



Public Health Department

Environmental Health

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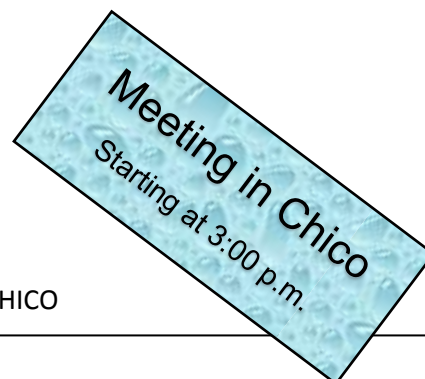
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WASTEWATER ADVISORY COMMITTEE

AGENDA

AUGUST 9, 2016 ❖ 3:00 P.M.-5:00 P.M.

ASSOCIATION OF REALTORS ❖ 1160 E 1ST AVE, CHICO



I. Preliminary Items

- A. Call to Order
- B. Roll Call and Determination of Quorum
- C. Introduction of Guests
- D. Review of Minutes (See Attachment "A", "B", and "C")
- E. Agenda Review
- F. Public Comments and Input

II. Informational Non-Action Items

- A. Informational Handout for Financial Assistance (See Attachment "D")
- B. Review of Puraflow, Elgin, and Geomatrix (See Attachment "E")

III. Action Items

- A. Conditions for Allowing Composting Toilets for Existing Residences (See Attachment "C")
Discuss and make recommendations
- B. Preliminary Review: OM&M Requirements for Direct Discharging Systems (See Agenda Attachment "F")
Discuss and make recommendations
- C. Criteria for Approval of Exceptions for Sewer Connection Based on Cost (See Agenda Attachment "G")
Discuss and make recommendations

IV. Agenda Preparation for Next Meeting

V. Adjourn

WASTEWATER ADVISORY COMMITTEE

MINUTES

MAY 17, 2016

TAHOE ROOM ** 202 MIRA LOMA DRIVE, OROVILLE

Attachment "A"

I. Preliminary Items

A. Call to Order

Nick called the meeting to order at 3:08 p.m.

B. Roll Call and Determination of Quorum (**See Attachment One**)

Nick Weigel, Jan Hill, Buddy Nottingham, Rick McCauley, and Lauralyn Lambert were present.

DC Jones, Wes Gilbert, and Will Arnold were absent.

A quorum was established.

C. Introduction of Guests

Jeff Pringle, Joseph Soulia, Doug Danz, Brian Cooper, Robert Parker, and Bryan Mallory attended as guests. Charlotte Walters, Darren Jones, Kristen McKillop, and Brad Banner attended the meeting on behalf of the Public Health Department.

D. Review of Minutes

Buddy made a motion to accept the February 16, 2016 minutes as written. Lauralyn seconded the motion and the motion passed unanimously.

E. Agenda Review

No changes were proposed.

F. Public Comments and Input

There was no public comment.

II. Informational Non-Action Items

A. Status of "Installation of Drainfield Under Driveway"

Brad distributed the provisions approved by the committee at the last meeting for placement of drainfields underneath driveways and noted that the changes were inadvertently not included in the latest update to the Manual, however could be used in the interim between the present time and when they are included in the next Manual update.

B. LAMP Update

Nick, Doug, and Brad discussed the process of LAMP submittal by various jurisdictions in the state. Butte County's LAMP, consisting of the Division's Ordinance and Manual, was submitted on April 12 and has tentative approval by the Regional Board.

C. County Fee Study

Brad described the county's ongoing fee study, which is the first comprehensive review of fees since 2008. The Division has submitted to the consultant the time spent in each of our fee categories and the consultant will calculate the "fully burdened cost" of all of our permits and submit a report to the Board of Supervisors.

III. Action Items

A. Provisions of Low Cost Repair Options for Low Income Families

1. Heather MacDonald, Management Analyst for Butte County Administration, presented information on the county's Housing Rehabilitation Loan Program. The program provides 30-year loans with sliding interest rates between 0-3% for low income families. In addition, payments on the principle can be deferred for 30 years or until the time of property sale for very low income families. The loan process takes about 2 months. There can also be grants up to \$7,500 for low income families. The program is administered through the Sutter Nevada Regional Housing Authority and Heather can be contacted at 530-538-6344.
2. Jan asked if a designer could perform the design services for a "write-off" for tax purposes. Heather did not know for sure, but thought probably not.
3. Buddy moved the conversation into the need for the cause of septic failures to be better diagnosed prior to requiring costly repairs.
4. Doug Danz pointed out that an archeological review would probably be required as a condition for loan approval, but that the cost could be rolled into the loan.
5. A future topic for discussion was raised: changes to the Ordinance requiring Certified Pumpers to receive continuing education and a condition for re-certification.
6. [The committee suggested that Environmental Health should distribute information about the loan and grant program to the county's wastewater professionals.](#)

B. Provision for Allowing Composting Toilets for Existing Residences

1. Brian gave a thorough description of the benefits of non-discharging toilets, such as composting toilets, and graywater systems. He pointed out that:

- a. California is the largest manufacturer of composting toilets
 - b. Composting toilets are very popular back east due to the high watertables there
 - c. Homeowners who want composting toilets will take care of them properly because they are motivated to do so
 - d. Graywater systems save water, prevent drainfield failure by reducing wastewater flow and by keeping lint out of the waste stream, and increase the public's consciousness of water sustainability issues. In addition, Laundry to Landscape systems do not require modifications to a home's plumbing system and are easy to install.
2. Brad said that he would like the committee to consider allowing existing toilets in residences to be replaced with composting toilets provided mitigating measures are developed to assure that doing so will be as protective of water quality and the environment as leaving intact the original water flush toilets. Brad suggested that the committee consider the Division's Composting Toilet Guidelines (April 18, 2011) as mitigations. **(See Attachment Two)**
 3. Brad explained that the Manual has been modified to be more user-friendly for graywater systems, with notification-only required for Landry to Landscape systems, only over-the-counter plan review required for Simple systems, and with modified Construction Permit requirements for Complex systems.
 4. Nick discussed an issue with the Regional Board that he is dealing with in Tuolumne County where a septic system without graywater has a higher waste strength, but the actual number of pounds per day of the solids, etc. going into the drainfield is about the same or a little less. Still, the Regional Board is considering only the wastewater concentration as a basis for their requirements.
 5. Jan asked Brian how he performs soil tests for graywater systems and Brian stated that he uses percolation tests. Nick noted that the application rates in the Plumbing Code are probably too high because they do not take into account reductions in absorption rate in the soil that occur over time. However, it was noted that graywater can always be redirected back into the primary septic system if the septic system is designed to handle the total amount of wastewater generated by the home.
 6. Nick pointed out that there are composting toilet demonstration projects in Sonoma County.
 7. [The committee agreed to consider the composting toilet proposal at the next meeting.](#)

C. OM&M Requirements for Geomatrix and other Direct Discharging Supplemental Treatment Systems

1. Jan briefly described the Geomatrix system but the discussion was cut short because of lack of time. Jan said that he will try to get the distributor of Geomatrix to attend the next committee meeting.
2. This item was tabled until the next meeting due to lack of time for full consideration of the issue.

IV. Agenda Preparation for Next Meeting

The next meeting is scheduled for August 9, 2016.

V. Adjourn

The meeting adjourned at 5:05 p.m.

Minutes provided by Brad Banner, EH Director



Public Health Department

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Wastewater Advisory Committee

Sign-In Sheet

Date: May 17, 2016

Location: Tahoe Rm, 202 Mira Loma Dr., Oroville

Name	Initials	Email
Brnd Binner	<i>[Signature]</i>	bbanner@buttecounty.net
Jan Hill	<i>[Signature]</i>	pam.janhill@comcast.net
Charlotte Walters	CW	char cwalters@buttecounty.net
Jeff Pringle	JF	jpringle@orenco.com
Joseph Soulia	JS	jsoulia@orenco.com
Buddy Nottingham	BN	Hydrotec
Kristen McKillop	<i>[Signature]</i>	kmckillop@buttecounty.net
Lauralyn A. Lambert	LJ	lauralyn@lauralynlambert.com
Doug Danz	DD	ddanz@townofparadise.com
Brian Ludwig Cooper	BLC	bllcgaiacreations@gmail.com
Robert Parker	RP	rfparkeriii@msd.com
DARRIN W JONES	<i>[Signature]</i>	dwjones@buttecounty.net
Bryan Mallory	<i>[Signature]</i>	bryan.mallory@comcast.net

RICK MCCAULEY REM R.MCCAULEY@SOSONSITECA.NET

Nick WEIGEL *[Signature]* NWEIGEL@DMTECH.COM
NORTHSTREETB.COM

Composting Toilet Guidelines

Update April 18, 2011

Composting toilets are not permitted in Butte County for residential or commercial use.

Individuals who wish to obtain a permit from Butte County Environmental Health to install a composting toilet will need to request that the Environmental Health Director approve alternative requirements to those found in the Butte County On-Site Wastewater Manual.

These guidelines provide a potential set of mitigations that would protect public health and the environment when allowing a composting toilet as an alternative to a conventional on-site wastewater systems.

(a) **Applicability.**

Composting toilets should only be considered for owner occupied dwellings on parcels 1 acre in size or larger.

(b) **Requirements.**

No person should install, use, or maintain a composting toilet, except where all of the following requirements are met:

(1) **General.**

- (A) The parcel is first shown to be capable of supporting an on-site wastewater system meeting the requirements of this chapter.
- (B) The composting toilet is installed, maintained, or replaced in accordance with the manufacturer's recommendations.
- (C) No material is placed in a composting toilet other than the material for which it has been designed.
- (D) Installation of the toilet has been inspected by the Butte County Building Official, or designee, in consultation with the Public Health Department, Environmental Health Division, hereinafter referred to as the Local Enforcement Agency (LEA).

(2) **Selection of Composting Toilet.**

- (A) The toilet needs to be specifically designed for holding and processing liquid and solid human waste, generally associated with toilet usage, and employs the process of biological degradation in which organic material is converted into a compost-like substance.
- (B) The toilet needs to be certified and currently listed by the National Sanitation Foundation (NSF) under NSF/ANSI Standard 41.

- (C) The model of toilet selected must be appropriate for the intensity and duration of use as specified in the manufacturer's recommendations.
- (D) The model of toilet selected is appropriate for the number of users. The assumed number of users should be the higher of the numbers calculated by the following methods:
 - a. Calculation by Number of Bedrooms:
 The number of occupants of each dwelling unit shall be calculated as follows:
 - i.) First Bedroom ----- 2 occupants
 - ii.) Each additional bedroom ----- 1 additional occupant
 - b. Calculation by Anticipated Actual Number of Users:
 The applicant indicates the maximum foreseeable number of persons who will be living at the residence and using the composting toilet.
 - c. Examples.
 - i.) If only one person will reside in a three bedroom home, the composting toilet selected shall be a toilet recommended to serve at least 4 residents.
 - ii.) If five people will reside in a one bedroom home, the composting toilet selected shall be toilet recommended to serve at least 5 occupants.

(3) **Management of Finished Compost and Liquid By-Products.**

- (A) The residual liquid waste by-product of the composting toilet needs to be collected, transported, and discharged in a manner as stated in the Operation and Maintenance (O&M) Manual.
- (B) The product of composting digestion needs to be handled and disposed of only after the digestion process is complete as specified in the manufacturer's operation and maintenance instructions; and
- (C) Composting toilets have been shown to be capable of deactivating and/or killing pathogens through the internal processes that take place. Due to external conditions or operational irregularities, the conditions in the unit may not always be optimal for pathogen destruction and improper handling and disposal of the product could adversely impact public health by allowing transmission of a variety of enteric diseases and parasitic illnesses. The product of composting digestion must, therefore, be transported and disposed of in a manner that does not create a public nuisance and is in accordance with the requirements of the operating permit and the owner's operation and maintenance manual, and the

following requirements:

- (i) Transportation needs to be by a licensed septic tank pumper to an approved solid waste disposal facility capable of accepting human waste; or
- (ii) Disposition by the homeowner on the property where the toilet is located, needs to meet all the following conditions:
 - a. Bury the waste under a minimum of six (6) inches of compacted soil;
 - b. The location for burial should be shown on a site plan submitted under the LEA's Site Assessment process;
 - c. The waste should not be buried in any present or planned food crop growing areas or dairy pasture; and
 - d. The waste should not be buried where there is less than 36 inches of native, undisturbed soil between the bottom of the burial excavation and a seasonal, perched watertable, or in an area subject to seasonal runoff where the discharge could flow into surface or subsurface water.

(4) **Site Assessment Requirements.**

A site plan and Site Assessment performed by the LEA of the site proposed for disposal of the product of composting digestion should be required as a condition for approval of a composting toilet as an alternative method of waste disposal. Setback requirements for the disposal site should be the same as those in Chapter 19 for septic tank placement.

(5) **Operating Permits.**

- (A) Approval by the LEA of a composting toilet would require an Operating Permit for installation and replacement.
- (B) Operating permits for composting toilets, unless suspended or revoked by the LEA for non-compliance with the LEA requirements, would be valid for the period the permittee resides on the property and utilizes the toilet.
- (C) A person selling a parcel on which there is an approved Operating Permit for a composting toilet would need to notify the LEA of the transfer and disclose to the prospective purchaser the presence of a composting toilet and the requirement to obtain an operating permit, and the location approved by the LEA for disposal of the product of composting digestion.
- (D) Operating permits would not be transferrable by the seller to the buyer upon sale of the property.
- (E) The LEA would consider revoking an operating permit under any of the following conditions:

- a. An unsanitary condition has been caused by the toilet or its use;
- b. The product of composting digestion has been improperly transported, disposed of or used;
- c. The toilet is not operated or maintained as specified in the operating permit or Operation and Maintenance (O&M) Manual or fails to meet its design or operating specifications; or
- d. Continued use of the toilet poses an imminent health hazard.

(6) **Operation and Maintenance (O&M) Manual.**

- (A) No person should install, maintain, or replace a composting toilet unless an O&M Manual is maintained and available for reference on the premises.
- (B) The O&M Manual should, at a minimum, contain all the following information:
 - a. Potential health risks from improper use or maintenance of the composting toilet;
 - b. Manufacturer's name and model number;
 - c. Manufacturer's NSF certification;
 - d. Manufacturer's recommended operational capacity;
 - e. Manufacturer's operation and maintenance recommendations;
 - f. Trouble-shooting information;
 - g. Contact information in case of the need for repair or replacement; and
 - h. Method of handling and site for disposal of the product of composting digestion.

(7) **Recorded Disclosure Document.**

A notification in the form of a deed restriction should be recorded informing future property owners of all the following:

- (A) The potential health risks associated with the product of composting digestion;
- (B) The property owner's responsibility to maintain an O&M Manual for the composting toilet;
- (C) The property owner's responsibility to maintain a current operating permit for the composting toilet; and
- (D) The property owner's responsibility for properly operating and maintaining the system in accordance with the O&M Manual and the operating permit.



Financial Assistance for Well or Septic

Attachment "D"

Financial assistance is available through the county for repair of wells and septic systems through the Regional Housing Authority of Sutter & Nevada Counties that is managed locally by Butte County Administration. All phases of the rehabilitation process, from beginning to end, are managed by Butte County Administration.



Loans are offered up to \$100,000. Terms and conditions for each loan are based on the applicant's income and household budget. Interest rates vary from 0-3 percent.

Income limits effective June 6, 2016:	
1 person	\$33,000
2 persons	\$37,700
3 persons	\$42,400
4 persons	\$47,100
5 persons	\$50,900
6 persons	\$54,650
7 persons	\$58,450
8 persons	\$62,200

In some cases, payment on the principle of the loan can be deferred for up to 30 years or when the property transfers ownership.

The County will loan up to 95% of your property's appraised value. Loans are secured by a recorded Deed of Trust and Promissory Note. Loans not in first position require a Request for Notice of Default to be recorded.

The contact to apply for this program is:

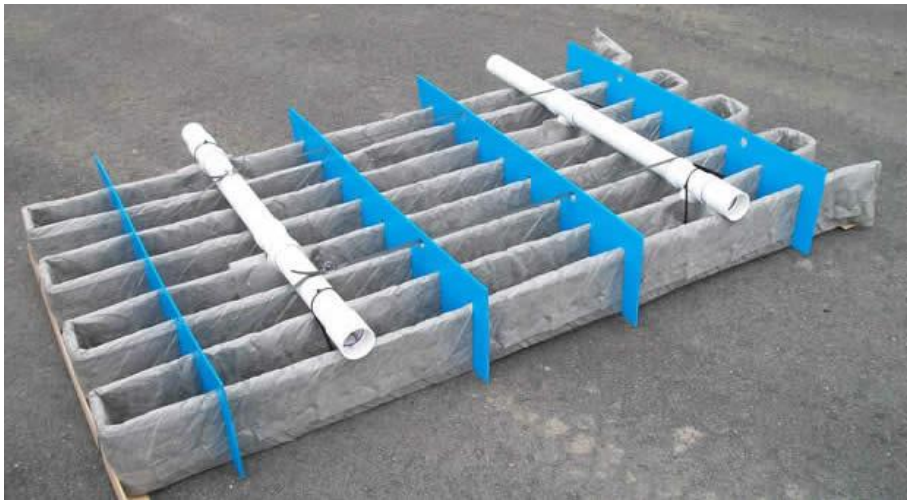
Heather MacDonald
Management Analyst, Associate
Butte County Administration
530.538.6344
HMacDonald@buttecounty.net



For additional information online, the program is found at this website:

<http://buttebusinessresources.com/housing-rehabilitation-loan-program>

Attachment "E"



2. **Operating Permit Renewal Frequency**
 Operating permits, unless suspended or revoked by the LEA for non-compliance with the On-Site Wastewater Ordinance or Manual, shall be valid for a duration based on system type, as follows:
 - a. **Pressure Distribution:** From issuance until the time of property transfer.
 - b. **Mound or Single-Pass Sand Filter:** From issuance for a period of one year.
 - c. **Aerobic Treatment Unit or Packed Bed Filter:** From issuance for a period of one year

Chapter 4. Inspection Frequency and Maintenance Checks

A. **Inspection Frequency**

Inspection Interval (Following Initiation of System Use)	Standard Gravity System	Pressure Dist. or Siphon	Mound or Single-Pass Sand Filter	ATU or Packed-Bed Filter (1)	Disinfection Units
First 6 weeks					PL or OM
Monthly					PL or OM (if no telemetry)
6 months after initiation of use			OM	OM	
Annually			OM		
As required by the manufacturer or NSF, but not less than once per year				PL or OM	PL or OM (with telemetry)
Every 2 years		OM (Recommended Only)			
Every 5 years	PU or IN or OM (Recommended Only)				

(1) Supplemental treatment systems, other than single-pass sand filters, used for treatment prior to disinfection must be monitored monthly for the first year of operation and longer if necessary to assure treatment requirements are reliably met

- PL= Proprietary Device Licensee (also must be locally certified as OM&M Specialist)
- PU= Certified Pumper
- INS= Certified Installer
- HO= Homeowner
- OM= Certified Operation, Monitoring, and Maintenance Specialist

D. Supplemental Treatment Effluent Monitoring

1. Any system that incorporates supplemental treatment shall be monitored annually for performance in the following manner:
 - a. Treated effluent and, where applicable, untreated influent will be sampled and tested at least annually for BOD, and TSS. Treated effluent and, where applicable, untreated influent of systems with Operating Permits requiring nitrogen reduction shall, in addition, be tested for Total Nitrogen. Treated effluent of systems utilizing disinfection shall, in addition, be tested for total and fecal coliform.
 - b. Where the OM&M Specialist has used field testing for pH, DO, and turbidity in addition to the parameters identified above during six consecutive monitoring events over a three year period, and where a relationship between field testing measurements and BOD/TSS has been established to the satisfaction of the LEA, the LEA may approve field testing in lieu of testing for BOD and TSS for future routine maintenance events.
 - c. Three years of effluent monitoring has shown the treatment system consistently meets the standards outlined in this Manual for BOD and TSS, the LEA may approve field testing.
 - d. When effluent quality monitoring results indicate that the supplemental treatment and/or add-on disinfection did not meet the minimum treatment levels specified in this Manual, a second sample will be taken within three months. If the follow up sampling results indicate that the supplemental treatment and/or add-on disinfection unit is not performing to the treatment levels specified in this Manual, the OM&M Specialist will inform the LEA and will take the corrective action necessary to achieve the treatment levels specified in this Manual. Correction of treatment problems will be verified by two consecutive compliant sample results within a three month period.

19-8 Connection to Public Sewer System

- A. Other than where an exception is granted by the Environmental Health Director pursuant to Subsection B of this Section, connection to a public sewer system shall be required by the LEA whenever the sewer main is no more than two hundred fifty (250) feet from the existing or proposed dwelling and all of the following circumstances apply:
 - 1. Application has been made for new development or a failing on-site wastewater system has been identified by the LEA; and
 - 2. The public sewer system has adequate capacity for the connection; and
 - 3. Connection to the public sewer is permitted by the sewer utility.
- B. Exceptions may be granted by the Environmental Health Director to Subsection A of this Section where the sewer main is not adjacent to the property line. Factors that may be considered prior to making a decision to grant or deny an exception include, but are not limited to, the following:
 - 1. **Feasibility and cost of connection**; and
 - 2. Reasonable expectation for future expansion plans of the sewer utility; and
 - 3. Willingness of the applicant to commit to connect to the public sewer in the future; and
 - 4. Suitability of the parcel for siting an on-site wastewater system.