<td>50</td>
</tr>
<tr>
<td>BEAUTY SALON, per station</td>
<td>250</td>
</tr>
<tr>
<td>Consider potential impacts of any chemicals discharged to the onsite system and the potential impacts of backwash from water treatment units.</td>
<td></td>
</tr>
<tr>
<td>BOWLING ALLEY</td>
<td></td>
</tr>
<tr>
<td>Per lane, no bar/food</td>
<td>75</td>
</tr>
<tr>
<td>Per lane, with bar only</td>
<td>125</td>
</tr>
<tr>
<td>Per lane, bar &amp; food</td>
<td>200</td>
</tr>
<tr>
<td>CAMPS, CAMPGROUNDS, &amp; TRAVEL TRAILER/RV PARKS</td>
<td></td>
</tr>
<tr>
<td>Public Campground, per travel trailer space, w/water and sewer hookups</td>
<td>175</td>
</tr>
<tr>
<td>Public Campground, per travel trailer space, w/no water &amp; sewer hookups</td>
<td>150</td>
</tr>
<tr>
<td>Youth overnight camp, per camper</td>
<td>50</td>
</tr>
<tr>
<td>Labor camp, per person</td>
<td>50</td>
</tr>
<tr>
<td>Luxury camp, per camper</td>
<td>100</td>
</tr>
<tr>
<td>Day camp, per person (add flow for meals, showers or pools)</td>
<td>15</td>
</tr>
</tbody>
</table>

For information on the discharge of RV pump-out wastewater into an OSDS (septic system), please contact the Groundwater Permits Division at (410) 537-3778.

**CHURCH-ASSEMBLY HALL**

| Per sanctuary seat                                 | 3            |
| With private kitchen (members only)                | 5            |
| With commercial kitchen (open to general public,  |              |
| With Food Service License: see “Food and Beverage Service Facility” | |
Classroom space or meeting rooms intended for daily use, per seat 15

(For church space not in a separate building, allocated to Sunday school and other occasional use, an additional flow factor need not always be applied, as long as seating capacity in these areas does not exceed the number of sanctuary seats.)

**DAY CARE**, per patron 15

**DRIVE IN THEATER**, per car space 5

**FACTORY (MANUFACTURING PLANT)**
- Per employee/per shift 15
- Add for showers per employee 10

**FAIRGROUND**, per person 5

**FOOD and BEVERAGE SERVICE FACILITIES**
- Banquet room, per seat (assoc. w/restaurant) 5
- Banquet room, per seat, exclusively banquet facility 25

Bar/Tavern/Pub, per bar seat 25
Bar/Tavern/Pub, per table seat 50

Convenience Store, Bakery, Carryout, Deli, w/no seating:
- Without public restrooms 0.40 gpd/ft²
- With public restrooms 0.75 gpd/ft²

With seats, add flow Use “Restaurants”

Grocery Store 0.40 gpd/ft²

Restaurants: 12 hour operation, per seat 50
- 24 hour operation or fast food, per seat 75
- Interstate or major highway, per seat 150

Tasting Room for Winery or Brewery w/public bathrooms 400 minimum
(Add for food service, special events or other amenities)

If wine or beer process wastewater is proposed to be combined with domestic wastewater, or planned for a dedicated onsite system, a Groundwater Discharge Permit may be required. Please contact the Groundwater Permits Division at (410) 537-3778.

* Consider waste strength in design
FUNERAL HOME (Domestic wastewater only)  0.62 gpd/ft$^2$

For any embalming disposal contact the Groundwater Permits Division at (410) 537-3778

GOLF COURSE with snack bar (limited food service)
  Per 18 holes  3500
  Per 9 holes  1500
  (Add for full food service and bar seating; See “Food Service Facility”)

LAUNDRY/COIN-OPERATED
  Per machine/per 24 hours  600
  If # of machines unknown  7.36 gpd/ft$^2$

MARINAS *
  Wet slip with toilet facilities (gpd/slip)  20
  Wet slip with toilet facilities and bathhouse  32
  Dry slips with toilet facilities  7
  Dry slips with toilet facilities and bathhouse  11
  Launch Ramp only, per parking space  10

*Add for other amenities such as food service, laundry service, swimming pool, etc.
Pump-out station sizing: 35 gpd per slip, or as dictated by DNR. Storage volume only, no discharge into OSDS

MEDICAL FACILITIES
  Dental office, per chair  150
  Doctor’s office  0.62 gpd/ft$^2$
  Hospital, per bed  350
  Nursing home, per bed  200
  Physical therapy  0.62 gpd/ft$^2$

MOBILE HOME PARKS, per lot  300 minimum

MOTEL-HOTEL-BED & BREAKFAST
  Per unit, no food, no kitchen  125
  Per unit, with food/kitchen in room  200
  Bed and Breakfast, per Bedroom  150

OFFICES
  Per employee/8 hr. shift  15
  If # of employees is unknown  0.18 gpd/ft$^2$

PARKS
  Per person, with toilets provided  10
  Add for showers  10
  Visitor Center, per parking space  45
PRISON/JAIL
  Per bed space  125
  Per employee/shift  15

RESIDENTIAL UNITS (APARTMENTS/CONDOMINIUMS)
  Per bedroom  150
  Rooming/boarding, per bed  75

REST AREA (HIGHWAY)
  State highway rest area (mini-station)  2000 minimum

SCHOOLS & COLLEGES (PER STUDENT)
  Without food or showers  15
  Add for food  5
  Add for showers  10
  Boarding  100
  Day care, per student  15

STORE/COMMERCIAL SPACE  0.10 gpd/ft²
  400 minimum

SWIMMING POOLS
  Per swimmer  10
  (add for food service)

THEATER OR SPORTS ARENA, per seat (add for food service)  5

THEATER-DINNER, per seat  20

WAREHOUSES  0.06 gpd/ft²

NON-DOMESTIC PROCESS WASTEWATER
  If a facility discharges non-domestic process wastewater, the facility may require a Groundwater Discharge Permit. Please contact the Groundwater Permits Division at (410) 537-3778.

For example:
  • Vehicle Maintenance facilities
  • Car Washing facilities
  • Dry Cleaners
  • Butcher Shops
  • Food processing facilities

[Disposal options for food processing and other nutrient containing wastewater, such as Wineries, Breweries and Milk Products processing facilities, are addressed in a separate MDE memo “Options for the Management of Food Processing Wastewater”.]

Rev. June 2011