Director

Contra Costa County

To: Board of Supervisors

From: Anna Roth, Health Services Director

Date: August 14, 2018

Subject: Introduction of Ordinance No. 2018-25, amending requirements regulating the collection and disposal of

sewage and septic systems

RECOMMENDATION(S):

INTRODUCE Ordinance No. 2018-25, amending requirements regulating the collection and disposal of sewage and septic systems, WAIVE reading, and FIX September 11, 2018, for adoption of Ordinance No. 2018-25 and related Health Officer Regulations for Sewage Collection and Disposal.

FISCAL IMPACT:

The recommended actions would have no impact on the General Fund.

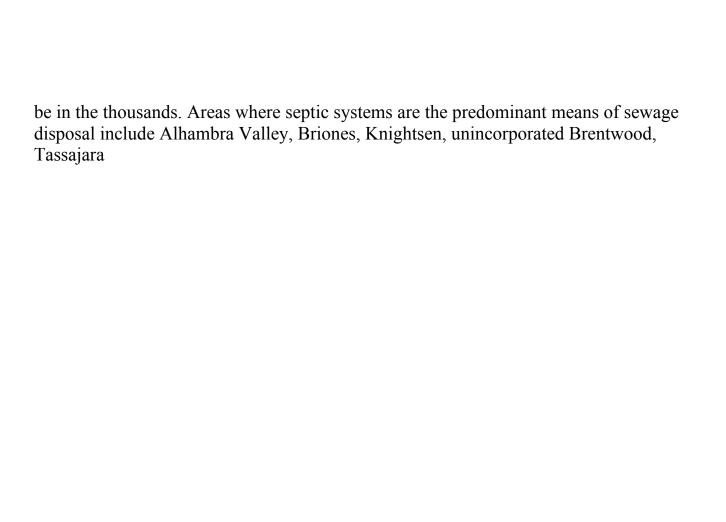
BACKGROUND:

Introduction

Residents of many unincorporated areas of Contra Costa County are not served by sanitary sewers and rely on onsite wastewater treatment systems (OWTS), commonly known as septic systems, for the disposal of sewage. A typical septic system consists of a septic tank, which removes solids, and a disposal field, where treated sewage effluent percolates into the soil. The exact number of septic systems in the County is not known but is estimated to

✓ APP	PROVE	OTHER
Action of Board On: 08/14/2018 ✓ APPROVED AS RECOMMENDED ☐ OTHER		
Clerks Notes:		
VOTE OF SUPERVISORS		
AYE:	Candace Andersen, District II Supervisor	
	Diane Burgis, District III Supervisor	I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the
	Karen Mitchoff, District IV	Board of Supervisors on the date shown.
	Supervisor	ATTESTED: August 14, 2018
	Federal D. Glover, District V Supervisor	David Twa, County Administrator and Clerk of the Board of Supervisors
ABSENT:	John Gioia, District I Supervisor	By: June McHuen, Deputy
Contact: Marilyn Underwood, 925-692-2521		

cc: Tasha Scott, Marcy Wilhelm, John Wiggins



BACKGROUND: (CONT'D)

Valley and unincorporated South County, Ayers Ranch in unincorporated Concord, and the Marsh Creek corridor east of Clayton.

Chapter 420-6 of the County Ordinance Code, which pertains to sewage collection and disposal, and the California Plumbing Code (adopted by the County and incorporated into the County's building regulations in Title 7 of the County Ordinance Code), require all structures in which plumbing fixtures are installed to be connected to either a sanitary sewer system or a septic system. Chapter 420-6 further requires that applications for building permits or certificates of occupancy for structures requiring disposal of sewage be submitted to the health officer for review and approval of the proposed sewage disposal system.

The installation or replacement of a septic system requires a permit issued by the health officer. Environmental Health Division staff, as the health officer's designee, reviews permit applications and system designs and issues permits on the basis of compliance with applicable requirements in Chapter 420-6 and regulations issued by the health officer. After a permit is issued, staff conducts construction inspections to verify that installations conform to permit requirements. Staff is also tasked with reviewing all building plans for new or remodeled structures on properties where septic systems are located to determine if proposed projects may adversely affect those systems, or areas reserved for the replacement of failing systems, and when conflicts are found, rejecting the plans and advising applicants of measures necessary to obtain approval.

In 2017, the Environmental Health Division issued 64 permits to construct, repair, or replace septic systems and received 100 applications for building plan reviews. Since 2002, the Environmental Health Division has issued nearly 900 construction permits to replace existing or construct new systems.

Chapter 420-6 and its associated health officer regulations were last amended in 2000. Since then, septic system technology and industry has evolved and new state regulatory requirements have been imposed. Proposed Ordinance No. 2018-25 ("Ordinance") and the proposed Health Officer Regulations for Sewage Collection and Disposal ("Regulations") address these changes and other issues.

New State Policy for Onsite Wastewater Treatment Systems

On September 27, 2000, then-Gov. Gray Davis signed Assembly Bill 885 into law. Assembly Bill 885 required the State Water Resources Control Board to adopt regulations or standards for the permitting and operation of onsite wastewater treatment systems. On June 19, 2012, the State Water Resources Control Board adopted the Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems ("State Policy"). The State Policy took effect on May 13, 2013.

The State Policy established statewide minimum standards for septic systems. Local agencies were given the option of either enforcing the standards in the State Policy or implementing a Local Agency Management Program ("LAMP") approved by the Regional Water Quality Control Board. Under a LAMP, local agencies may establish standards that differ from those in the State Policy provided they achieve the same purpose, which is to protect water quality and public health. This enables a local agency to address local conditions and provides the flexibility to allow different types of septic systems, thereby providing more options to property owners.

In May 2016, the County health officer submitted a LAMP, based on current Chapter 420-6 of the Ordinance Code and the current health officer regulations, to the San Francisco Regional Water Quality Control Board ("Regional Board"). At that time, Regional Board staff was informed that Chapter 420-6 and the health officer regulations were undergoing revision to address several issues, including adding setback requirements from public water systems surface water intakes and public water wells to be consistent with the State Policy. The Regional Board has not yet acted on the submitted LAMP. Upon adoption by this Board, Chapter 420-6 as amended, and the Regulations, will be submitted to the Regional Board to replace the old standards in the LAMP.

Stakeholder Review

Last year, staff notified stakeholders of pending amendments to Chapter 420-6 and new regulations and solicited comments on earlier versions of the Ordinance Regulations. Stakeholders notified included the East Bay Municipal Utility District, Contra Costa Water District, East Bay Regional Park District, the John Muir Foundation, the 19 incorporated cities in the county, Infiltrator Water Technologies (a manufacturer of OWTS components) and more than 20 septic system consultants and contractors. Several stakeholders responded with comments, all of which were considered and many of which were incorporated into the Ordinance and Regulations. The general public has also had access to earlier versions of the Ordinance and Regulations that have been available for inspection on the Environmental Health Division's website since July 2017.

SIGNIFICANT CHANGES TO CHAPTER 420-6

Determination of Sewer Availability

Under existing law, a structure that contains or will contain plumbing fixtures generally must be connected to a sanitary sewer if the sewer is considered to be "available" for connection. Sewer availability is determined based on several factors, including the size of the parcel where the structure is located and the distance between the sewer and the parcel. Depending on other factors, a sanitary sewer might be considered available if the parcel is less than 40,000 square feet in area and less than 300 horizontal feet from the sewer. But a sewer would not be considered available to structure on a parcel that is more

than 40,000 square feet in area if the structure to be served is more than 300 horizontal feet from the sewer. (Co. Ord. Code, § 420-6.115, subd. (b)(1)-(2).)

These availability standards do not take into consideration situations where a sanitary sewer is technically available by definition, but is not actually available. For example, if a sanitary sewer is within 300 feet of the property to be served, the sanitary sewer might be considered as being "available." However, in a situation where there is another parcel between the sanitary sewer and the property to be served, and the owner of the intervening parcel will not grant an easement or other legal rights necessary for installation and maintenance of a sewer lateral, the sanitary sewer would not be available as a practical matter. The current sewer availability standards in Chapter 420-6 are also in conflict with Title 7 of the Ordinance Code, which incorporates the California Plumbing Code. Under the Plumbing Code, a sewer is considered to be unavailable if it is more than 200 feet from a proposed structure or exterior drainage facility on a lot that abuts the public sewer.

The Ordinance amends the sewer availability standards so that a sanitary sewer would be deemed available to a structure if the entity operating the sewer determines that it can be connected, the sewer is located in a thoroughfare or right of way abutting the lot where the structure is located, and the sewer is within 200 feet of the structure to be served.

Lot Area

Section 420-6.505 of the County Ordinance Code requires a minimum lot size of 15,000 square feet if a structure will require a septic system for the disposal of sewage and 40,000 square feet if both a septic system and a private water supply, such as a well, are needed. But the health officer may grant a variance from the lot size requirement if the lot conforms to all other requirements of Chapter 420-6 and health officer regulations, and the variance would not create or contribute to a nuisance. The Ordinance would eliminate the minimum lot size requirement along with the provision for variances. The Ordinance would instead require the siting and installation of all septic systems in compliance with all applicable site criteria. Staff considers this a more equitable and enforceable standard.

Holding Tanks

Under Chapter 420-6, holding tanks may be used for the collection of sewage only under a variance, in very limited circumstances (i.e., the parcel is located within 50 to 1,000 feet from a drinking water reservoir or tributary stream), and only if the holding tank system is owned or operated by a public agency having statutory authority to provide such service. The Ordinance would broaden the circumstances under which the use of a holding tank might be allowed on a temporary basis to include (1) serving temporary

structures during construction projects and (2) collecting sewage when an existing septic system is improperly functioning and there is no area on the property to install a replacement system. The holding tank system would not need to be owned or operated by a public agency.

Septic Systems Near Reservoirs

Section 420-6.507, subdivision (a) of the Ordinance Code generally prohibits any septic systems on lots within the drainage area of a drinking water reservoir, and requires connection to a community sewer system instead if a sanitary sewer is not available. However, there are two provisions that allow the health officer to grant variances from this requirement. If the lot is between 50 and 1,000 feet from the reservoir or tributary stream, the health officer may allow use of a holding tank owned by an authorized public agency (Ord. Code, § 420-507(b)(1). The second provision states: "Beyond one thousand feet from a reservoir or tributary stream an individual system or other similar acceptable system may be permitted . . ." (Ord. Code, § 420-6.507, subd. (b)2).)

The latter provision has been a source of confusion and differing interpretations over the years. The Ordinance would eliminate both of the above provisions. In their place would be a setback standard in the amended health officer regulations, requiring septic systems to be located at least 1,000 feet away from a reservoir or tributary stream.

Alternative Septic Systems

An alternative septic system is a septic system that provides supplemental treatment of the sewage effluent, removing additional solids, bacteria, and nitrogen from the effluent before it is discharged to a disposal field. Chapter 420-6 allows the use of alternative systems and requires a separate operating permit; however, the permit requirement has proven to be challenging to enforce with respect to existing systems.

The Ordinance cites specific circumstances when an alternative septic system will be required, and does not require an annual operating permit. In lieu of an operating permit, the owner of an alternative septic system will be required to monitor the operation of the system and submit periodic reports to the health officer. If the owner of the alternative septic system fails to submit the required reports, the system may not be lawfully used and the owner may be subject to administrative fines.

Other

While the Ordinance deals primarily with sewers and septic systems, it also addresses various forms of sewage collection. In addition to temporary holding tanks, the Ordinance sets standards for septic tank and chemical toilet cleaners and the equipment they use, as well as standards for vault privies, which are typically used by park districts in remote areas in lieu of using portable toilets. The Ordinance also contains new requirements with regard to the abandonment of sewage disposal and sewage collection

systems in specified circumstances.

SIGNIFICANT CHANGES TO THE HEALTH OFFICER REGULATIONS

The proposed Regulations repeal the previous health officer regulations in their entirety. The bulk of the proposed Regulations deals with technical standards applicable to different types of septic systems. The proposed Regulations also set forth standards and specifications for the siting and construction of septic systems, the monitoring of alternative septic systems, the review of building permit applications and subdivision maps, the design, installation and use of sewage collection systems, the abandonment of sewage disposal systems and sewage collection systems, and septic tank-chemical toilet cleaners.

Moratorium Areas

From 1964 to 1977, the health officer submitted memoranda to the Board and others, decreeing that the Health Services Department would no longer accept applications for approval of septic systems in six areas of the county. These areas, which are referenced and depicted in the current County General Plan, included the service area of the former San Pablo Sanitary District (North Richmond, East Richmond Heights and El Sobrante), the Rodeo Creek watershed drainage area, the unincorporated area of Canyon, the area served by Sanitation District 15 on Bethel Island, the Muir Oaks-Vine Hill Way area of Martinez, and the El Toyonal area of Orinda.

The so-called septic system moratorium areas were established for various reasons, including poor soil conditions, other restrictive conditions such as steep slopes and hills, and the proximity of areas to reservoirs. It is not entirely clear what standards were being applied in the evaluation of areas for installation of septic systems when the moratorium areas were established. Owners of residences in moratorium areas are prohibited from building residential additions that increase occupancy, installing gray water systems, or installing swimming pools without an approved means to dispose of the water. Consistent with these moratoria, the current health officer regulations prohibit the acceptance of applications for new septic systems.

In the course of considering amendments to the health officer regulations adopted in 2000, staff evaluated the need to retain the septic system moratorium areas and determined that they were no longer necessary, and that new site and soil criteria and testing standards would be sufficient to protect water quality and public health. These site and soil criteria and testing standards are set forth in the proposed Regulations. References to the moratorium areas were removed.

This change does not mean that the installation of septic systems in these areas will necessarily be permitted, given the prevalence of restrictive site conditions in these areas that prompted the establishment of the moratorium areas in the first place. But the change will allow for the submission of applications for permits to build septic systems in these

areas. The applications would be reviewed on a case by case basis to see if the required site and soils criteria and other standards in in the Ordinance Code and health officer regulations can be met.

Upon adoption of the Ordinance and Regulations, the health officer will rescind the six moratorium areas. Staff will also recommend removal of mention of the moratorium areas from the County General Plan following their rescission by the health officer.

Additions and Remodels

Additions and remodels on properties with septic systems are currently categorized into four types, each of which may require an upgrade to one of two classifications of systems depending on the type of remodel (bedroom addition, non-bedroom addition, remodels with no addition, detached non-living or non-habitable addition). The Proposed Regulations would eliminate the categorization of additions and remodels and the requirement to upgrade an existing system, provided that it is an approved system that is functioning properly and can accommodate the projected sewage flow from the existing structure as well as the addition or remodel.

CONSEQUENCE OF NEGATIVE ACTION:

The proposed ordinance and related health officer regulations would not be adopted.

ATTACHMENTS

Ordinance No. 2018-25 Redline of Chapter 420-6 HO Sewage Regs