AN ORDINANCE ADDING CHAPTER 13.10
ENTITLED "GREYWATER USE" TO TITLE 13
ENTITLED "WATER AND SEWER",
AMENDING SUBSECTION "J" OF SECTION 13.08.010
ENTITLED "DEFINITIONS",
ADDING SUBSECTION "P" TO SECTION 13.08.010
ENTITLED "DEFINITIONS", AND REPEALING
SECTION 13.08.100 IN ITS ENTIRETY

WHEREAS, the Mariposa County Code currently does not address
the greywater use issue in Chapter 13.08 entitled "Sewage Dispos-
al", and

WHEREAS, the Health Department has recommended modification
of current, more stringent, County Code under Chapter 13.08
entitled "Sewage Disposal", and

WHEREAS, in light of the recent adoption of Mariposa County
Well Ordinance No. 802, the need for a "Well Driller" Section in
Chapter 13.08 is inappropriate;

NOW THEREFORE, the Board of Supervisors of Mariposa County,
a political subdivision of the State of California does ordain as
follows:

SECTION I: Chapter 13.10 entitled "Greywater Use" shall be
added to Title 13 entitled "Water and Sewer". Chapter 13.10 in
its entirety is attached hereto as Exhibit "A".

SECTION II: Subsection "J" of Section 13.08.010 entitled
"Definitions" of Chapter 13.08 entitled "Sewage Disposal" shall
be amended to read in its entirety as follows:

J. "Sewage" means any and all waste substances,
liquid or solid, associated with human habitation, or
which contain or may be contaminated with human or
animal excreta or excrement, offal or any feculent
matter and includes all liquid waste from toilets,
bidets, and kitchen sinks.

SECTION III: Ordains further that Subsection "P" shall be added
to Section 13.08.010 entitled "Definitions" to read in its en-
tirety as follows:

P. "Greywater" means that wastewater from a dwelling
which does not contain human or animal excreta, offal,
or food matter and includes waste from sinks, washing
machines, and other plumbing fixtures but not toilets, bidets, and kitchen sinks.

SECTION IV: Ordains further that Section 13.08.100 entitled "Well driller---Registration" shall be repealed in its entirety.

SECTION V: This ordinance shall become effective thirty (30) days from date of final passage pursuant to California Government Code Section 25123.

Pass and adopted by the Board of Supervisors of Mariposa County this 3rd day of September, 1991 by the following vote:

AYES: Baggett, Punte, Erickson, Radanovich, Taber
NOES: None
ABSENT: None
ABSTAINED: None

GEORGE P. RADANOVICH, CHAIRMAN
Mariposa County Board of Supervisors

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY:

MARGIE WILLIAMS
Clerk of the Board

JEFFREY G. GREEN
County Counsel
CHAPTER 13.10

GREYWATER USE

Sections:

13.10.010 Definitions
13.10.020 Greywater Use Permitted
13.10.030 Standards of Greywater Use
13.10.040 Capturing and Storing Greywater
13.10.050 Prohibited Uses of Greywater
13.10.060 Alternate Disposal of Greywater
13.10.070 Revocation of Greywater Discharge Permit
13.10.080 Permit Fees

13.10.010 Definitions

For the purpose of this chapter certain words and phrases are defined and certain provisions shall be construed as herein set forth unless it shall be apparent from their context that they have a different meaning:

A. "Black water" means sewage as defined in chapter 13.08 and as defined in this chapter.

B. "Dwelling" means any housing unit constructed for the purpose of housing one or more families and includes mobile homes, trailers, etc.

C. "Greywater" means that wastewater from a dwelling which does not contain human or animal excreta, offal, or food matter and includes waste from sinks, washing machines, and other plumbing fixtures but not toilets, bidets, and kitchen sinks.

D. "Health Department" means the health department of the county.

E. "Health Officer" means the Health Officer of the County, or his dully authorized representative.
F. "Person" means any person, firm, association, organization, partnership, business, corporation or company.

G. "Septic Tank" means a watertight receptacle which receives the discharge of a drainage system or part thereof, designed and constructed so as to retain solids, digest organic matter during a period of detention, and allow the effluent to drain into an absorption system.

H. "Sewage" means any and all waste substances, liquid or solid, associated with human habitation, which contain or may be contaminated with human or animal excreta or excrement, offal or any feculent matter and includes all liquid waste from toilets, bidets, and kitchen sinks.

I. "Sewage Disposal System" means any sewer system, sewage disposal plant, septic tank, drainage system, seepage pit, chemical toilet, privy or any other facility constructed for the purpose of receiving sewage or its effluent.

13.10.020 Greywater Use Permitted. Greywater may be utilized for purposes of irrigation of plants if the owner of the building has in his possession a current valid greywater discharge permit from the County. Such a permit is revokable for noncompliance with standards of greywater use as outlined in this chapter.

13.10.030 Standards of Greywater Use.

A. Plumbing: Greywater may be captured and disposed of as allowed for under this ordinance if, at the time of installation of plumbing in the building, a dual waste water plumbing system was installed in such a way that no waste water from kitchen sinks, toilets, or bidets can, under any circumstances, intermingle with the other waste water system (greywater system). No cross connection between the two systems shall be allowed.

Alternatively, a building may be retrofitted with plumbing to allow the reuse of some greywater by directing waste water from the washing machine, sinks other than kitchen sink, bathtub, shower, or other fixture excluding toilets, bidet, and kitchen sink.
In the case of both approaches above, the Mariposa County Building Department must attest to the Health Department at the time for which the greywater discharge permit is applied, that the separate greywater plumbing system conforms to these requirements.

B. Greywater Treatment Systems. Treatment of greywater before it is applied as irrigation to plants may be accomplished in a number of ways at the discretion of the owner of the building. These may include but shall be limited to the following:

1. Direct application with no treatment.
2. Sand filtration with subsequent application.
3. Disinfection with chlorine or other substance, and subsequent application.
4. Settling and biological treatment in a buried septic tank which is not contaminated by untreated sewage (black water), with subsequent application.
5. Filtration with some method other than sand filter.
6. Some other method as purposed by the owner of the building and acceptable to the Health Department.

C. Application Methods: Greywater may be applied in irrigation of plants by any of the following methods:

1. Distribution through a drip irrigation system under the pressure of gravity alone.
2. Distribution through a drip irrigation system under pressure generated by a pump, pressure tank, or elevated holding tank.
3. Subsurface distribution by way of buried perforated pipes or leaker hose, or trenches and beds specifically designed for that purpose.
4. Episodic application into irrigating wells consisting of pipes installed vertically into the ground and filled with gravel to allow a temporary reservoir within the pipe which oozes out and is absorbed into the soil from the bottom of the pipe. This method is usually utilized for irrigating large trees.
D. The following application methods will not be allowed:

1. Spraying or sprinkling into the air.

2. Flooding of an area in such a manner that standing water accumulates for a period of time to contribute to nuisances such as odors and insect breeding.

3. Discharge to the surface which can runoff into seasonal streams, or any other geological formation which could allow the greywater to come to flow directly into surface water.

4. Application by any method within the setback distances applicable to sewage as referenced in the Rules and Regulations for private sewage systems pursuant to Chapter 13.08.

5. Application which would lead to greywater flowing onto the surface of adjacent property.

13.10.040 Capturing and Storing Greywater. Greywater may be captured in a reservoir as it leaves the building through a separate greywater plumbing system and may then be discharged to the irrigation system or be pumped to another reservoir for subsequent discharge to the irrigation system. Reservoirs in which greywater is captured and stored shall be maintained in such a way that bacterial growth will not reach levels such that nuisances including odors and insect breeding will develop, and shall be designed in such a way that accidental drowning or human contact with the water in the reservoir is prevented.

Stored greywater may be reserved for use in fire protection, but must be maintained to prevent nuisance as discussed above, and must be labeled "used water - do not drink".

13.10.050 Prohibited Uses of Greywater. The following uses of greywater shall be prohibited.

A. Drinking.

B. Bathing.

C. Used as swimming pool or wading pool water.
D. Irrigation of edible crops where the irrigating water will have routinely come into contact with the edible vegetable such as root crops. Crops where the edible portion grows on the surface of the ground and surface application methods were used. Examples of root crops are carrots and potatoes; examples of crops growing on the surface of the ground include lettuce and strawberries.

E. Discharge through a garden hose which might be inadvertently picked up by someone and either drunk or sprayed at another human being.

F. Returning the greywater to the building for utilization in any way including use in the tank of the toilet for flushing, unless specifically approved by the County Building Department.

13.10.060 **Alternate Disposal of Greywater.** The plumbing of the greywater system exterior to the house shall be such that the greywater can be immediately diverted to an approved sewage disposal system by the process of simply turning some valves. In cases of ground saturation during rainy season, revocation of the greywater discharge permit, malfunction of the greywater accumulation or distribution system, or need to work on the greywater application distribution system, the greywater should be able to be diverted into the sewage disposal system. The calculation of leachfield size for the approved sewage disposal system shall be performed in such a way that all water discharged from the building, both black water and greywater, shall be able to be accommodated by the leachfield.

13.10.070 **Revocation of Greywater Discharge Permit.** A permit to discharge greywater in Mariposa County may be revoked by the Health Department for any of the following reasons:

A. Non-compliance by the permit holder with the standards of this chapter.

B. Evidence documented by the Health Department of the failure of the greywater system.
C. Determination by the Health Department that greywater systems of the type permitted have begun to show evidence of failure or have been shown to pose public health risk where permitted and/or installed elsewhere.

D. Determination by the Health Officer that continued functioning of the greywater system poses an eminent health hazard.

13.10.080 Permit Fees. Fees for a greywater discharge permit may be set by the Board of Supervisors from time to time by ordinance.
RECOMMENDED ACTION AND JUSTIFICATION: (Policy Item: Yes X  No ___)

Recommend waive first reading and introduce Ordinance to permit use of greywater for irrigation of plants.

BACKGROUND AND HISTORY OF BOARD ACTIONS:
Current County Code prohibits disposal of greywater any way but through an approved sewage disposal system. Historically, no other use has been allowed in any County -- greywater use was discouraged by the State Department of Health, however, recent concerns for more efficient water use has modified this position.

(continued on page 3)

LIST ALTERNATIVES AND CONSEQUENCES OF NEGATIVE ACTION:
1. Do not adopt ordinance.
2. Modify ordinance and adopt.

COSTS: (X) Not Applicable
A. Budgeted current FY $_____
B. Total anticipated costs $_____
C. Required Add'l funding $_____
D. Source:

SOURCE: ( ) 4/5ths Vote Required
A. Internal transfers $_____
B. Unanticipated revenues $_____
C. Reserve for contingency $_____
D. Description:
Balance in Reserve for Contingencies, if approved: $_____

CLERK'S USE ONLY:
Res. No.: ____________________________
Ord. No.: 809
Vote - Ayes: ___ Noes: ___
Absent: ___ Abstained: ___
Approved ( ) Denied ( )
Minute Order Attached

The foregoing instrument is a correct copy of the original on file in this office.

Date: ____________________________

ATTEST: MARGIE WILLIAMS
Clerk of the Board of Supervisors
County of Mariposa, State of CA

By: Deputy

ADMINISTRATIVE OFFICER'S RECOMMENDATION:
This item on agenda as:

X Recommended
___ Not Recommended
___ For Policy Determination
___ Submitted with Comment
___ Returned for Further Action

Comment: ____________________________

A.O. Initials: _______________________

Action Form Revised 12/89
Continued

BACKGROUND AND HISTORY OF BOARD ACTIONS:

A group composed of interested citizens, an engineer, environmental health specialists and contractors helped develop this ordinance. I know of no opposition to it except for the Association of Directors of Environmental Health Specialists (Sanitarians) who remain conservative about the concept. I have discussed this with the Water Quality Control Board and with officials at D.H.S. There are no statutes of which I am aware, that prohibit such an ordinance.