

**Individual On-Site Wastewater Treatment Facility (Septic System)  
Site Suitability Determination Guidelines and Checklist for 4.02 (Conventional) Disposal ONLY**

This form must be filled in completely and signed by the applicant, or someone who has legal authority to sign for the applicant. Submit original forms, as photocopies will not be accepted.

Site Address / Legal Description: \_\_\_\_\_ Date: \_\_\_\_\_

Subdivision: \_\_\_\_\_ Lot # / Space: \_\_\_\_\_ Tax ID Number: \_\_\_\_\_

Owners Name: \_\_\_\_\_ Owners Phone Number: \_\_\_\_\_

Person/Company Name Performing Site Evaluation: \_\_\_\_\_ Phone #: \_\_\_\_\_

Contractor Name & License #, if applicable: \_\_\_\_\_

**A. Site Plan Information**

Does the site plan contain the following information in the format required?

- | DEQ   | Applicant | (Check the items listed below that apply)  |
|-------|-----------|--|
| _____ | _____     | 1. Parcel number (Tax ID #), property address, and property size in acres. A.309.B.2.a                                 |
| _____ | _____     | 2. Property boundaries and north arrow. A.309.B.2.b  |
| _____ | _____     | 3. Proposed and existing on-site wastewater treatment facilities, with wastewater pipelines. A.309.B.2.b.i             |
| _____ | _____     | 4. Dwellings and other buildings, pools, wells, and ponds. A.309.B.2.b.i   |
| _____ | _____     | 5. Driveways, porches, tennis courts, and other paved or concrete features. A.309.B.2.b.i                              |
| _____ | _____     | 6. Cut banks, retaining walls, or other features that might affect the system. A.309.B.2.b.i                           |
| _____ | _____     | 7. Features less than 200 feet outside property line that constrain location. A.309.B.2.b.ii                           |
| _____ | _____     | 8. Topography with contours, original grades, and final grades if surface slope is greater than 5%. A.309.B.2.b.iii    |
| _____ | _____     | 9. Surface limiting conditions, such as the presence of fill material or the 100-year floodplain. A.311.C, A.310.C.2   |
| _____ | _____     | 10. Primary area, reserve area, and all soil testing locations. A.309.B.2.b.iv   |
| _____ | _____     | 11. Site plan is drawn to scale. A.309.B.2.b   |
| _____ | _____     | 12. Site plan is accurate, as determined by a field inspection. A.301.D  |
| _____ | _____     | 13. No public sewer with adequate capacity is within 200 feet of property line, or waiver was obtained. PCC 7.21.037.D |

**B. Setback Requirements**

Does the proposed location for all parts of the on-site system meet the following setback requirements? A.312.C applies to all

- | DEQ   | Applicant | (Check the items listed below that apply)   |
|-------|-----------|---|
| _____ | _____     | 1. Five feet or more from a driveway or easement.   |
| _____ | _____     | 2. Ten feet (water main), five feet (domestic line).  |
| _____ | _____     | 3. Ten feet or more to structures including decks, porches, etc.  |
| _____ | _____     | 4. Five feet or more to a swimming pool.  |
| _____ | _____     | 5. Fifty feet to a wash that drains more than 20 acres.   |
| _____ | _____     | 6. One hundred feet or more to a well. notes (2)a,b   |
| _____ | _____     | 7. Five feet or more from property lines.   |
| _____ | _____     | 8. Fifty feet from property line if no central water source.  |
| _____ | _____     | 9. One hundred feet to live or intermittent stream.   |
| _____ | _____     | 10. Two hundred feet to surface water drinking source.  |
| _____ | _____     | 11. One hundred feet to lake, reservoir, or canal.  |
| _____ | _____     | 12. One hundred feet to an earth fissure.   |
| _____ | _____     | 13. Downslopes or cut banks >15%, culverts, and ditches from: septic tank- 10 feet, disposal field if no limiting condition within 12 feet of land surface- 20 feet (50 feet if limiting condition exists). |

Engineer's Seal:
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**C. Site Requirements** If soil evaluation method other than percolation test is submitted, then A310.E (ASTM) applies !

- |        |           |   |
|--------|-----------|---|
| DEQ    | Applicant | (Check the items listed below that apply)   |
| _____  | _____     | 1. Minimum of 2 soil test sites (perc or ASTM) in primary area, 1 in reserve area, and others as necessary. <b>A310.E.1, F.1</b>  |
| _____  | _____     | 2. Soil test holes have a minimum depth of 12 feet and meet Minimum Vertical Separation (MVS) requirements.   |
| A312.E |           | (4 feet below trench bottom if surfacing of wastewater is the concen, regardless of Soil Absorption Rate [SAR] )<br>(5 feet below trench bottom for seasonal high water table; SAR 0.20-0.63 for trench/chamber, 0.13-0.42 for beds)<br>(10 feet below trench bottom for seasonal high water table; SAR 0.63-1.20 for trench/chamber, 0.42-0.93 for beds) |
| _____  | _____     | 3. Perc tests performed at multiple depths, or soil evaluation shows that perc test at one depth is sufficient. <b>A310.F.1.b</b>   |
| _____  | _____     | 4. Perc test holes were properly prepared. <b>A310.F.1.c,d,e,f</b>  |
| _____  | _____     | 5. The perc test holes were properly pre-soaked before testing. <b>A310.F.2.a,b,c,d</b><br>a. If 12" of water drains from holes in less than 60 minutes, three consecutive times, then OK to perc.<br>b. If 12" takes longer than 59 min., keep at least 9" in hole for 4 hours, then wait 16-24 hours, then OK to perc.                                  |
| _____  | _____     | 6. Perc tests were properly conducted: fill to 6", time 1" drop, refill, continue until 3 tests are within 10%. <b>A310.F.3</b>   |
| _____  | _____     | 7. Soil evaluation for perc test is complete: need soil texture, structure, consistence, and % rock fragments. <b>A310.F.3.f</b>  |
| _____  | _____     | 8. Perc test results for each hole tested are between 1 and 120 minutes, or ASTM provided. <b>A310.D.3.b.vi</b>   |
| _____  | _____     | 9. ASTM is provided if a subsurface limiting condition exists at less than 12 feet below land surface. <b>A310.D.2, D.3.b</b>   |
| _____  | _____     | 10. Natural surface slope is less than 15% in primary and reserve areas, or ASTM provided. <b>A310.D.3.b.i</b>  |
| _____  | _____     | 11. The soil evaluation holes contain less than 35% rock fragments in all soil horizons, or ASTM provided. <b>A310.D.3.b.iii</b>  |
| _____  | _____     | 12. Soil evaluation holes are dry, with no evidence of groundwater or soil mottling, or ASTM provided. <b>A310.D.3.b.iv &amp; v</b>   |

**D. Design Requirements** (Check the items listed below that apply)

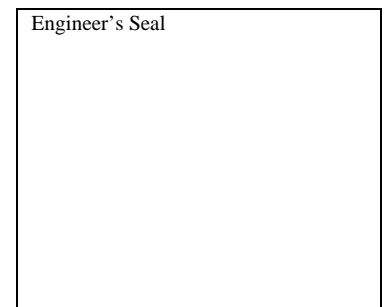
- |       |       |   |
|-------|-------|---|
| _____ | _____ | 1. The design flow is accurately described using the A314.A.4 Table and the Unit Daily Design Flows Table, and the design flow includes all sewage sources and characteristics. <b>A309.B.3, A312.B.3, A314.A.4.a</b>   |
| _____ | _____ | 2. All setbacks have been met after system location has been determined, or A312.G request submitted. <b>A312.C &amp; notes</b>   |
| _____ | _____ | 3. The correct soil absorption rate (SAR) has been calculated using the most conservative result of all testing regardless of method, or additional justification provided. <b>A312.D.1</b>   |
| _____ | _____ | 4. Minimum Vertical Separation (MVS) requirements have been met from subsurface limiting conditions. <b>A312.E.1, E.3.c</b>   |
| _____ | _____ | 5. All SURFACE limiting conditions have been disclosed and addressed. <b>A311.C, A310.C.2, A312.G</b>   |
| _____ | _____ | 6. The reserve area is equal in size to the primary area and cannot be divided, constructed on, or improved. <b>A312.D.4</b>  |
| _____ | _____ | 7. The septic tank is sized according to the A314.A.4 Table, or 2.1 times the design flow if not an SFR. <b>A314.A.4.a &amp; b</b>  |
| _____ | _____ | 8. A list of materials for constructing the system has been provided. <b>A309.B.4</b>   |
| _____ | _____ | 9. The AGGREGATE TRENCH or CHAMBER leach lines have been properly designed. <b>E302.C.1, C.2, C.4</b><br>a. Trenches parallel contours, pipes/chambers are level, bottoms of trenches are level<br>b. Minimum backfill over pipes/chambers is 9", maximum is 24" unless SDR 35 used or chamber specs allow<br>c. Trenches are not paved over, and A312.G request is submitted if any other part of system will be paved over<br>d. Spacing of trench sidewalls is 2 times the depth of gravel below pipe or 5 feet, whichever is greater<br>e. Maximum trench length is 100 feet<br>f. Aggregate trench only:<br>1. Sidewall area included in design calculations (any sidewall between 12" and 48" below pipes)<br>2. Bottom area included in design calculations ( between 12" and 36" wide), unless crushed concrete used<br>3. Maximum absorption area is 11 square feet per linear foot<br>4. 2" aggregate cover over pipes and geotextile fabric specified<br>g. Chambers only:<br>1. Absorption area per chamber determined by: $A=(1.8 \times B \times L) + (2 \times V \times L)$<br>2. Sidewall of chamber provides at least 35% open area, and no geotextile fabric used |

**NOTE: Each listed item should be checked (✓), at the time it is reviewed by the applicant, for conformance to the proposed site. Space is provided on the reverse side of the checklist pages for making specific comments regarding the listed items. If specific comments about an item will be made, please mark that item above with an arrow (→) rather than a check mark (✓).**

I certify by signing below that, to the best of my knowledge, the above information is accurate and true.

\_\_\_\_\_  
Signature of Owner or Owners Representative

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



**PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY  
PERCOLATION TEST DATA SHEET**

Address / Legal Description: \_\_\_\_\_, Subdivision: \_\_\_\_\_, Lot # / Space \_\_\_\_\_

Name of person performing test (please print) \_\_\_\_\_, Slope % in area: \_\_\_\_\_, % Rock out-croppings \_\_\_\_\_

Depth of deepest profile hole (ft) \_\_\_\_\_, Depth of most shallow profile hole (ft) \_\_\_\_\_, Distance to cuts in slope (ft.): \_\_\_\_\_

**PRE-SOAKING LOG \***

Test No.	PRIMARY AREA MINUTES PER 12 INCHES						RESERVE AREA OR OTHER AREA MINUTES PER 12 INCHES						
	Hole 1	Hole 2	Hole 3	Hole 4	Hole 5	Hole 6		Hole 1	Hole 2	Hole 3	Hole 4	Hole 5	Hole 6
1**													
2													
3***													
4													
Test Depth													
Total Pre-soaking Time													

\* Percolation test holes are 12 inches square or 15 inches in diameter, located in undisturbed soil, and at least 12 inches deep

\*\* If 12 inches of water drains away in 60 minutes or longer, continue to pre-soak the hole for another four hours. Proceed with the percolation test between 16 and 24 hours after pre-soaking is completed.

\*\*\* If 12 inches of water drains away in less than 60 minutes, three times, then proceed with the percolation test. The percolation test must proceed before soil hydraulic conditions established by the pre-soaking procedure substantially change.

**PERCOLATION TEST**

Test No.	Minutes per inch					
	Hole 1	Hole 2	Hole 3	Hole 4	Hole 5	Hole 6
1						
2						
3						
4						
5						
6						
7						
Stabilized Rate						
Test Depth						

Engineer's Seal

Comments

Pre-soak Date:

Percolation Test Date:

PDEQ Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor name: \_\_\_\_\_ Date: \_\_\_\_\_

<b>SOIL EVALUATION FOR PERC TEST IN PRIMARY AREA</b> (use ASTM method and forms if req'd by R18-9-A310.D.3.b)						
Depth (ft.)	HOLE 1			HOLE 2		
	Soil Texture / Structure / Consistence	% Rock Fragments	Mottles (Y/N)	Soil Texture / Structure / Consistence	% Rock Fragments	Mottles (Y/N)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

<b>SOIL EVALUATION FOR PERC TEST IN RESERVE AREA AND/OR OTHER AREAS</b> (use ASTM method and forms if req'd by R18-9-A310.D.3.b)						
Depth (ft.)	HOLE 3			HOLE 4		
	Soil Texture / Structure / Consistence	% Rock Fragments	Mottles (Y/N)	Soil Texture / Structure / Consistence	% Rock Fragments	Mottles (Y/N)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

