Course Objective

To gain a basic understanding of the requirements of the onsite sewage treatment and disposal system application/permitting process including the application, site plans and design for new residential systems.
### Application Form DH4015

**Application Form DH4015**

- **Applicant/authorized agent**
- **Date lot platted/subdivided**
- **Property size**
- **Water supply**
- **Sizing criteria**

### Instructions on Back

- Building Area: do not confuse with "living area" or "heated/cooled area"
Applicant/authorized agent

Completed and signed by:

- Applicant/owner
- Authorized agent
  (owner's authorized representative if not a contractor licensed under sec. 489, FS – a signed statement is required)
- Contractor licensed under Chap. 489, FS

64E-6.004(2), FAC

Above is a sample form

Date Lot Platted / Subdivided (lot recorded or created)

To determine whether current or pre-1972 lot size provisions will apply.

- **Surface water setbacks**
  lots platted or recorded prior to 1972 have a minimum 50 ft. setback to surface water bodies. Current setback is 75 feet.

  s. 381.0065(4)(g)2., F.S.
Legal Descriptions

- All information that is necessary to determine the total sewage flow and proper setbacks on the site ownership shall be submitted with the application. The applicant lot shall be clearly identified. A copy of the legal description or survey must accompany the application for confirmation of property dimensions only. 64E-6.004(3)(a)5.
Legal Descriptions

Lot 10

Property Size

Current Lot Size Requirements:
(Lots platted/subdivided after 1/1/1972)

- Lots using private potable or 64E-8 well – .50 acre (21,780 sq. ft.)
  (and either a minimum dimension of 100 feet or a mean of at least 100 feet of the side bordering the street and the distance formed by a line parallel to the side bordering the street drawn between the two most distant points of the remainder of the lot)

- Lots using a DEP regulated public water system, no more than 4 lots per acre

See Memo 06-005 for further information on application of the 4 Lots Per Acre
No more than 4 lots per acre – How to Determine

- Sum the cumulative area of 4 adjacent lots
- Add pro-rata portion of adjacent right of way and subtract surface water, prepared road beds etc.
- If cumulative area is less than a whole acre, the provision is violated
- Individual lots, not associated with a subdivision can not be assessed
- See section 381.0065(4)(b), FS and Memo 06-005 for further details

Property Size

Pre 1972 Lot Size Requirements:

- lots platted or recorded prior to 1972 have no minimum lot size requirements
- provided daily sewage flow does not exceed allowances.

s. 381.0065(4)(g)2., FS
Maximum Daily Sewage Flow Allowance

- Public drinking water system (regulated by DEP)
  2500 gallons/acre/day

- Private potable wells, 64E-8 Ltd use PWS (regulated by DOH)
  1500 gallons/acre/day

  64E-6.005(7)(c), 64E-6.001(44)(a)-(c)

Setback to Surface Water

- Lots platted or recorded prior to January 1, 1972 have a minimum 50 feet setback to surface waters

- Current setback is 75 feet
Private Potable Well Setback

75 feet setback to private wells regardless of the date of platting

Sizing Criteria

- 64E-6.008, Table I Estimated Sewage Flows for Residential System Design

- When estimated sewage flows are less than 200 gallons per day, system size shall be based on a minimum of 200 gallons per day.

64E-6.008(5), FAC
Sizing Criteria

- **Number of bedrooms and building area** (Table 1 for Residences is used to estimate sewage flow). Examples are SFR.

  - Example: 2 bedrooms with 1000 sq.ft, requires 200 gpd.
  - Example: 3 bedrooms with 3000 sq.ft., requires 400 gpd.

### Example

What is the estimated sewage flow for a 5 bedroom SFR with 6672 sq. ft., of bldg. area?

- Use this section, since 4 bedrooms or a max of 3300 SF is exceeded.

- At least 4 bedrooms with 3300 SF of building area 400 GPD
- \[ 6672 \text{ SF} - 3300 \text{ SF} = 3372 \text{ SF} / 750 \text{ SF} = 4.49, \ (5 \times 60 \text{ gal.} = 300 \text{ gal.}) \] 300 GPD
- \[ 400 + 300 = 700 \text{ GPD} \]

The estimated sewage flow is **700 GPD**

Note: in the former rule the est. sewage flow would be 900 gpd.
Site Plan

- Drawn to scale, boundaries with dimensions
- Structures, swimming pools, recorded easements
- OSTDS location & configuration, slope of property
- Wells, potable and non-potable water lines
- Drainage features, filled areas
- Excavated areas for onsite sewage systems

64E-6.004, FAC

Site Plan

- Obstructed areas, surface water bodies
- Benchmark/reference point, soil profile locations (documented in drainfield area)
- Offsite features within 75 feet of lot (dimensions)
- Legal description or survey/to confirm property dimensions
- Applicant/agent signature and date
- Department approval (name of CHD, date, signature)

Need CHD approval
Floor Plan

- Floor Plan is required
- Verify the floor plan is consistent with application and site plan
- Scaled
- Or total bldg. area, showing bedrooms

64E-6.004(3)(b), FAC

“For residences, a floor plan drawn to scale or showing the total building area of the structure, at the applicants’ option, and showing the number of bedrooms and the building area of each dwelling unit…” note: the sentence continues regarding commercial site plans.

Sample Floor Plan

FLOOR PLAN for Tom Smith - 312 Cypress Avenue,

2 Bedrooms - 2 Baths - 840 Square Feet
Setbacks

- Private potable wells (75 ft), non potable (50 ft)
- Other public drinking water wells (100 – 200 ft)
- Storm sewer pipe (max possible or not <5 ft)
- Dry - ponds/drainage features, retention areas (15 ft)
- Building foundations, pilings, mobile home walls, swimming pool walls, property lines (5 ft)
- Drainfields shall not be installed below, sidewalks, decks and patios. Mound drainfield, (4 ft) from these features (the shoulder shall not be covered).

Setbacks

- Potable water lines (10 ft) or not less than (2 ft) if double sleeved or consist of schedule 40 PVC or stronger.
- Non-potable water lines (2 ft) and (<2 ft.) if backflow devices.
- Groundwater interceptor drains (15 ft)
- Effluent transmission lines (schedule 40 PVC) – to private potable wells, irrigation wells and surface water bodies not less than (25 ft)
- Effluent transmission lines (schedule 40 PVC) – to property lines and building foundations not less than (2 ft)
- Effluent transmission lines (schedule 40 PVC or double sleeved) – potable water lines and storm sewer lines not less than (5 ft)
Setbacks – Surface Water Bodies

- Surface water bodies (75 ft.) if platted/subdivided prior to 1972 (50 ft.)
  
  Tidal – the surface water boundary (mean high water line, MHWL) must be determined by a licensed professional surveyor and mapper. The MHWL must be located on the site plan or additional survey by the surveyor including the elevation.

  Non-Tidal - the surface water boundary (mean annual flood line, MAFL) may be determined by certified department personnel or a licensed professional surveyor and mapper. The MAFL must be located on the site plan or additional survey by the surveyor. Must include documentation of the MAFL indicator.

  see Section 381.0065,FS, Memo 11-006 and more details covered day 2 in Soils Course.

Site Evaluation
Form DH 4015 pg. 3 of 4

- Net Usable Area Available
- Estimated sewage flow
- Authorized sewage flow
- Unobstructed Area Available

Note: The remainder of the site evaluation is covered in ACT days 2 and 3 – Soils Course.

Onsite Wastewater Concepts - Part D, New Permit Applications and Site Plans, 2013
### Application/Permitting Process

**Day 1**  
MC Part I – Onsite Wastewater Concepts Regulations and the Application Process  
- **Application Form** (DH 4015, pg. 1 of 4)  
- **Site Plan** (DH 4015, pg. 2 of 4)  
- **Floor Plan**  
- **Site Evaluation** (DH 4015, pg. 3 of 4)

**Day 2 – 3**  
MC Part II – Introduction to Florida Soils and the Site Evaluation Process  
- **Site Evaluation** (DH 4015, pg. 3 of 4)

**Day 4 – 5**  
MC Part III – Onsite System Construction Permits and Inspections  
- **Construction Permit** (DH 4016, pg. 1 of 3)  
- **Final Inspection and Approval** (DH 4016, pg. 2 of 3)

### Documents/Forms Required

**Application Form DH 4015 pg. 1 of 1**

- **Applicant/authorized agent**  
- **Date lot platted/subdivided** (need to validate)  
- **Property size** (from lot dimensions, must be consistent with site plan)  
- **Water supply**  
- **Sizing criteria** (must be consistent with floor plan)
Does This Lot Meet Lot Size Requirements?

Yes. It was **platted prior to 1972**, and there are no minimum lot size requirements; however, it must not exceed **authorized sewage flow allowances**.
Lot size and Determination of Net Usable Area:

- Calculate Property Dimensions (Lot Size)
  100 ft. x 175 ft. = 17,500 sq. ft.
- Add permissible public rights-of-way and easements
  10 ft. x 100 ft. = 1000 sq. ft.
- Exclude paved and compacted road beds in rights-of-way
- Exclude surface water bodies
  30 ft. x 80 ft. = 2,400 sq. ft.
- Calculate in Acreage – Net Usable Area of Lot
  17,500 sq. ft. + 1,000 sq. ft. – 2,400 sq. ft. = 16,100 sq. ft.
  (16,100 sq. ft. / 43,560 sq. ft. per acre) = .37 acres

Net usable area of property in acres exclusive of all paved areas and prepared road beds within public rights-of-way or easements and exclusive of streams, lakes, normally wet drainage ditches, marshes, or other such bodies of water. Contiguous unpaved an non-compacted road rights-of-way and easements with no subsurface obstructions may be included in calculating lot area. 6464E-6.005(7)(c)
Site Plan

- **Net Usable Area Available is 16,100 sq. ft. or .37 acres**
- Excludes Surface Water Body (pond)
- Add non-compacted ROW

Area of non-compacted ROW is 1,000 sq. ft.

Site Evaluation
Form DH 4015
pg. 3 of 4

- **Net Usable Area Available**

Note: The remainder of the site evaluation is covered in ACT days 2 and 3 – Soils Course
Estimated Sewage Flow

64E-6.008, Table I

2 bedroom single family residence with 840 sq. ft. bldg. area requires 200 gallons per day

(must be consistent with the application sizing criteria and floor plan)
### Site Evaluation Form DH 4015 pg. 3 of 4

- **Estimated sewage flow**

**Note:** The remainder of the site evaluation is covered in ACT days 2 and 3 – Soils Course

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**Authorized Sewage Flow**

= Net usable area (acres) x Maximum Daily Sewage Flow

For lots served by private well: maximum daily sewage flow is 1500 gpd/acre

\[
(0.37 \text{ acres}) \times (1500 \text{ gpd per acre}) = 555 \text{ gpd}
\]

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Onsite Wastewater Concepts - Part D, New Permit Applications and Site Plans, 2013
### Site Evaluation

**Form DH 4015**  
**pg. 3 of 4**

- **Authorized Sewage Flow**
- **Unobstructed Area Available**

**Note:** The remainder of the site evaluation is covered in ACT days 2 and 3 – Soils Course

<table>
<thead>
<tr>
<th>Site Plan with dimensions or setbacks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unobstructed Area Available</strong></td>
</tr>
<tr>
<td><strong>3375 sq. ft.</strong></td>
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</tbody>
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Questions?