

Gunnison County Environmental Health Board

Agenda: October 7, 2015

- 1:15 p.m.** Call to order; determine quorum
- 1:17 p.m.** Approval of minutes from the September 2, 2015 meeting
- 1:20 p.m.** Unscheduled Citizens: A brief period in which the public is invited to make general comments or ask questions of the Board or County Staff about items which are not scheduled on the day's agenda.
- 1:30 p.m.** **Gunnison County On-site Wastewater Treatment System Regulation, proposed revisions to Article 19: *Crested Butte Watershed OWTS District.***
- Draft revisions to Article 19: *Crested Butte Watershed OWTS District.*
 - Possible proposed OWTS regulations letter of recommendation.

Adjourn

NOTE: Unless otherwise noted, all meetings are conducted in the Blackstock Government Center Meeting Room at 221 N. Wisconsin Street in Gunnison, across the street from the Post Office. Anyone needing special accommodations please contact the Community Development Department (641-0360) before the meeting.

**Gunnison County Environmental Health Board
Agenda: September 2nd, 2015**

- 1:15 p.m.** Call to order; determine quorum
- 1:17 p.m.** Organizational business
- Election of officers
 - Review of role of the EH Board
 - Discussion of future meetings
 - Creation of minutes policy
- 1:40 p.m.** Approval of minutes from the May 14, 2014 & July 15, 2015 meetings
- 1:45 p.m.** Unscheduled Citizens: A brief period in which the public is invited to make general comments or ask questions of the Board or County Staff about items which are not scheduled on the day's agenda.
- 1:55 p.m.** **Staff-Gunnison County On-site Wastewater Treatment System Regulation**, work session/no action, Article 19: *Crested Butte Watershed OWTS District*, Article 20: *Marble OWTS District*.
- Old ISDS Regulations
 - New OWTS Regulations

Adjourn

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**GUNNISON COUNTY ENVIRONMENTAL HEALTH BOARD
SEPTEMBER 2, 2015**

The Gunnison County Environmental Health Board conducted a meeting, in the Planning Commission Meeting Room at the Blackstocks Government Center.

Present Were:

Lucinda Lull, Chairperson
Eddy Balch, EH Board Member
Steve Glazer, EH Board Member Alternate
Larry Parachini, Vice-Chairperson
Rodney Due, EH Board Member

Crystal Lambert, Building and EH Official
Charlie Dominguez, EH and Building Inspector
Rebecca Ricord, Administrative Assistant
Russ Forrest, Community Development Director

Absent Were: Jeffrey Sellen, Ed Bavouset

Other attendees as listed in text.

Call to order: A quorum was determined by Lull. Properly noticed verified by Lambert. Steve Glazer as an alternate was seated as a voting member for the meeting.

1:31:53 PM Election of officers:

Glazer moved to re-elect officers of the board as they are. Seconded by Balch. Lull will be the Chairperson and Parachini the Vice-Chairperson. Ed Bavouset and Steve Glazer will be the alternates. No further discussion. Parachini abstained. Passed unanimously.

Review of role of the EH Board:

Forrest stated that he, Lucinda and Larry had a good meeting previously regarding the roles of the Board. Forrest stated the purpose and role of the Environmental Health Board is to consider applications that may come before the board related to the On-Site Wastewater Treatment System Regulations and to consider amendments to that regulation.

Future meetings:

The Board all agreed that an organizational meeting in the first quarter of the year is important for electing officers, getting organized and anything new that may come up regarding regulations. The Board discussed whether any additional meetings will be required. They decided that unless something came up there would be no need. The Board discussed possibly having a meeting in the fall to look at the year, depending on what happened in the summer. If there were any meetings regarding State changes needed during the year, then the Board would figure that out in February. Forrest stated it would be a good idea to discuss any further meetings during the first quarter meeting.

Glazer wanted to know if it is clear whether they can appear by phone. Forrest stated that usually it is frowned upon in public hearings due to missing out on the visual presentation but otherwise it should be ok. Glazer reported he would most likely be out of State in February and would like to appear by phone then. Balch reported that since the Board of County Commissioners probably won't appoint anyone until mid-February then the Board should have a meeting in March instead of February. Glazer stated that would work better for him. Due requested that they require one mandatory meeting in the first quarter of the year. Forrest stated that if the meeting falls on the third Wednesday of the month it may start at 2:00 p.m. due to scheduling of the room.

Moved by Due and Seconded by Parachini that there will be a mandatory meeting the first quarter of the year. No further discussion. Passed unanimously.

Parachini requested that if there are no scheduled meetings towards the end of the year that an update be given, electronically, to everyone to make sure they aren't missing anything. Due stated that if there is going to be a meeting there needs to be an agenda. Forrest requested that he be emailed if they believed there should be an additional meeting and he would help them set it up.

1:54:32 PM Creation of Minutes policy:

Forrest recommended that the Board review the Minutes, provide the feedback and approve the minutes at the next meeting. Minutes would be sent to them within 30 days of the applicable meeting

Forrest discussed Action Minutes and that they include: what it was, who was there, what the motion was and if it passed. Forrest discussed actually adding some key points and making them "Action Minutes Plus". If an actual hearing then it will be more detailed. Forrest requested that instead of everything written out we give the minutes in "Action Minutes Plus". Everyone agreed that would work for them.

Glazer wanted to make sure that the recording of the votes by roll call be included in the Minutes, stating clearly who voted and how, and who, if anyone, abstained.

Parachini wanted to know when the Minutes would be approved and believed that a year would be too long to wait. Glazer stated that they could approve the meetings electronically and then at the next meeting they would affirm the approval. Everyone agreed that would work.

2:16:57 PM Approval of Minutes:

Approval of Minutes from the May 14, 2014 meeting. Motioned by Parachini, Seconded by Balch to approve the May 14, 2014 meeting minutes. Due abstained due to not being there. The motion passed unanimously.

Approval of Minutes from the July 15, 2015 meeting. Motioned by Parachini, Seconded by Due to approve the July 15, 2015 meeting minutes. The motion passed unanimously.

2:20:13 PM Unscheduled citizens: Glazer gave an update about the standard mine at Mt. Emmons and acid mine drainage. After ten years they finally started going underground this year. Waiting to hear if the crew back onsite after being temporarily assigned to the spill near Silverton and the Standard Mine site was inspected for safety protocols.

2:27:39 PM Staff-Gunnison County On-Site Wastewater Treatment System Regulation, The Environmental Health Board conducted a work session to review Article 19: *Crested Butte Watershed OWTS District*, Article 20: Marble OWTS District.

- Old ISDS Regulations
- New OWTS Regulations

Chairman Lull confirmed a quorum and opened the work session.

Simon A. Farrell, P.E. from JVA, Incorporated, was present to discuss the revision of Article 19 and to discuss the issues he has been having with the regulation.

Discussion followed. No minutes required.

Motioned by Due to direct staff as requirements for high level treatment incorporated into Article 19 of Crested Butte Watershed Onsite Waste Water Treatment Systems District with a minimum requirement that all systems proposed be at a treatment level of TL2N or better. Seconded by Parachini. Passed unanimously.

Lambert stated that she would like to do a draft of the revisions showing the Board the TL2; TL2N, TL3 and TL3N systems and the level of treatment and cost associated with each one so the Board could see the different varieties and choices they would have. .

The revisions will be drafted by Lambert, reviewed by the Environmental Health Board and then forwarded to the Board of County Commissioners for approval. In addition, direction was given to provide proposed language for modifying the regulations as they apply to the 22 existing OWTS systems in the watershed to ensure maintenance (versus water quality sampling) of these existing systems.

The next meeting will be October 7, 2015 at 1:15 p.m. for review by the Board of the Article 19 revisions.

Motion to adjourn by Parachini. Seconded by Balch. Passed. 3:26 P.M.

/S/ Rebecca Ricord
Administrative Assistant
Gunnison County Community Development Department



**Gunnison County Community
Development Department**

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October 7, 2015

**TO: Environmental Health Board Members
Russ Forrest, Community Development Director**

FROM: Crystal Lambert, Environmental Health Official

**SUBJECT: Proposed Revisions to the Gunnison County OWTS Regulations, Article 19:
Crested Butte Watershed OWTS District**

A. PURPOSE:

The purpose of this item is to follow up on direction that staff received from the Environmental Health Board at the September 2, 2015 meeting to draft revisions to Article 19: *Crested Butte Watershed OWTS District* of the Gunnison County OWTS Regulations. To assist in the determination of a minimum treatment level for the Crested Butte Watershed OWTS District, staff has prepared a list of the available systems associated with each higher level treatment designation along with an estimated cost range for each system. The proposed revisions to Article 19 are intended to align the special area district requirements with the Gunnison County OWTS Regulations and incorporate current technologies utilized for wastewater treatment system design.

B. BACKGROUND:

The current Crested Butte Watershed OWTS District requirements, written in 1996, were ahead of the times by requiring that treatment of wastewater occur before disposal. Since that time, the wastewater disposal industry has evolved and changed to the wastewater treatment industry. The recently adopted Gunnison County OWTS Regulations focus on the treatment of wastewater and advanced treatment technology has been incorporated into the current treatment system regulations. Unfortunately, designers currently proposing a system within the Crested Butte Watershed District are challenged to show compliance with the design criteria required by both the State mandated OWTS Regulations and the Crested Butte Watershed OWTS District Article because the two are not aligned in regards to specific provisions, even though they are aligned in purpose.

C. GUNNISON COUNTY OWTS REGULATIONS-TREATMENT LEVELS FOR SYSTEMS

The Gunnison County OWTS Regulations, Section 5-113 *TREATMENT LEVELS* provides a table of qualifying parameters for treatment levels by OWTS components, excluding the Soil Treatment Area. The qualifying parameters are CBOD₅, TSS, and Total Nitrogen. The five treatment levels are 1, 2, 2N, 3, 3N. All systems greater than a Treatment Level 1 require a design by a professional engineer. Depending on the soils, site specific characteristics, and whether pressure distribution is used, a Treatment Level 1 may also require a design by a professional engineer. All systems greater than a

treatment level 1 require pressure dosed distribution. Pressure dosed distribution is most commonly achieved with a pump which requires electricity. Pressure dosed distribution can sometimes be achieved with a dosing siphon which requires its own separate tank after the two compartment septic tank. Below is a list of currently available and approved systems for each of the levels of treatment and an estimated cost range associated for the system. The list of approved systems for levels of treatment may increase in the future as products are tested and verified.

System Price Range

\$: \$7,000 to 15,000

\$\$: \$15,000 to 25,000

\$\$\$: \$25,000 to 45,000

Treatment Level 1 Systems:

Effluent from a two compartment septic tank meets the standards for a Treatment Level 1. The Soil Treatment Area design has to meet the provisions of Regulations 43 and the Gunnison County OWTS Regulations. If a designer is using a Treatment Level 1, a lower Long Term Acceptance Rate is used which makes the Soil Treatment Area larger in size. The current cost typically ranges from \$7,000 to \$20,000.

Treatment Level 2 Systems (8 systems total currently available):

A Treatment Level 2 system provides significant reduction in CBOD₅ from 145mg/L (typical) to 25mg/L and a reduction in Total Suspended Solids from 80mg/L to 30mg/L from a Treatment Level 1 (septic tank effluent). Additionally, there are currently eight systems that are approved for a Treatment Level 2 and three of those system would potentially not require electricity, depending on the site specific characteristics.

Proprietary Systems (purchased from a supplier, maintenance requires a system specific certified technician):

- **Eljen Geotextile Sand Filter.** \$\$. A42 Eljen modules over 12 inches of ASTM 33 concrete sand (or better). The design must include pressure dosed distribution. Electricity would be required if pressure dosed distribution cannot be achieved by a dosing siphon.
- **Bio-Microbics, MicroFAST or RetroFAST.** \$\$. Blower unit in tank. The design must include pressure dosed distribution. Electricity is required.
- **Eliminite treatment technology.** \$\$ to \$\$\$. The eliminate wastewater treatment system is sold as a complete unit and follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.
- **Norweco Singulair.** \$\$\$. The singulair wastewater treatment system follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.
- **Orenco, Advantex.** \$\$\$. The Orenco, Advantex wastewater treatment systems follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.

Public Domain Technology Systems (can be built on-site by an installer):

- **Lined, Single-Pass Sand Filter.** \$\$. 30 mil thick PVC impervious line on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (min.) under distribution lines. Under-drain effluent collected below sand filter shall be dispersed to soil treatment area. Pressure dosed distribution is required. Electricity is required unless pressure distribution can be achieved by a dosing siphon tank.
- **Unlined, Single-Pass Sand Filter.** \$ to \$\$ depending on the site excavation work and the cost of sand. Minimum of 2 feet ASTM 33 concrete sand (or better) under distribution

lines. Pressure dosed distribution is required. Electricity is required unless pressure distribution can be achieved by a dosing siphon tank.

- **Recirculating Sand Filter.** \$\$ to \$\$\$ depending on site excavation and the cost of sand. 30 mil thick impervious liner on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (or better). Pressure dosed distribution is required. Electricity is required.

Treatment Level 2N Systems (3 systems total currently available):

A Treatment Level 2N system provides an additional 50% of Total Nitrogen reduction. However, there are currently only three available systems that have been approved for a Treatment Level 2N and they all require electricity to operate effectively.

Proprietary Systems (purchased from a supplier, maintenance requires a system specific certified technician):

- **Bio-Microbics, MicroFAST or RetroFAST.** \$\$ Blower unit in tank. The design must include pressure dosed distribution. Electricity is required.
- **Orenco, Advantex.** \$\$\$ The Orenco, Advantex wastewater treatment systems follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.

Public Domain Technology Systems (can be built on-site by an installer):

- **Recirculating Sand Filter.** \$\$ to \$\$\$ depending on site excavation and the cost of sand. 30 mil thick impervious liner on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (or better). Pressure dosed distribution is required. Electricity is required.

Treatment Level 3 Systems (3 systems total currently available):

A Treatment Level 3 system provides even more reduction in CBOD₅ to 10mg/L, a reduction in Total Suspended Solids to 10mg/L and a reduction in Total Nitrogen from 60-80mg/L (range for TL1 and TL2 systems) to 40-60mg/L. However, there are currently only three available systems that have been approved for a Treatment Level 3 and all but one, the lined single-pass sand filter, would require electricity.

Proprietary Systems (purchased from a supplier, maintenance requires a system specific certified technician):

- **Orenco, Advantex.** \$\$\$ The Orenco, Advantex wastewater treatment systems follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.

Public Domain Technology Systems (can be built on-site by an installer):

- **Lined, Single-Pass Sand Filter.** \$\$ 30 mil thick PVC impervious line on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (min.) under distribution lines. Under-drain effluent collected below sand filter shall be dispersed to soil treatment area. Pressure dosed distribution is required. Electricity is required unless pressure distribution can be achieved by a dosing siphon tank.
- **Recirculating Sand Filter.** \$\$ to \$\$\$ depending on site excavation and the cost of sand. 30 mil thick impervious liner on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (or better). Pressure dosed distribution is required. Electricity is required.

Treatment Level 3N Systems (2 systems total currently available):

The highest treatment level is Treatment Level 3N. A system must be tested and validated to treat Total Nitrogen down to below 20mg/L to be designated Treatment Level 3N. There are currently only two systems that have been designated Treatment Level 3N and both required electricity.

Proprietary Systems purchased from a supplier, maintenance requires a system specific certified technician):

- **Orenco, Advantex.** \$\$\$\$. The Orenco, Advantex wastewater treatment systems follows a septic tank in series. Pressure dosed distribution is required. Electricity is required.

Public Domain Technology Systems (can be built on-site by an installer):

- **Recirculating Sand Filter.** \$\$ to \$\$\$ depending on site excavation and the cost of sand. 30 mil thick impervious liner on sides and bottom of filter. Minimum of 2 feet ASTM 33 concrete sand (or better). Pressure dosed distribution is required. Electricity is required.

Many of the Higher Level Treatment Systems require electricity to operate. For the Irwin and surrounding area, electricity is not always readily available. Even the use of solar panels with battery storage capacity has limitations, reliability concerns, maintenance and expense. Additionally, seasonal usage requires shutdown and startup operations. The more mechanically fancy the system, the more complicated the startup procedures can be if the system is to operate effectively. For example, the Bio-Microbics system (Treatment Level 2N) requires that if the system is started up during cold weather that a temporary heat source be provided until the nitrifying bacteria can be established.

D. GUNNISON COUNTY OWTS REGULATIONS-INSPECTION AND MAINTENANCE

Article 10 of the Gunnison County OWTS Regulations requires regular maintenance and inspection for all treatment levels greater than TL1. The inspector qualifications include certification by the National Association of Wastewater Technicians in addition to training relevant to the specific system or a certification by the equipment manufacturer. The inspection and maintenance schedule is every six months for a system with mechanical parts and every 12 months for a system with no mechanical parts. Treatment systems have undergone testing to verify that, if the systems are maintained properly, they will achieve the effluent parameters associated with their designated level of treatment. Once a system is installed and operating, the focus should be on regular maintenance and inspection.

E. POSSIBLE ACTIONS BY THE GUNNISON COUNTY ENVIRONMENTAL HEALTH (EH) BOARD:

- a) The EH Board may decide to propose a revision to Article 19: CRESTED BUTTE WATERSHED OWTS DISTRICT in order to align the Article with the remainder of the Gunnison County OWTS Regulations in terms of treatment technology and terminology. Assigning a minimum treatment level requirement to systems proposed within the District and requiring a standard of maintenance and inspection that is required on all systems, new and existing, would maintain the intended higher standard of wastewater treatment within the District.
- b) The EH Board may decide to not revise Article 19: CRESTED BUTTE WATERSHED OWTS DISTRICT.
- c) The EH Board may decide to propose a revision to Article 19 that focuses on the maintenance and inspection of systems, new and existing, to help ensure that systems are functioning as intended while requiring that new systems meet the design requirements of the Gunnison County OWTS Regulations based on site and soil characteristics and conditions.
- d) The EH Board may decide that additional information and/or discussions are needed and may continue the Public Hearing.

F. STAFF RECCOMENDATION

Installing a higher level treatment system in most areas of the Crested Butte Watershed OWTS District presents challenges associated with lack of electricity, cost and seasonal access to systems for startup and shutdown procedures. Treatment Level 2 has the most available options of all the higher treatment systems (8 available). In the future, as more products are tested and validated, there will be more choices available but they will most likely still require a reliable source of electricity to operate as designed. At the September 2, 2015 EH Board meeting, staff recommended that all systems within the Crested Butte Watershed OWTS District be a minimum Treatment Level 3N. The staff recommendation has been revised, after review of the available systems for designated treatment levels and the associated system costs and operational constraints staff is recommending that either: 1. Systems within the Crested Butte Watershed OWTS District be a minimum Treatment Level 2; or 2. Systems within the Crested Butte Watershed OWTS District utilize the Gunnison County OWTS Regulations for the design of systems (minimum Treatment Level 1 depending on the soils and site). Additionally, staff recommends that the requirements for inspection and maintenance of higher level treatment systems be applied to all systems within the District, new and existing. Assigning a minimum treatment level of 1 to all systems within the Crested Butte Watershed OWTS District would allow designers to utilize all of the Gunnison County OWTS Regulations after evaluating the site and soil conditions. Depending on the soils, a higher level treatment system may be required. An example of this would be a silty Loam soil with more than 50% rock (>2mm) requires an un-lined sand filter, pressure dosed (Treatment Level 2) automatically. The inspection and maintenance program is integral to ensure that the system is treating wastewater as designed, whatever the treatment level is.

The following draft Article 19: *Crested Butte Watershed OWTS District* details the items recommended by staff with the exception of a minimum designated treatment level.

ARTICLE 19: CRESTED BUTTE WATERSHED OWTS DISTRICT

SECTION 19-101: DESIGNATION OF CRESTED BUTTE WATERSHED ON-SITE WASTEWATER TREATMENT SYSTEM DISTRICT

The Crested Butte Watershed On-site Wastewater Treatment System District ("Crested Butte Watershed OWTS District") is designated, pursuant to Article 12: *OWTS Districts*, to be the geographic area depicted on the Gunnison County "Map of the Crested Butte Watershed On-site Wastewater Treatment System District." That geographic area includes the entire "Town of Crested Butte Watershed Protection District" and the entire former townsite of Irwin. The official Gunnison County Map of The Crested Butte Watershed On-site Wastewater Treatment System District is located in the Community Development Department. A copy of the map may be obtained from the Department.

SECTION 19-102: PURPOSE OF CRESTED BUTTE WATERSHED ON-SITE WASTEWATER TREATMENT SYSTEM DISTRICT

The purpose of the Crested Butte Watershed OWTS District is the identification of a discrete geographic area in which groundwater pollution is to be systematically evaluated and sewage treatment is to be specially regulated by Gunnison County to minimize the threat of or actual pollution of surface, stream or groundwater.

SECTION 19-103: INTERPRETATION WITH OTHER PROVISIONS OF THE GUNNISON COUNTY ON-SITE WASTEWATER TREATMENT SYSTEM REGULATIONS

Whenever any provision of this Article 19 is inconsistent with any other provision of these *Regulations*, the provision imposing the more restrictive definition, requirement or standard shall apply.

SECTION 19-104: ~~DEFINITIONS~~ **NEW SYSTEMS AND REPLACEMENT SYSTEMS**

~~Whenever the following words or phrases are used in this Article 19 they shall have the following meanings:~~

~~**Conventional On-site Wastewater Treatment System.** On-site wastewater treatment system designed to collect, store, treat, neutralize, stabilize or dispose of sewage by a process that depends on or uses, wholly or partially, the treatment capability of ground soil. Examples include, without limitation, a soil treatment area system, propriety technology system, or sand filter system with septic tank.~~

A. NEW OWT SYSTEMS AND REPLACEMENT OF EXISTING OWTS SYSTEMS WITHIN THE CB WATERSHED. All proposed systems and any replacement of an existing OWTS system, including a Soil Treatment Area, within the Crested Butte Watershed OWTS District shall meet the following requirements:

1. **SITE-SPECIFIC DESIGN.** In addition to the requirements of Section 3-105: *OWTS PERMIT APPLICATION*, proposed designs within the CB Watershed OWTS District shall be a minimum treatment level of ENTER DESIGNATION HERE; and
2. **INSPECTION AND MAINTENANCE REQUIRED.** Maintenance and inspection for systems within the Crested Butte Watershed OWTS District shall be in accordance with Section 10-105: *INSPECTION AND MAINTENANCE FOR SYSTEMS THAT HAVE RECEIVED SOIL TREATMENT AREA REDUCTIONS BASED ON USE OF HIGHER TREATMENT*.
3. **PERMIT SHALL BE RENEWABLE.** The OWTS permit shall be a renewable permit in accordance with Article 11: *RENEWABLE PERMITS*.

SECTION 19-105: ~~CONSTRUCTION, INSTALLATION, ENLARGEMENT OR RELOCATIONS OF CONVENTIONAL ON-SITE WASTEWATER TREATMENT SYSTEMS PROHIBITED~~ INSPECTION AND MAINTENANCE OF EXISTING SYSTEMS

~~No person shall construct, install, enlarge the capacity of or relocate off of its current lot any conventional OWTS in the Crested Butte Watershed OWTS District.~~

A. INSPECTION AND MAINTENANCE OF EXISTING SYSTEMS. The owner(s) of real property in the Crested Butte Watershed OWTS District on which any OWTS existed as of August 15, 2014, shall cause, at the expense of the owner, such system to be inspected, on at least an annual basis by September 15 of each year. The owner of any such system shall cause to be performed, within 60 days of the inspection, at the owner's cost, all cleaning and maintenance required by the inspector. The owner of any such system shall provide to the Environmental Health Office written proof of compliance with this Section 19-105 no later than October 15th of each year.

1. QUALIFICATIONS OF THE INSPECTOR AND MAINTENANCE PROVIDER. Inspectors shall be certified by the National Association of Wastewater Technicians or an equivalent program approved by the Environmental Health Office. Inspectors shall have training relevant to the specific system or certification by the equipment manufacturer.

SECTION 19-106: ~~INSPECTION, CLEANING AND MAINTENANCE OF EXISTING ON-SITE WASTEWATER TREATMENT SYSTEMS.~~ GARBAGE DISPOSALS PROHIBITED

The installation and use of garbage disposals is prohibited within the Crested Butte Watershed OWTS District.

~~A. ANNUAL INSPECTION AND CLEANING.~~ The owner(s) of real property in the Crested Butte Watershed OWTS District on which any OWTS existed and was permitted as of August 20, 1996, shall cause, at the expense of the owner, such system to be inspected, on at least an annual basis by September 15 of each year by a County licensed system inspector to ensure proper operation of the system in accord with Article 10: *Operation and Maintenance*. Such inspection shall include the fixtures, including but not limited to sink(s), toilet(s), bathtub(s) and shower(s) which are, or may be, connected to the system. The owner of any such system shall cause to be performed, within 60 days of the inspection, at the owner's cost, all cleaning and maintenance required by the inspector. The owner of any such system must provide to the Environmental Health Office written proof of compliance with this Section 19-106 no later than October 15 of each year. Inspections required pursuant to this Section 19-106 shall commence in 1997.

~~B. NON-CONFORMING SYSTEMS TO BE BROUGHT INTO COMPLIANCE.~~ The owner(s) of real property in the Crested Butte Watershed OWTS District on which any OWTS existed but was not permitted as of August 20, 1996, shall cause, no later than August 20, 1997, such system to come into compliance with these *Regulations*, including but not limited to permitting, or cease and desist from use of such system. Thereafter, the owners shall comply with these *Regulations* including but not limited to inspection, cleaning and maintenance.

SECTION 19-107: ~~REPAIR OF EXISTING ON-SITE WASTEWATER TREATMENT SYSTEMS~~

~~Repair of a OWTS that existed in the Crested Butte Watershed OWTS District as of August 20, 1996, shall be permitted only pursuant to a Repair Permit issued pursuant to Article 4: *Emergency Use Permits and Repair Permits*; and If all the requirements for OWT systems of these *Regulations* can be met.~~

SECTION 19-108: ~~CONSTRUCTION, INSTALLATION, ENLARGEMENT OR RELOCATION OF PERMITTED ON-SITE WASTEWATER TREATMENT SYSTEMS~~

~~A. NEW, ENLARGED OR RELOCATED OWTS IN CB WATERSHED.~~ Except as set forth in Section 19-106: *Inspection, Cleaning and Maintenance of Existing OWTS* and Section 19-107: *Repair of Existing On-site Wastewater Treatment Systems*, any OWTS constructed, installed, enlarged or relocated in the Crested Butte Watershed OWTS District on or after August 20, 1996:

1. SITE-SPECIFIC DESIGN. Shall be a site specific system designed and engineered by a professional engineer licensed in the State of Colorado to meet the requirements of these *Regulations* and to ensure that none of the discharge parameters set forth in Table 19-1: *Discharge Parameters, Crested Butte OWTS District* exceeded at

any time. Written design and engineering specification must be provided to Gunnison County for review before an application can be approved. Such engineering also shall include construction, inspection, cleaning and maintenance schedules appropriate to ensure continued proper operation of the system; and

- ~~2. TREATMENT BEFORE DISCHARGE.~~ Shall collect or treat solids, and treat liquids before discharge to the environment, such that there is no discharge from the system to the environment in excess of the discharge parameters set forth in Table 19-1: *Discharge Parameters, Crested Butte OWTS District*; and
- ~~3. INSTALLATION OVERSEEN BY ENGINEER.~~ Shall be constructed, installed, enlarged or relocated under the supervision of such engineer at the cost of the applicant. The engineer shall certify in writing to the Community Development Department that such activity was in compliance with the design and engineering specifications. This supervision shall be coordinated with the Environmental Health Office. Such certification shall be a prerequisite to final approval by the County.
- ~~4. MONITORING WELL DOWN GRADIENT OF SYSTEM.~~ Shall include a monitoring well down gradient from the final component of the system. The well shall be of sufficient depth to permit periodic sampling of groundwater. Such monitoring well shall be constructed sufficiently before construction, installation, enlargement or relocation of the system to permit collection of baseline water quality data by the County at the expense of the owner. Collection of the baseline data shall be a prerequisite to final approval by the County.
- ~~5. MONITORING AT POINT OF DISCHARGE.~~ Any system that discharges to the environment shall include at least one monitoring port per system at the point of discharge from the treatment component to permit monitoring of discharge.
- ~~6. VAULT PRIVY.~~ Any vault privy constructed, installed, enlarged or relocated in the Crested Butte Watershed OWTS District after August 20, 1995, must meet the requirements of this Section 19-108 as well as all other requirements of these *Regulations*. A vault privy is prohibited in the District unless it is associated with a permitted gray water system serving the same building or structure. Except, a vault privy without an associated system may be approved only pursuant to Section 3-116: *Special Review*, during which the applicant must demonstrate that the building or structure to be served by the vault system does not have plumbing or fixture(s), e.g. sink(s), toilet(s), bathtub(s), or shower(s) which may be connected to a system.
- ~~7. PERMIT SHALL ACKNOWLEDGE LOCATION OF SYSTEM IN DISTRICT.~~ The OWTS Permit issued to any OWTS constructed, installed, enlarged or relocated in the Crested Butte Watershed OWTS District after August 20, 1996, shall be titled a Crested Butte Watershed OWTS Permit.

e-coli	less than 126 cfu/100ml.
Nitrate (NO ₃)	less than 10 mg/l.
BOD ₅	less than 30 mg/l.
Phosphate	less than 10 mg/l.
Ph	Range from 6.5 su to 8.5 su

SECTION 19-109: INSPECTION, CLEANING AND MAINTENANCE OF PERMITTED ON-SITE WASTEWATER TREATMENT SYSTEMS

- ~~A. REGULAR TESTING OF DISCHARGE SAMPLES AT OWNER'S EXPENSE.~~ The owner(s) of real property in the Crested Butte Watershed OWTS District on which any OWTS is constructed, installed, enlarged or relocated pursuant to 19-108: *Construction, Installation, Enlargement or Relocation of Permitted OWTS* shall cause, at the expense of the owner, a discharge sample from the monitoring well, and from the monitoring port if one exists, to be taken no later than July 15 and again no later than September 15 of each year by a County-approved system inspector. Samples shall be tested at the cost of the owner(s) by a Colorado certified laboratory to ensure that no discharge parameter is being exceeded. If a discharge parameter is being exceeded, a redrawing and retesting may occur if requested by the owner(s). If any of the tests performed indicate that a discharge parameter is being exceeded, the owner(s) shall cause to be performed, at the cost of the owner(s), within 15 days of mailing of written notice by the County, all cleaning, maintenance or repair required by the inspector. Discharge sampling pursuant to this Section shall commence in 1997.
- ~~B. OWNER'S RESPONSIBILITY TO ENSURE ANNUAL INSPECTION.~~ The owner(s) shall cause, at the expense of the owner(s), such system to be inspected pursuant to its engineering specifications on at least an annual basis by September 15 of each year by a County-approved system inspector to ensure proper operation of the system in accord with Article 10: *Operation and Maintenance*, and Article 19: *Crested Butte Watershed On-site Wastewater Treatment System District* of these *Regulations* and in accord with its engineering specifications. Such inspection shall include the fixtures, including but not limited to sink(s), toilet(s), bathtub(s) and shower(s) which are, or may be,

~~connected to the system. The owner(s) shall cause to be performed, within 15 days of the inspection, at the owner's cost, all cleaning and maintenance required by the inspector. Inspections pursuant to this Section 19-109 shall commence in 1997.~~

~~C. WRITTEN PROOF OF TESTING TO BE SUBMITTED TO COUNTY. The owner(s) must provide to the Environmental Health Office written proof of compliance with this Section 19-109 and all applicable engineering specifications no later than August 15 and again October 15 of each year.~~

~~SECTION 19-110: REPAIR OF PERMITTED ON-SITE WASTEWATER TREATMENT SYSTEMS~~

~~Any OWTS constructed, installed, enlarged or relocated pursuant to Section 19-108: *Construction, Installation, Enlargement or Relocation of Permitted OWTS* may be repaired only pursuant to a Repair Permit issued pursuant to Article 4: *Emergency Use Permits and Repair Permits*.~~

~~SECTION 19-111: GARBAGE DISPOSALS PROHIBITED~~

~~No OWTS constructed, installed, maintained, altered, repaired, enlarged, relocated or used in the Crested Butte Watershed OWTS District may contain a garbage disposal unit as a component.~~