

**Office Use Only**

Date: \_\_\_\_\_

Receipt #: \_\_\_\_\_

Site ID #: \_\_\_\_\_

**LAKE COUNTY GENERAL HEALTH DISTRICT**

**5966 Heisley Rd  
Mentor, OH 44060  
(440) 350-2543**

**APPLICATION FOR SMALL FLOW ON-SITE  
SEWAGE TREATMENT SYSTEM (SFOSTS) SITE REVIEW**

***\$650 Fee must accompany a complete site review application submittal***

- 1.) **Property Location of proposed SFOSTS:** (Address: S/L & Street or parcel no.)  
\_\_\_\_\_  
**City:** \_\_\_\_\_ (Twp, Village)
- 2.) **Requestor:** Name \_\_\_\_\_ Phone: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_
- 3.) **Owner:** Name \_\_\_\_\_ Phone: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

**Please provide the following complete information with your site review application:**

- a.) Please be advised that a site review approval is valid for 5 years or if there is a change in the applicable law or rules or if the site is altered or the approved site plans for the property are altered.
- b.) Site & Soil evaluation performed by a certified professional soil scientist in accordance with the OAC 3701-29-07.
- c.) Design plan prepared in accordance with OAC 3701-29-10 and waste strength and flow volumes determined in accordance with the Ohio EPA Design Flow Table 3745-42-05 of the Ohio Administrative Code. Plans must be prepared by an individual knowledge of sewage treatment with experience with soil absorption sewage treatment design. The Health District retains 2 copies of approved plans for our records. Design plans must include the following information:
1. Topographic site plan, SFOSTS project description form, lot dimensions, proposed and existing water supplies, existing adjacent businesses, houses or sewage systems.
  2. Primary and replacement system areas as designated by soil scientist and designer.
  3. System schematics of distribution layouts, pump stations, waste strength and flow volume calculations, pretreatment components and hydraulic calculations/specifications, justification of selected loading rates, soil depth credits and variances where applicable.
- 4.) Property lines must be staked and the property clearly identified prior to requesting a review. Incomplete applications or unidentified lots will cause delays.
- 5.) Site reviews are conducted in the order in which they are received. Please allow at least three weeks for the completion of the review. A \$55.00 plan resubmittal fee is charged after the second plan submission.
- 6.) I authorize representatives of the Lake County General Health District to enter the property referenced above for the purpose of conducting a site review.

\_\_\_\_\_  
Requestor's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Owner's Signature

\_\_\_\_\_  
Date

**LAKE COUNTY GENERAL HEALTH DISTRICT**

## **PROCEDURES FOR DEVELOPMENT & MANAGEMENT OF A SMALL FLOW ON-SITE SEWAGE TREATMENT SYSTEM**

The SFOSTS designer must meet with the proposed business operator and determine the waste strength and daily and peak flow and must ensure that the treatment per day (total dose to the soil absorption components) does not exceed 1000 gallons per day.

### **ALL ITEMS IN SECTIONS A AND B MUST BE COMPLETED BEFORE THE HEALTH DISTRICT WILL PERFORM THE SITE REVIEW**

#### **A. SITE & SOIL EVALUATION**

1. Must be performed by a certified professional soil scientist in accordance with OAC 3701-29-07 of the Sewage Treatment System Rules.  
Minimum of two soil borings/test pits detailed on the soil report form in the area of proposed sewage system soil absorption area and replacement area.
2. Soil boring locations must be marked/flagged on the site for use by the designer and the Health District.

#### **B. DESIGN PLAN PREPARATION**

1. Plans must be prepared by sewage system designer who has experience in designing commercial/business on-site soil absorption sewage treatment systems.
2. Include the SFOSTS Project Description worksheet with the design plans.
3. Confirm site & soil evaluator's locations for sewage system and replacement area based on review of soil report and site inspection.
4. Site inspection includes determination of slope, wet areas to avoid, drainage, isolation distances, neighboring wells, existing structures, disturbed and fill areas, etc.
5. Designated sewage system/replacement areas indicated on site and protected (fenced or roped off with caution tape).
6. Topographic site plan must be prepared in accordance with OAC Chapter 3701-29. Plans shall include designated primary and replacement system areas, soil boring locations, all necessary system schematics of distribution component layouts, pump stations, pretreatment components.
7. Treatment calculations, hydraulic calculations and specifications.

**Designs must justify the determination of waste strength and volume, selection of treatment components, loading rates, soil depth credits and variances where applicable. The SFOSTS project description form must be thoroughly completed and submitted with the site review application.**

### **PRIMARY AND REPLACEMENT SYSTEM AREAS MUST BE LOCATED ON THE PROPERTY PRIOR TO REQUESTING THE SITE REVIEW.**

#### **C. SITE REVIEW PROCESS**

1. Health District staff conducts site review on the property.
2. Reviews system proposal (site evaluation, soil report, topographic plans & specifications) to determine compliance with Sewage Treatment System Rules.
3. Designer and proposed operator will be notified to in writing of SFOSTS approvals, disapprovals or requests for additional information.

## **SFOSTS PROJECT DESCRIPTION**

**1) Detailed description of proposed business or operation (include no. of patrons)**

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**2) Indicate days and hours of operation**

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**3) Number of employees and/or volunteers, (full and part time)**

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**4) Wastewater flow estimates/calculations (peak and daily) utilizing the Ohio EPA Design Flow Table OAC 3745-42-05 paying particular attention to the notes for the table**

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**5) Indicate operation details on wastewater generation such as showers, laundry facilities, vehicle washing, kennel/cage cleaning, etc.**

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**6) Businesses/operations with food activities other than restaurants must indicate in detail how the kitchen facilities will be utilized (no. and type of events per week, type of food preparation/menu, rental of kitchen and facilities to public for parties & functions)**

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**7) Operation with food as primary business must provide details on number of seats, food preparation details, dishwashing details, if facility will be carry out only, etc. Any operation with food must provide a proposed menu or in the case of grocery type retail applicant must provide a list of all food items to be sold.**

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**8) Proposed churches must include details on number of services per week (events such as weddings, funerals, bingo, etc. are considered as a service). Churches with kitchen facilities must complete section six above and must indicate other services provided such as day care including employees and numbers of children.**

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## Ohio EPA Design Flow Guide Table

Place	Notes	Design flow (gallons per day)	Waste strength range BOD <sub>5</sub> (milligrams per liter)
Airport	b, i, j, p, r, t	15 per employee plus 4 per parking space	200 to 280 <sup>r, s, t</sup>
Apartment	b, l	120 per bedroom	200 to 280 <sup>r, s, t</sup>
Assembly hall	a, i, j	15 per employee plus 3 per seat without kitchen facilities or 7 per seat with kitchen facilities	200 to 280 <sup>r, s, t</sup>
Banquet hall	b i, j	15 per employee plus 3 per seat without kitchen facilities or 7 per seat with kitchen facilities	400
Barber shop	i, j	80 per basin	200 to 280 <sup>s</sup>
Beauty shop, styling salon	i, j	200 per basin	200 to 280 <sup>s</sup>
Bowling alley	a, i, j, p	75 per lane	200 to 280 <sup>r, s, t</sup>
Car wash		Sewer connection required; contact district office	
Campground or recreational vehicle park	a, i, j, m, n, p	30 per tent camp site without showers; 60 per tent camp site with showers; 60 per RV camp site without water hook-up; 90 per RV camp site with water hook-up	200 to 280 <sup>r, s, t</sup>
Church (less than 200 sanctuary seats)	a, h, j, k, o, p	3 per sanctuary seat without kitchen; 5 per sanctuary seat with kitchen	200 to 280 <sup>r, s, t</sup>
Church (greater than 200 sanctuary seats)	b h, j, k, o, p	5 per sanctuary seat without kitchen; 7 per sanctuary seat	200 to 280 <sup>r, s, t</sup>

		with kitchen	
Coffee shop	a i, j	15 per employee plus 5 per seat	200 to 280 <sup>r, s, t</sup>
Convenience store, service station or gas station (add all flows that apply)	a, d, i, j, p, q	500 per pump island; 500 per service bay; 250 per shower; 15 per employee	200 to 280 <sup>r, s, t, u</sup>
Country club, sportsman club or gun club	b i, j, m, n, o, p	50 per individual based on occupancy capacity	200 to 280 <sup>r, s, t</sup>
Dance hall	a, i, j, p	15 per employee plus 3 per patron without kitchen facilities or 7 per patron with kitchen facilities	200 to 280 <sup>r, s, t</sup>
Daycare facility	a, i, j, p	35 per employee plus 10 per student or child	200 to 280 <sup>r, s, t</sup>
Dentist office	i	35 per employee plus 10 per patient that can be scheduled to be seen in a given day plus 75 per dentist	200 to 280 <sup>s</sup>
Doctor office	i	35 per employee plus 10 per patient that can be scheduled to be seen in a given day plus 75 per doctor	200 to 280 <sup>s</sup>
Dry cleaner	i	Contact district office <sup>1</sup>	200 to 280 <sup>s</sup>
Factory or manufacturing facility	i, q	25 per employee without showers; 35 per employee with showers	200 to 280 <sup>r, s, t</sup>
Food service operation/restaurant categories (as noted below)			
-Ordinary restaurant (not open 24 hours)	c, i, j, p	35 per seat	400 to 600

- 24-hour restaurant	c, i, j, p	60 per seat	400 to 600
-Restaurant along freeway	c, i, j, p	100 per seat	400 to 600
-Tavern (very little food service) or bar (full food service)	c, i, j, p	35 per seat	400 to 600
-Curb service (drive-in)	c, i, j, p	40 per car space	400 to 600
-Vending machine	c, i, j, p	100 per machine	400 to 600
*** End of food service operation/restaurant categories *****	*** End of food service operation/restaurant categories *****	*** End of food service operation/restaurant categories *****	*** End of food service operation/restaurant categories *****
Homes in subdivision	b, l	120 per bedroom	200 to 280 <sup>r, s</sup>
Horse stable	a, j	120 for outdoor living quarters if present on property plus 120 per wash stall plus 50 per horse stall for boarding	200 to 280
Hospital	b, i, j, p	300 per bed plus 35 per employee	200 to 280 <sup>r, s, t</sup>
Hotel or motel	a, i, j, p	100 per room	200 to 280 <sup>r, s, t</sup>
Institution (such as psychiatric hospitals or prisons)	b, i, j, p	100 per bed plus 35 per employee	300
Laundromat	i, q	15 per employee plus 400 per washing machine	200 to 280 <sup>s</sup>
Marina (restrooms and showers only)	a, i	20 per boat mooring or slip	200 to 280 <sup>r, s, t</sup>
Labor camp	e, i, j, p	50 per employee	200 to 280 <sup>r, s, t</sup>
Mobile home park	b, i, j, p	300 per mobile home space	200 to 280 <sup>r, s, t</sup>

Nursing and rest homes	b, i, j, p	200 per bed plus 100 per resident employee plus 50 per non-resident employee	300
Office building	a, i, j, k	20 per employee	200 to 280 <sup>r, s, t</sup>
Playground or day park	a, i, k, p	15 per employee plus 12 per parking space	200 to 280 <sup>s</sup>
Stand alone retail store	a, i, j, p	15 per employee plus 12 per parking space	200 to 280 <sup>r, s, t</sup>
School	b, i, j, k, p, t	15 per employee plus 15 per student for elementary schools; 20 per student for junior and high schools; 85 per student for boarding schools	200 to 280 <sup>r, s, t</sup>
Service station or convenience store or gas station (add all flows that apply)	a, d,i, j, p, q, u, v	500 per pump island; 500 per service bay; 250 per shower; 15 per employee	200 to 280 <sup>r, s, t, u</sup>
Shopping center	a, f, l, p, q	15 per employee plus 2 per parking space without food service or 5 per parking space with food service	200 to 280 <sup>r, s, t</sup>
Swimming pool	a, i, j, m, n	5 per swimmer without hot showers or 10 per swimmer with hot showers, based on permitted capacity	200 to 280 <sup>r, s, t</sup>
Theater	a, i, j, p	5 per seat for indoor auditorium or 10 per car space for drive-in	200 to 280 <sup>r, s, t</sup>
Vacation cottage	b, i, j, p	50 per person without kitchen or 75 per person with kitchen	200 to 280 <sup>r, s, t</sup>
Veterinarian office and animal hospital	f, i, j	15 per employee plus 100 per doctor plus 20 per run and cage	200 to 280 <sup>r, s, t</sup>
Youth and recreation	b, i, j, p	15 per employee for day camp	200 to 280 <sup>r, s, t</sup>

camps		plus 15 per camper for day camp with food service or 10 per camper for day camp without food service; 50 per employee for overnight camp plus 50 per camper for overnight camp, based upon occupancy capacity	
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Note a: Food service waste not included.

Note b: Food service waste included, but without garbage grinders.

Note c: Aeration tanks for these systems require forty-eight-hour detention periods. Garbage grinders not permitted.

Note d: Truck parking areas will require consideration for treatment of runoff at large truck stops.

Note e: Twenty gallons per day of a vault latrine is used for toilet wastes.

Note f: Assume manual hosing of dog runs and solids (food droppings, etc.) removal prior to hosing.

Note g: Year round disinfection of all wastewater may be required before discharge to waters of the state or to any other surface or subsurface disposal systems.

Note h: Lower per seat estimate assumes a maximum of one church service per day, higher per seat estimate assumes a maximum of three church services per day. Weddings and funerals shall be counted as services.

Note i: Non-domestic or industrial wastes are prohibited from being discharged to soil based treatment systems.

Note j: Total capacity for number of persons should be confirmed by occupancy license or total occupancy capacity.

Note k: Higher flows shall be estimated when showers are available.

Note l: Deviating from this estimated design flow will require the director's approval, prior to applicant submitting the permit to install.

Note m: Pools cannot discharge pool filter backwash into soil based treatment systems.

Note n: Pool de-watering is prohibited from discharging to soil based treatment systems.

Note o: Flow estimates do not consider daycare facilities. If a daycare is present, the flow requirements for a daycare facility must be included.

Note p: An external grease trap is required for facilities with food service for soil based treatment systems.

Note q: Assume one working shift of not more than eight hours. Assume higher flows for two or three shift operations.

Note r: Assume no garbage grinder and normal domestic waste. If garbage grinders are present, the waste strength should be increased from twenty to sixty-five per cent.

Note s: Data for regular strength waste range of 200 to 280 milligrams per liter was obtained from U.S. EPA's manual "Onsite Wastewater Treatment Systems Manual, Revised 2002 (EPA/625/R-00/008)." This manual is available on the internet at [www.epa.gov/ncepihom/](http://www.epa.gov/ncepihom/) and can be ordered by telephone by calling (800) 490-9198.

Note t: Waste strength should be twenty to sixty-five per cent higher for facilities that include food service operations, such as cafeterias, service stations and for facilities that may handle pet wastes.

Note u: Sewer connection is required for a car wash. Please contact your district office.