



County of Yolo

ENVIRONMENTAL HEALTH POLICY AND PROCEDURE

CHAPTER 6, DIVISION 5, SECTION 3.1

Onsite Wastewater Treatment Systems (OWTS) Policy Local Agency Management Plan Responsibilities and Duties Other OWTS Policy Sections

- A. PURPOSE:** The California State Water Resources Control Board adopted the *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy) on June 19, 2012 which became effective in May 13, 2013. The OWTS Policy requires each local agency that permits OWTS (hereafter “Septic Systems”) to submit a Local Agency Management Program (LAMP) that is approved by the Regional Water Quality Control Board having jurisdiction; for Yolo County this is the Central Valley Regional Water Quality Control Board (CVRWQCB). The Yolo County LAMP includes the adopted OWTS Ordinance, OWTS Manual and related internal policies. This policy and procedure document addresses aspects of the OWTS Policy that are not addressed in the other parts of the Yolo County LAMP.
- B. FORMS REQUIRED:** None
- C. POLICY:** The following information addresses aspects of the OWTS Policy that are not addressed in the other parts of the Yolo County LAMP, and describes the Yolo County Division of Environmental Health (DEH) intentions to fulfill the requirements of each corresponding section. Each program element is presented below in the order in which it appears in the OWTS policy with the corresponding OWTS Policy section numbers.
- D. PROCEDURE:** The following describes the scope of coverage for the Yolo County LAMP and any guidelines and procedures for the fulfillment of the OWTS policy pertaining to the corresponding OWTS Policy Sections.

9.1.2 A minimum parcel size for newly created lots within the City of West Sacramento is proposed to be 1 acre minimum (gross). This was justified with the following mathematical model using a formula from “Predicting Ground-Water Nitrate-Nitrogen Impacts” (Hantzche and Finnemore 1992) .

$$A = 0.01344W(Nw-DNw-10)/R(10-Nb)$$

W = 223 gallons/day for 2.791 persons/dwelling unit per EPA (at 80 gallons/person)

Nw = 50 mg/L (as N, =221 mg/L as NO₃), total nitrogen concentrations in septic tank effluent, generally in the range of 35-45 mg/L per EPA Design Manual

D = 0, no dinitrification credit is given for the worst performance soil

R = 20.782 inches/year

Nb = 1 mg/L, background nitrate-nitrogen loading, typically falls between 0.5-1 mg/L

1: The estimated average household size in unincorporated Yolo County is 2.79, as cited in Housing Element, 2030 Countywide General Plan (HO-13);

2: The precipitation average (average annual rainfall) is 20.78 inches, as cited in Yolo County Comprehensive Economic Development Strategy (Page 3), published on 1/25/2010.

The calculated A value is 0.64 acre/dwelling.

It is estimated that 30% of the parcel will be developed with impervious surface such as the dwelling, driveway, sidewalk, street, etc. Based on this calculation a one-acre parcel size should not negatively impact the groundwater with nitrogen from the septic systems.

Based on this information the RWQCB allows the 1-acre minimum lot size within the City of West Sacramento. However, this allowance will be re-evaluated based on the water quality assessment data collected and evaluated at the first 5-year report to the CVRWQCB.

9.2.6: Adequate capacity for disposal of all septage pumped within Yolo County is available at the Yolo County Central Landfill operated by the County of Yolo Department of Planning, Public Works and Environmental Services, Integrated Waste Management Division. The Yolo County Central Landfill is located at 44090 County Road 28H, Woodland, CA. The volume of Septage pumped each year in Yolo County is variable and cannot be projected with certainty. However, for comparison the Yolo County Central Landfill has a septage wastewater capacity of 17.5 million gallons.

The amount of septic (including portable/chemical toilet waste) received over the last five years are as follows:

Year	Tons	Gallons
2015	6,714.37	1,866,251
2014	5,036.12	1,354,780
2013	4,615.82	1,241,714
2012	5,155.95	1,387,016
2011	5,242.32	1,410,251

The landfill's septic waste comes from the following counties: Primarily from: Yolo, Solano, Sacramento, San Joaquin, and Placer Rarely from: Butte, Sutter, Colusa and San Francisco

The DEH estimates there are approximately 10,000 existing septic systems in Yolo County or less. The septage volume disposed at the landfill equates to an average of 236 gallons per tank per year. The general recommendation for a tank pumping is approximately once every five years. Therefore, assuming tanks are pumped at the recommended interval, each tank in the County produces about 1,125 gallons of septage per every 5-year event. This totals approximately 225,000 gallons of septage waste from tanks in Yolo County each year and represents 1.3% percent of the Landfill's capacity to accept the septage. During the peak year of 2015 the total septage waste received equals approximately 11% of the landfill's capacity. This indicates that there is adequate capacity for septage disposal within Yolo County.

9.2.7: The requirements for the formation of responsible entities for community septic systems is provided in Section 6-19.606 (j) of the Yolo County OWTS Ordinance and Section 5 of the Manual. At this time the DEH does not anticipate assessing the financial resources, stability, legal authority, and professional qualifications for the operations of existing community septic systems. However data will be collected from existing communities that monitor water quality as

a public water system. Water quality monitoring shall meet current requirements for the operation of a public water system which includes but is not limited to coliform and nitrate.

- 9.2.8: Representatives from the CVRWQCB suggested Yolo County develop a Regional Salt and Nutrient Management Plan in areas of high-density Onsite Wastewater Treatment Systems. At this time DEH would consider developing or implementing a Regional Salt and Nutrient Management Plan with the assistance of the CVRWQCB if required to do so and with adequate funding.
- 9.2.9: Regarding coordinating with watershed management groups, DEH representatives may attend meetings of the Regional Water Authority.

Approved by:

For Leslie Lindbo
Director of Env. Health



Jianmin Huang, Supervising Enc. Health Specialist

7/14/2016

Date

Effective Date: July 14, 2016