## University of Arizona's Recommendations

for

## Inspecting Properties with Cesspools

(Developed by Kitt Farrell-Poe & Jake Garrett)

Cesspools are excavations that receive household wastewater. They are essentially outhouses with running water. Since there is little or no treatment, cesspools can contaminate groundwater. Also, cesspools often have no lids covering the opening causing safety concerns. Both situations are the reason that cesspools have not been approved for use in Arizona since 1976. In fact, current Arizona Department of Environmental Quality (ADEQ) regulations on cesspools specifically prohibit their use for sewage disposal [R18-9-A309(A)(4) and R18-5-408(D)].

#### **Inspector's Responsibilities**

So what do you do if, while you are inspecting a property for the Transfer of Ownership program, you discover that the property has a cesspool as its only waste disposal system? The University of Arizona's Onsite Wastewater Education Program recommends taking the following steps:

- 1. Once you have discovered that the property has a cesspool for its waste disposal, your inspection becomes one of full disclosure to the buyer and no longer qualifies as an inspection for the Transfer of Ownership program as ADEQ does not recognize cesspools as legitimate onsite wastewater treatment facilities.
- 2. Fill out the Report of Inspection to Section 7. At Section 7, write in "CESSPOOL."
- 3. Draw a diagonal line through the remainder of the pages to Section 11 as these sections only apply to recognized, legitimate onsite wastewater treatment systems.
- 4. In Section 11 (Other Comments), write in your observations on the hydraulic and structural soundness of the cesspool.
  - a. Because the amount of information you should be providing will exceed the one line offered in Section 11, provide your comments in a separate attachment (therefore, Section 11 should state "see attachment(s)" or "see attached letter."
  - b. Fully describe your findings including how the cesspool was installed (timber, concrete block, car body, etc.).
  - c. If possible include/attach pictures of the inside of the cesspool to give visual support of your findings.
  - d. Include/attach the two ADEQ rule citations supporting your reasoning for not continuing with the Transfer of Ownership inspection.
  - e. Include/attach any county ordinances, policies, etc.
  - f. You may want to include a copy of the 2008 letter from ADEQ on their position on cesspools.
- 5. In Section 12, DO NOT complete Part A. Part A is for legal, legitimate, recognized onsite wastewater treatment facilities.
- 6. In Section 13, DO NOT sign unless you a) cross-out the words "on-site wastewater treatment facility" and b) replace those words with "cesspool."

### Real Estate Agent's Responsibilities:

If you find that your client has a cesspool as their wastewater disposal system, it is important to provide full disclosure to potential buyers. There are qualified inspectors for the Transfer of Ownership inspection program, and you can find them by going to the ADEQ website [http://www.azdeq.gov/environ/water/engineering/not.html]. Under no circumstances should you *ever* engage a non-qualified inspector for transfer of ownership inspections.

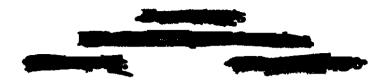
## Arizona Administrative Code Prohibiting Use of Cesspools

## R18-9-A309(A)(4).

A person shall not use a cesspool for sewage disposal.

## R18-5-408(D).

The use of cesspools is prohibited.



#### 7-16-11

The following is information concerning the cesspool found at the test and the cesspool found at the test and the cesspool found at the test and the forms for a ADEQ Notice Of Inspection. Note that the only pages that apply to this property are the pages that contain the information about property owner, address, Parcel # and my certification. Note that there are lines drawn through most pages. The reason for this is because cesspools are not recognized as legal systems in the State of Arizona, therefore there are no legal forms that apply to a cesspool.

I will how ever provide you with, not only the ADEQ Notice of Inspection Form but the two letters stating the stand on cesspools by the State of Arizona and County. Also provided to you in the rest of this page will be a report on the condition and safety of the cesspool located on the property.



# INSTRUCTIONS FOR PREPARING A REPORT OF INSPECTION

FOR AN ON-SITE WASTEWATER TREATMENT FACILITY

#### Instructions

Any person selling or transferring ownership of a property served by an on-site wastewater treatment facility (including a conventional septic tank system or and alternative on-site wastewater treatment facility) must retain a qualified Inspector to inspect the facility within six months prior to transferring ownership of the property, (Arizona Administrative Code, A.A.C. R18-9-A316). See Figure 1.

An inspector that is qualified under A.A.C. R18-9-A316, must complete the attached *Report of Inspection* form, and provide it to the seller as required by the Code. If there is more than one on-site system in use on the property, the Inspector shall complete a *Report of Inspection* form for each system.

Qualified Inspector inspects facility within 6 months before property transfer

Inspector completes Report of Inspection and gives to Seller

Prior to property transfer, Seller gives Report of Inspection to Buyer with any other facility documentation in Seller's possession

Buyer submits Notice of Transfer form with fee to applicable agency within 15 days after date of property transfer

Before the transfer date (closing date) of the property, the seller shall provide the buyer with the completed Report of Inspection form and any other documents in their possession that relate to the permitting or operation and maintenance of the septic tanks systems or alternative on-site wastewater treatment facility. DO NOT submit this Report of Inspection form to ADEQ or the local county permitting agency. The Buyer retains this form after receiving it from the Seller.

Within 15 calendar days after the date of property transfer, the Buyer shall submit a complete *Notice of Transfer* form (http://www.azdeq.gov/environ/water/permits/download/presale.doc) for the change of ownership, and file it with the applicable agency indicated in the *Notice of Transfer* instructions. Information from this *Report of Inspection* form is needed to fill out the *Notice of Transfer* that must be submitted by the Buyer.

Effective February 2, 2007, you may be able to file your *Notice of Transfer* online. Go to the ADEQ web site at http://www.azdeq.gov/environ/water/permits/onsitenot.html for further information regarding this.

Qualified inspectors are required to completely and accurately fill out this form to the best of their knowledge.



## REPORT OF INSPECTION

OF AN ON-SITE WASTEWATER
TREATMENT FACILITY

l	PROPERTY INFO	RMATION ( <i>All fields are required</i> )					
	Addressxxxx	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Cou	•	Gila	<del></del>	
			Tax	Parcel No.	XXXXXXXX	CXXXXXXXXXXX	xx
		оххххххххх Zip ххххххх		esidential pi	roperty 🔲 🛚	Non-residen	tial property
2	CURRENT OWNE	R INFORMATION (All fields are r	equired)				
	Name	*XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXX	(XXXX			
	Mailing Address	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXX			
	City	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	State AZ		Zip	XXXXXXXX	XXXXXX
	INSPECTOR INFO	RMATION (All fields are required	)		•		
	Inspector Name		N	NAWT Inspe	ector No.		
	Company Name		<b>B</b>				
	Address						
	Phone No.			-	Email	_	
ļ		LIFICATIONS (Inspectors must fil		A. and che		ne box in S	ection B
	3						
	A. Coursework						
	Name of ADEQ-a	proved Course: N.A.W.T.					<del></del> .
	City where Course	was taken Flagstaff, Az.	_			Completed:	
						istration/	Expiration
		tration (check at least one box) cle with a Human Excreta Collection a	nd Transports	tion	Lic	ense No.	Date
		ge Hauler license), issued pursuant to A					
	Check one:	Owner of license; Employee of I	icensed owner	<u> </u>	1		300a,
		atment Plant Operator licensed pursuar					
	-101 through 11	6 (indicate type): Grade 1; Gr	ade 2; ∐ Gra	ade 3;	1		
	Arizona Registe	red Sanitarian					
	Arizona Profess	<u> </u>					
		actor (indicate type):	-~				
	Residenti	al B-4 or C-41; Commercial	A, A-12, or L-	-41; or			
	Dual KA		<del></del>				
_		ying under another category designated	by the Depart	lment (describ	ne)		
5		NSULTED (Answer as applicable)		labian N	an. □v	as Cindinata	haları)
		uit, construction and/or operational lo Discharge Authorization (or V					
	n) □ 169 □ 1	R18-9-A301(D)(2)(c). If yes,					
	B) [Yes [?]	No Approval of Construction issu	ed by ADEQ	or its deleg	ated County	agency bef	ore January 1,
	·	2001. If yes, indicate agency l	File No.	ало	l date issued	1	
	C) Tes N	No Site plan, plot plan, "as-built"	drawings, or	similar doc	uments (des	.cribe):	
	D) Tyes T	No Documents relating to operation	on and mainte	enance (alte	mative syste	ems)	
	E) Tyes IN	No Other (describe):			_		

6

SIT	E AND USAGE INFORMATION (All fields are required)
A)	Domestic Water Source:
	Municipal System
	Private Water Company
	Shared Private Well
	Individual Private Well
	Hauled Water
	No Water
B)	Approximate Property Size: 1.5 ☐ Square Feet ☒ Acres
	Use of Property:
υ,	Dwelling or Other Residential
	Other (describe):
D)	Occupancy/Use:
υ,	Full Time
	Seasonal/Part time: About% of year
	Intermittent
	☐ Vacant
	Unknown
	Number of on-site systems in use on this property?
	One (most common)  Note: If more than one on-site system is in use on this property, a
E)	More than one (indicate number): Report of Inspection form should be completed for each system.
EJ	Estimated Design Flow; 450 gallons per day
	Basis for design flow (check either 1 or 2):
	1) Designated in permitting documents issued on or after January 1, 2001
	2) Calculated or estimated based on (check one):
	For a dwelling, number of bedrooms times 150 gallons per day per bedroom
	For a dwelling, fixture count as tabulated in A.A.C. R18-9-A314(4)(a)(i)
	If not a dwelling, summation of unit flows from Table 1, Unit Design Flows (AAC. R18-9-E323)
	Other (describe):
F)	Evaluation of actual flow versus the design flow indicated in E:
	Actual flow does not appear to exceed design flow
	Actual flow may exceed design flow due to:
	Number of occupants (high occupancy)
	Bedroom count (actual number of bedrooms appears greater than number upon which original design
	may have been based)
	Fixture count
	Water meter/usage records
	Other (describe):
	Unknown or could not be determined
G)	Strength of sewage received by on-site wastewater treatment facility:
	Appears representative of typical residential sewage strength
	Includes waste from kitchen garbage disposal?
	Yes No Unknown or could not be determined.
	Appears to exceed strength of typical residential sewage because
	Appears to be weaker than typical residential sewage because
	Unknown or could not be determined

## 7 GENERAL TREATMENT AND DISPOSAL WORKS INFORMATION (Complete either Section A or Section B)

The system consists of the following treatment and disposal technologies (check either column A or column B, and all applicable boxes in the selected column that describe the overall system).

SECTION A	SECTION B
A) System constructed or authorized for	B) System authorized for construction ON OR
Construction BEFORE January 1, 2001	AFTER January 1, 2001
	,
Conventional Septic Tank System	☐ GP 4.02 Conventional Septic Tank/ Disposal System
Septic Tank	Septic Tank
☐ Disposal Trench	Disposal Trench
☐ Disposal Bed	Disposal Bed
Disposal by Chamber Technology	Disposal by Chamber Technology
Disposal by Seepage Pit	Disposal by Seepage Pit
Other: { cesspool }	
Alternative Systems (check all that apply)	Alternative Systems (check all that apply)
Composting Toilet System Pressure Distribution System	GP 4.03 Composting Toilet System
Gravelless Trench	GP 4.04 Pressure Distribution System GP 4.05 Gravelless Trench
Natural Seal Evapotranspiration Bed	GP 4.06 Natural Seal Evapotranspiration Bed
Lined Evaporanspiration Bed	GP 4.07 Lined Evapotranspiration Bed
Wisconsin Mound	GP 4.08 Wisconsin Mound
Engineered Pag System	GP 4.09 Engineered Pad System
Intermittent Sand Filter	GP 4.10 Intermittent Sand Filter
Peat Filter	GP 4.11 Peat Filter
Textile Filter	GP 4.12 Textile Filter
Denjarkying System Using Separated Wastewater	GP 4.13 Denitrifying System Using Separated
Streams (e.g., RUCK®)	Wastewater Streams
Sewage Vaunt	GP/4. 4 Sewage Vault
Aeronic System	G 4. 5 Aerobic System
Nitrate-Reactive Media Filter	☐ OP 4.16 Nitrate-Reactive Media Filter
Cap System	GP 4.17 Cap System
Constructed Wetland	GP 4.18 Constructed Wetland
Sand-Lined Trench	GP 4.19 Sand-Lined Trench
☐ Disinfection Devices ☐ Surface Disposal	GP 4.20 Disinfection Device GP 4.21 Surface Disposal
Subsurface Dring Irrigation Disposal	GP 4.22 Subsurface Drip Irrigation Disposal
Design flow is 3,000 gpd or more	GP 4.23 Design flow from 3,000 to less than 24,000
Other	Gallons Per Day (4.23 GP)
	Canoni a Day (1125 O1)
Date of Construction;	Date of Discharge Authorization for system
Based on:	(or Verkication if issued from 1/1/2001 through 12/11/2005):
Permitting documentation	
Other documentation	
☐ Estimated	
Unknown Construction Date	
fff	<u> </u>
	, \
C) Date of last inspection and/or pumping of septic tar	
D) Repairs or alterations to the facility since original is	nstallation?
E) Is facility currently being serviced under a mainten	ance contract? 🔲 Yes 🔲 No 🔲 Unknown
· •	
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	T

SEPTIC TANK INSPECTION AND PUMPING INFORMATION (for Conventional Septic Systems or Alternative Systems that use a Septic Tank)  A) Was the septic tank pumped as part of this inspection?   If No septic tank was not pumped because:  The septic tank was put into service less than 12 months before inspection  Pumping or servicing was not necessary at the time of inspection based on manufacturer's written operation and maintenance instructions (applicable only to alternative technologies).  No accumulation of floating or settled waste was present in the septic tank (may be applicable to certain remote or seasonal systems with little use).  Additional Information:
B) Septic tank material: Pre-cast concrete Fiberglass Plastic Other: Could not be determined
C) Liquid level in septic tank before pumping:
□ Normal       □ Below normal       □ Above normal       □ Could not be determined         □ D) Access openings in septic tank:       □ One       □ Two □ Three □ None       □ Other (describe)
E) Number of compartments in septic tank:  One  Two  Other (describe)
F) Depth of soil cover over tank access port or riser: inches br feet
G) Septic tank risers:  Present  Not present  H) Capacity of septic tank:  gallons
H) Capacity of septic tank: gallons /
☐ Measurements/dimensions of tank ☐ Volume Pumped ☐ Estimate ☐ Capacity could not be determined
Scum Sludge (measured before pumping):     i) Tank depth (air-liquid interface to bottom of tank) ft inches
ii) Primary (instream) chamber: Scum depth inches, Sludge depth inches
iii) Secondary (downstream) chamber: Scum depthinches, Sludge depth inches
J) Baffle of sanitary "T" material: Pre-cast concrete Fiberglass Plastic Clay Other:
K) Condition of baffles and sanitary "Ts":
i) Inlet baffle or "T":
iii) Interior baffle:
L) Is there evidence of leakage into septic tank (infiltration)?  Yes No Could not be determined  M) Is there evidence of leakage out of the septic tank (exfiltration)?  Yes No
Could not be determined
N) Is there evidence of: Root invasion Cracks in tank Damaged lids or risers Other (describe):
O) Is a sewer line cleanout present between building drain and septic tank? Yes No
P) Effluent filter: Present Not present Could not be determined Filter serviced.
Q) Repairs or other maintenance done to septic tank as part of this inspection? \( \subseteq \text{No } \subseteq \text{Yes} \)
(describe at Item 12B)
igwedge

## 9 DISPOSAL WORKS INSPECTION (All fields are required)

A)	Disposal is by: Trench Bed Chamber Technology Seepage Pit No. of pits Un Alternative disposal works Unknown of could not be d		further details in Ita	em 1 <b>0E</b> )	
B)	Is there evidence of disposal well Wet areas Unusual green/lush vegetat Sewage smell Liquid discharges on surface Discharge pipes of unknow Impaired hydraulic capacity Erosion encroachment, erosion Other (describe):	ion e n origin / (hackups)	П		onditions observed):
C)	Any structural or drainage prob  Localized surface settling  Apparent root invasion  Animal damage  Other (describe):	lems?: No	Yes (check all ap	plicable conditions	observed):
D)	Diversion valve or distribution If yes: Type of component: Opened for inspection? Operational status?		No Not fun	ctioning properly	
	Are inspection ports present in i) If yes, number of functiona ii) If yes, indicate depth (in inc	ports:	No Yes [	Not determined	
		Port 1	Port 2	Port 3	Port 4
	Bottom of Port	•			<u> </u>
	Wastewater (liquid) surface				
F)	Is a reserve disposal area availa	bie? 🗌 Yes 🖺	No Unknow	n or could not be de	termined
	Repairs or other maintenance de (describe in Item 12B)	one to disposal wor	ks as part of this ins	spection? No	Yes

IU	A) A with an appropriate posterior tooks on accords other than a continuous?				
	A) Are there wastewater-containing tanks or vessels other than a septic tank?   No Yes				
	If yes, were tank(s) or vessel(s) pumped as part of this inspection?				
	Yes 1 1 C 1 C 1				
	No, because the tank or vessel was put into service less than 12 months before inspection.				
	No, because pumping or servicing was not necessary at the time of inspection based on manufacturer's				
	written operation and maintenance instructions.				
	No, because no accumulation of floating or settled waste was present in tank(s) or vessel(s).				
	B) Is there a pump or pumps? \( \subseteq \text{No} \subseteq \text{No there a pump or pumps?} \) \( \subseteq \text{No there a pump or pumps?} \)				
	C) Are there system controls (switches, alarms, fluid level controls, etc.)? No Yes Not determined				
	i) If yes, system settings were:				
	Checked Not checked Adjusted (describe):				
	D) Are there other mechanical components or appurtenances? Yes No Not determined				
	i) If yes, describe mechanical components and appurtenances:				
	E) Are there any disposal works components other than trench, bed, chamber technology, or seepage pit?				
	Are there any disposal works components other than trench, bed, chamber technology, or seepage pm?				
	No Not determined Yes (describe):				
	F) Describe any tests conducted, maintenance performed (other than pumping or adjustments of system controls), or				
	repairs completed to any of the treatment or disposal components or appurtenances addressed in this Section:				
	G) Repairs or other maintenance done to components/appurtenances as part of this inspection? No Yes				
	(describe in Item 12B)				
11	OTHER COMMENTS				
	SEE ATTACHEMENT LETTERS				
	<del></del>				
12	INSPECTION SUMMARY (Check All That Apply)				
14	ANDIECTION DOMINARI (Check An Indi Apply)				
	A) Physical and operational condition of the on-site wastewater treatment facility, at time of inspection, appears to be:				
	☐ Functional ☐ Functional with concerns ☐ Not Functional				
	D) Barring transfer of this immediately				
	Kepairs were made as part of this dispection (describe):				
	- <u> </u>				
	C) Repairs are recommended (describe):				
13	Inspector's Certification (Required) cesspool				
10	I have inspected the physical and operational condition of the on-site wastewater treatment facility serving this				
	property on the date indicated below. I have completed this <i>Report of Inspection</i> to the best of my knowledge, and				
	have based the information contained in this form on observations and work performed at the time of inspection.				
	However, this Report of Inspection does not imply nor guarantee any future performance of this facility in any way.				
	Thowever, and resport of inspection does not impry not guarantee any tuture personnance of this facility in any way.				
	Inspector's Signature Date of Inspection:				

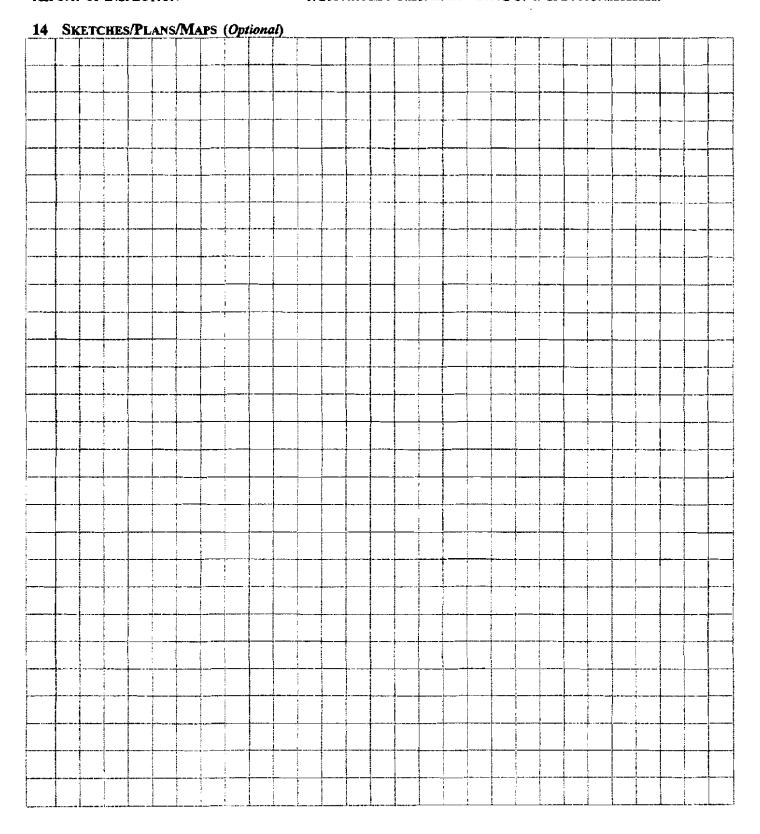
#### NOTE TO BUYER:

Within 15 calendar days after the date of property transfer, the Buyer shall submit a complete Notice of Transfer form (http://www.azdeq.gov/environ/water/permits/download/presale.doe) for the change of ownership, and file it with the applicable agency indicated in the Notice of Transfer instructions. Information from this Report of Inspection form is needed to fill out the Notice of Transfer that must be submitted by the Buyer.

Effective February 2, 2007, you may be able to file your *Notice of Transfer* online. Go to the ADEQ web site at http://www.azdeq.gov/environ/water/permits/onsitenot.html for further information regarding this.

FORM GWS 432 (REVISED, FEBRUARY 16, 2007)

PAGE 6 of 7





# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



1110 West Washington Street • Phoenix, Arizona 85007 (602) 771-2300 • www.azdeq.gov

April 7, 2008

Jake Garrett, P.E.
Gila County Community Development Division
Wastewater Department Manager
714 S. Beeline Hwy, Ste 200
Payson, AZ 85541

Dear Mr. Garrett:

We have received your letter dated March 18, 2008 regarding cesspools. First, any information provided to you by our Department suggesting that cesspools are to be inspected or transferred under A.A.C. Title 18 is incorrect. Cesspools are not a permitted method of wastewater disposal and are prohibited expressly under R18-9-A309(A)(4) and R18-5-408(D). Accordingly, they are not subject to the notice of transfer requirements of R18-9-A304, the presale inspection rules of R18-9-A316, or the repair provisions of R18-9-A309(A)(9).

In addition to being prohibited under the "General Provisions for On-site Wastewater Treatment Facilities" section of the rule, cesspools do not meet the requirement of the R18-9-B301(I)(1)(b). That provision refers specifically to "[a]n on-site wastewater treatment facility with flows less than 20,000 gallons per day operating before January 1, 2001." The definition of "on-site wastewater treatment facility" is provided in rule (R18-9-101(27));

"On-site wastewater treatment facility" means a <u>conventional septic tank system</u> or <u>alternative system</u> installed at a site to treat and dispose of wastewater, predominantly of human origin, generated at that site. ...

ADEQ recognizes that a number of residential cesspools remain in operation in Gila County and across the state. However, since their operation is generally prohibited and, as your letter effectively conveys, they unacceptably endanger water quality and the public health and safety, their continued operation should not be encouraged. ADEQ believes that home inspectors and on-site transfer inspections that may occur should encourage potential buyers to require the installation of a permitted facility. Also, we would like to explore with you ways to educate current and potential homeowners of the prohibition against cesspool operation and appropriate methodologies to phase out their use in Gila County.

Jake Garrett April 2, 2008 Page 2

Please feel free to call me at (602) 771-2306 or David Lelsz at (602) 771-4447.

Sincerely,

Yoan Card, Director

Water Quality Division

1400 East Ash Street Globe Arizona 85501 (928)425-3231 Ext. 8512 FAX (928)425-0829



714 S. Beeline Hwy, Suite 200 Payson, Arizona 85541 (928)474-9276 FAX (928)474-0802

## GILA COUNTY COMMUNITY DEVELOPMENT

Robert Gould, Director

June 17, 2008

Wastewater Department Policy Statement Re: Cesspool Replacement Policy

#### **Policy Statement**

The current Gila County Wastewater Department policy regarding waste systems installed prior to 1976 is stated in the Gila County Health Department letter dated 12/9/1996 and partially quoted here:

"Any system that was installed prior to 1976 including but not limited to cesspools, homemade septic tanks, or other sewage disposal hybrid devices would be grandfathered in until these "systems" fail or the residence plumbing is modified."

In support of this policy the following practices were implemented:

#### **Nuisance Complaint Investigation:**

- Should failure be discovered through the complaint process, while investigating a possible Environmental Nuisance or during any normal business activity undertaken by Gila County, the failure must be immediately corrected. Possible corrective actions include:
  - Ceasing use of the home or
  - o Install an appropriate wastewater treatment system.

(Failure means any structural or hydraulic failure and is evidenced by such things as collapsed lids, deterioration of sidewall structural components, back-up of sewage into the home, groundwater contamination or surfacing of sewage.)

#### **Building Clearance:**

- The Wastewater Department will not approve the submittal of building plans for any property served by a cesspool if those plans expand the footprint of buildings or structures on the property or alter the wastewater flow characteristics (bedrooms or plumbing fixtures) of the property.
- In April, 2008 in response to ADEQ's statement that cesspools are not included in the 1.09 General Permit, the clearance practice was modified to state that only Life-Safety remodel projects of homes served by cesspools will be cleared for building plan submittal provided that the cesspool does not meet the definition of failure and the life-safety changes do not expand the home footprint.

Respectfully

Jake Garrett, P.E.

Wastewater Department Manager