

TABLE 5.6 Estimated Design Sewage Flow from Other Establishments

Dwelling units (also see outdoor recreation)	Unit	Design flow (gal/ day/unit)
Hotel or luxury hotel	guest	55
	square foot	0.28
Motel	guest	38
	square foot	0.33
Rooming house	resident	45
	add for each nonresident meal	3.3
Daycare (no meals)	child	19
Daycare (with meals)	child	23
Dormitory	person	43
Labor camp	person	18
Labor camp, semipermanent	employee	50
Commercial/Industrial	Unit	Design flow (gal/ day/unit)
Retail store	square foot	0.13
	customer	3.8
	toilet	590
Shopping center	employee	11.5
	square foot	0.15
	parking space	2.5
Office	employee/8-hour shift	18
	square foot	0.18
Medical office*	square foot	1.1
	practitioner	275
	patient	8
Industrial building*	employee/8-hour shift	17.5
	employee/8-hour shift with showers	25
Laundromat	machine	635
	load	52.5
	square foot	2.6
Barber shop*	chair	68
Beauty salon*	station	285
Flea market	nonfood vendor/space	15
	limited food vendor/space	25
	with food vendor/space	50
Eating and drinking establishments	Unit	Design flow (gal/ day/unit)
Restaurant (does not include bar or lounge)	meal without alcoholic drinks	3.5
	meal with alcoholic drinks	8
	seat (open 16 hours or less)	30
	seat (open more than 16 hours, single service articles)	50
	seat (open 16 hours or less, single service articles)	20
seat (open more than 16 hours, single service articles)	35	
Restaurant (short order)	customer	7
Restaurant (drive-in)	car space	30
Restaurant (carry out, including caterers)	square foot	0.5
Institutional meals	meal	5.0
Food outlet	square foot	0.2
Dining hall	meal	8.5
Coffee shop	customer	7
Cafeteria	customer	2.5
Bar or lounge (no meals)	customer	4.5
	seat	36

Entertainment establishments	Unit	Design flow (gal/ day/unit)
Drive-in theater	car stall	5
Theater/auditorium	seat	4.5
Bowling alley	alley	185
Country club	member (no meals)	22
	member (with meals and showers)	118
	member (resident)	86
Fairground and other similar gatherings	visitor	1.5
Stadium	seat	5
Dance hall	person	6
Health club/gym	member	35
Outdoor recreation and related lodging facilities	Unit	Design flow (gal/ day/unit)
Campground	person with hook-up	36
	site with hook-up	100
	site without hook-up, with central bath	62
	site to be served by dump station	14.5
Permanent mobile home	mobile home	225
Camp, day without meals	person	20
Camp, day with meals	person	25
Camp, day and night with meals	person	45
Resort/lodge hotel	person	62
Cabin, resort	person	50
Retail resort store	customer	4
Park or swimming pool	guest	10
Visitor center	visitor	13
	Unit	Design flow (gal/ day/unit)
Transportation	Unit	Design flow (gal/ day/unit)
Gas station/convenience store	customer	3.5
Service station*	customer	11
	service bay	50
	toilet	250
	square foot	0.25
Car wash* (does not include car wash water)	square foot	5
Airport, bus station, rail depot	passenger	5
	square foot	5
	restroom	565
Institutional	Unit	Design flow (gal/ day/unit)
Hospital*	bed	220
Mental health hospital*	bed	147
Prison or jail	inmate	140
Nursing home, other adult congregate living	resident	125
Other public institution	person	105
School (no gym, no cafeteria, and no showers)	student	14
School (with cafeteria, no gym and no showers)	student	18
School (with cafeteria, gym, and showers)	student	27.5
School (boarding)	student	95
Church	seat	4
	add for each meal prepared	5
Assembly hall	seat	4
Miscellaneous		
Public lavatory	user	5
Public shower	shower taken	11

* Waste other than sewage is only allowed to be discharged into the system if the waste is suitable to be discharged to groundwater.

Table 5.6 from:
Onsite Sewage Treatment Program, University of Minnesota. 2009.
Manual for Septic System Professionals in Minnesota. St. Paul, MN.

Available online: <http://septic.umn.edu/sstsmmanual/index.htm>