

Yolo County LAMP Completeness Checklist

LAMP Part 1: Draft Ordinance
LAMP Part 2: Technical Manual
LAMP Part 3: Policies and Procedures

2/2/2016 Received comments from Eric Rapport
 2/17/2016 Discussed comments with Eric Rapport and his staff at a meeting
 2/23/2016 Updated the Completeness Checklist
 4/13/2016 Updated the Completeness Checklist

GENERAL REQUIREMENTS FOR LAMPs							
OWTS Policy Section	OWTS Policy Section Summary	Region 5 Comments (These do not replace your review of OWTS Policy. Italics and websites are specific explanations, more detailed than in the Policy.)	Relevant LAMP Section	Legal Authority/ Code Section	Deficiency; Address Prior to Our Scheduling for Board Approval.	Potential Concern; Address in First Water Quality Assessment Report.	Yolo County Response 2/17/2016
3.3	Annual Reporting ¹	For Section 3.3 et seq, describe your program for annual reporting to Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff in a tabular spreadsheet format.	LAMP Part 1: YCC, Chapter 19, Page 38 LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Annual reporting section	YCC 6-19.1401			
3.3.1	Complaints	Include numbers and locations of complaints, related investigations, and means of resolution.	LAMP Part 1: YCC, Chapter 19, Page 39 LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Annual reporting section	YCC 6-19.1402			
3.3.2	OWTS Cleaning	Include applications and registrations issued as part of the local cleaning registration pursuant to California Health and Safety Code §117400 et seq.	LAMP Part 1: YCC, Chapter 19, Page 33, 38. LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Annual reporting section	YCC 6-19.1001 YCC 6-19.1401			
3.3.3	Permits for New and Replacement OWTS	Include numbers and locations of permits for new and replacement OWTS, and their Tiers.	LAMP Part 1: YCC, Chapter 19, Page 38 LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Annual Reporting section	YCC 6-19.1401			
3.4	Permanent Records	Describe your program for permanently retaining records, and means of making them available to Central Valley Water Board staff within 10 working days of a written request.	LAMP Part 1: YCC, Chapter 19, Page 39 LAMP Part 3: D Policy and Procedure 6-2-2.3: Data Collection and Reporting; Permanent Records section	YCC 6-19.1402			
3.5	Notifications to Municipal Water Suppliers	Describe your program for notifying public well and water intake owners, and the State Board Division of Drinking Water Programs. Notification shall be as soon as practicable, but no later than 72 hours upon discovery of a failing OWTS, as described in Sections 11.1 and 11.2, within setbacks described in Sections 7.5.6 through 7.5.10.	LAMP Part 1: YCC, Chapter 19, Page 28 LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Water Quality Data section	YCC 6-19.616			

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9.0	Minimum OWTS Standards	This Section is an introduction; we require no specific LAMP Section citation here.		N/A			
9.1	Considerations for LAMPs	For Section 9.1 et seq., provide your commitment to evaluate complaints, variances, failures, and inspections in Section 9.3.2 (Water Quality Assessment); and your proposed means of assessment to achieve this Policy's purpose of protecting water quality and human health.	LAMP Part 1: YCC Chapter 19, pages 2, 18, and 39. LAMP Part 2 Manual: Section 2, Page 14. Section 12, Page 103. Section 14, Page 105. LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Water Quality Data section	YCC 6-19.2, 6-19.5, 6-19.15		As part of the Water Quality Assessment Report, a Qualified Professional should compile appropriate data from sources including, but not limited to, Geotracker GAMA-secure, small community water systems, and monitoring wells from permitted facilities and other programs, and water quality testing at time of well construction (Part 3, Water Quality Data)	Draft Policy and Procedure 6-2-2.3 has been updated to include data from GAMA
9.1.1	Degree of vulnerability due to local hydrogeology	<i>Describe your commitment, and proposed means to identify hydrogeologically vulnerable areas for Section 9.3.2, after compiling monitoring data. Discuss appropriate related siting restrictions and design criteria to protect water quality and public health. Qualified professionals ("Definitions," page 9 in the Policy) should identify hydrogeologically vulnerable areas. Such professionals, where appropriate during a Water Quality Assessment, should generally consider locally reasonable percolation rates of least permeable relevant soil horizons, best available evidence of seasonally shallowest groundwater (including, but not limited to, soil mottling and gleying, static water levels of nearby wells and springs, and local drainage patterns), threats to receptors (supply wells and surface water), and potential geotechnical issues (including, but not limited to, potentially adverse dips of bedding, foliations, and fractures in bedrock).</i>	LAMP Part 1: YCC Chapter 19, Pages 13, 18, 22-25. LAMP Part 2 Manual: Section 2, Page 14. Section 3, Page 28. Section 3C, Page 29. Section 3D, Page 31. Section 3K, Page 35. Table 3-1, Page 29 and Table 5-2, Page 47. LAMP Part 3: Policy and Procedure 6-2-2.3: Data Collection and Reporting; Water Quality Data section	YCC 8-19.454, 6-19.5, 6-19.605, 6-19.606	Part 2, Yolo County Draft Manual, C Site Assessment of Surface Features and Setbacks, page 14, gives discretion for a Site Assessment (plot plan and work description) in lieu of a full Site Evaluation when DEH determines either that the applicant (otherwise) meets minimum requirements of the manual, or adequate 'geographic or historical data' exists. The manual does not specify means of determination. A Qualified Professional should support DEH with its determination. Support should at minimum include, but is not limited to, evidence for shallowest seasonal groundwater and long term acceptance rates of effluent. We can potentially consider information from applicants' local building permit application.		<i>The sentence that allowed site assessment to replace a site evaluation under some circumstance has been deleted, See Manual Page 14.</i>

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9.1.2	High quality waters and other environmental conditions requiring enhanced protection	Describe special restrictions to meet water quality and public health goals pursuant to all Federal, State, and local plans and orders. Especially consider appropriate alternatives to those provided in Section 7.8, Allowable Average Density Requirements under Tier 1. See also: State Water Resources Control Board Resolution No. 68-16.	LAMP Part 1: YCC Chapter 19, Pages 6, 16, 18, 27, 30, 36, 37 and 38. LAMP Part 2 Manual: Section 2, Page 14 and 23. Table 3-1, Page 29 and Table 5-2, Page 47.	YCC 6-19.415, , 6-19.472, 6-19.5, 6-19.611, 6-19.622, 6-19.1101 (g), 6-19.1101 (h), 6-19.1301		YCC 6-19.1101(g) allows newly created lots in West Sacramento of 1 acre. Based on informal discussions with DEH staff, average annual rainfall for Yolo County is 23 inches/year. Therefore, OWTS Policy, Section 7.8, Table 1, would allow an average density of 1.5 acres/single family dwelling unit.	See updated changes to Draft Ordinance Section 6-19.1101 (g) and updated Draft Policy and Procedure 6-5-3.1
9.1.3	Shallow soils requiring non-standard dispersal systems	<i>We interpret "shallow" soils generally to mean thin soils overlying bedrock or highest seasonal groundwater. Dependent on threats to receptors, highest seasonal groundwater can locally include perched and intermittent saturated zones, as well as the shallowest local hydraulically unconfined aquifer unit. See Section 8.1.5 for Minimum Depths to Groundwater under Tier 1. Qualified professionals should make appropriate determinations on the design and construction of non-standard dispersal systems due to shallow soils.</i>	LAMP Part 1: YCC Chapter 19, Pages 13, 18, 22, 23 and 26. LAMP Part 2 Manual: Section 2, Page 14. Section 3C: Page 29. Section 3D, Page 31. Section 3k, Page 35. Section 5, Page 46. Table 5-2, Page 47.	YCC 6-19.454, 6-19.6, 6-19.605, 6-19.606, 6-19.610(o)			
9.1.4	High domestic well usage areas	<i>Our key potential concerns are nitrate and pathogen transport toward receptor wells, especially in areas with existing OWTS already prone to soft failures (OWTS failures not evident at grade). Appropriate qualified professionals should consider reasonable pollutant flow paths toward domestic wells, at minimum based on; publically available nitrate concentrations in local wells, published technical literature on local wastewater and non-wastewater nitrate sources, well constructions, pumping demands, and vulnerability of wells due to local hydrogeology. For pathogens, qualified professionals should ensure that field methods are sufficient to mitigate the potential for false positives.</i>	LAMP Part 1: YCC Chapter 19, Page 6, 13, 16, 18, 27, 30, 36, 37, 38 LAMP Part 2 Manual: Section 2, Page 14. Section 2N, Page 23. Table 3-1, Page 29 and Table 5-2, Page 47.	YCC 6-19.415, 6-19.454, 6-19.472, 6-19.5, 6-19.611, 6-19.622, 6-19.1101 (g), 6-19.1101 (h), 6-19.1301			
9.1.5	Fractured bedrock	<i>Where warranted, appropriate qualified professionals should assess permeability trends of water-bearing fractures, and related potential pathways of effluent toward receptors, including but not limited to, domestic wells and surface water. The professionals should also consider potential geotechnical issues. We suggest consideration of fractured bedrock in concert with percolation rates of overlying soils; either very high or low percolation rates might warrant siting restrictions or non- standard dispersal systems. See also State Water Resources Control Board Order WQ 2014-0153-DWQ, Attachment 1, page 1-3, Item A-3.</i>	LAMP Part 1: YCC Chapter 19, Pages 13, 18, 22, 23, 26, 27. LAMP Part 2 Manual: Section 2, Page 14. Section 3C, Page 29. Section 3D, Page 31. Section 3K, Page 35. Table 5-2, Page 47.	YCC 6-19.454, 6-19.5, 6-19.605, 6-19.606, 6-19.610(o) and 6-19.612,			

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9.1.6	Poorly drained soils	<i>Appropriate qualified professionals should give criteria for determination of representative percolation rates, including but not limited to, general site evaluation, trench logging, pre-soak and measurement methods of percolation tests, and acceptable alternatives for percolation tests.</i>	LAMP Part 1: YCC Chapter 19, Pages 13, 18, 22, 23, 27. LAMP Part 2 Manual: Section 2, Page 14.	YCC 6-19.454, 6-19.6, 6-19.605, 6-19.606 and 6-19.612			
9.1.7	Vulnerable surface water	<i>Our key potential concern is eutrophication of fresh surface water. While typically with relatively low mobility in groundwater and recently informally banned in dishwater detergents, phosphate is a common cause. At minimum, describe appropriate qualified professionals who will consider potential pathways of wastewater-sourced phosphate and other nutrients toward potentially threatened nearby surface bodies.</i>	LAMP Part 1: YCC Chapter 19, Pages 13, 15, 27. LAMP Part 2 Manual: Section 2, Page 14.	YCC 6-19.454, 6-463, 6-19.611			
9.1.8	Impaired water bodies	<i>Wolf Creek, Nevada County, and Woods Creek, Tuolumne County will require Tier 3 Advanced Protection Management Programs. This applies to Nevada, Placer, and Tuolumne Counties. See Attachment 2 of the OWTS Policy.</i>	No impaired water bodies were identified in Yolo county LAMP Part 2 Manual: Section 13, Page 105.	YCC 6-19.5			
9.1.9	High OWTS density areas	<i>Where nitrate is an identified chronic issue, at minimum, consider nitrogen loading per area; for example, see Hantzsche and Finnemore (1992), Crites and Tchobanoglous (1998), and more recent publications as appropriate.</i>	LAMP Part 1: YCC Chapter 19, Page 6, 16, 18, 27, 30, 36, 37, 38. LAMP Part 2 Manual: Section 2, Page 14. Section 2N, Page 23. Table 3-1, Page 29 and Table 5-2, Page 47.	YCC 6-19.415, 6-19.472, 6-19.5, 6-19.611, 6-19.622, 6-19.1101 (g), 6-19.1101 (h), 6-19.1301			
9.1.10	Limits to parcel size	At minimum, consider hydraulic mounding, nitrate and pathogen loading, and sufficiency of potential replacement areas.	LAMP Part 1: YCC Chapter 19, Pages 36, 37.	YCC 6-19.1101 (g) and 6-19.1101 (h)			
9.1.11	Areas with OWTS that predate adopted standards	This refers to areas with known, multiple existing OWTS.	LAMP Part 1: YCC Chapter 19, Pages 3, 13, 30	YCC 6-19.301 (b), 6-19.301 (c), 6-19.454 (c), 6-19.620, 6-19.623.			
9.1.12	Areas with OWTS either within prescriptive, Tier 1 setbacks, or within setbacks that a Local Agency finds appropriate	This refers to areas with known, multiple existing OWTS.	LAMP Part 1: YCC Chapter 19, Pages 3, 12, 27, 29, 30	YCC 6-19.301 (b), 6-19.301 (c), 6-19.454 (c), 6-19.611, 6-19.620, 6-19.623,			

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9.2	Scope of Coverage:	For Section 9.2 et seq, provide details on scope of coverage, for example maximum authorized projected flows, allowable system types, and their related requirements for site evaluation, siting, and design and construction requirements.	LAMP Part 1: YCC Chapter 19, Pages, 4 and 19. LAMP Part 2 Manual: Introduction, Page 7. Section 2, Page 14. Section 3, Page 28. Section 3E, Page 31. Section 5, Page 46. Section 6, Page 84.	YCC 6-19.301 (i), 6-19.602 (a)	Manual Introduction, page 7, and YCC 6-19.301 (i) and 6-19.602(a) subject applicants for new and replacement OWTS with projected flows >5,000 gpd to Central Valley Regional Water Quality Control Board WDRs. OWTS Policy Section 9.4.2 allows new and replacement OWTS <10,000 gpd. We find local codes excessively burdensome to applicants; under WDRs they would likely incur higher fees and much longer permit processing times than under local oversight. See also, previous comment, OWTS Policy Section 9.1.1 regarding Site Assessments in lieu of Site Evaluations.		The applicability has been increased to include systems with domestic wastewater flow up to 10,000 gallons. See Ordinance pages 4 and 20. See Manual pages 7, 31.
9.2.1	Installation and Inspection Permits	Permits generally cover procedures for inspections, maintenance and repair of OWTS, including assurances that such work on failing systems is under permit; see Tier 4.	LAMP Part 1: YCC Chapter 19, Pages 18, 20, 25, 27, 28, LAMP Part 2 Manual: Section 1, page 9. Section 4, Page 36. Section 5, Page 46. Section 10, Page 95.	YCC 6-19.5, 6-19.604, 6-19.610 (a), 6-19.613, 6-19.615			
9.2.2	Special Provision Areas and Requirements near Impaired Water Bodies	<i>Wolf Creek, Nevada County, and Woods Creek, Tuolumne County will require Tier 3 Advanced Protection Management Programs. This applies to Nevada, Placer, and Tuolumne Counties. See Attachment 2 of the OWTS Policy.</i>	No impaired water bodies were identified in Yolo County LAMP Part 1: YCC Chapter 19, Page 18. LAMP Part 2 Manual: Section 13, page 105.	YCC 6-19.5			
9.2.3	LAMP Variance Procedures	Variances for new installations and repairs should be in substantial conformance to the Policy, to the greatest extent practicable. Variances cannot authorize prohibited items in Section 9.4.	LAMP Part 1: YCC Chapter 19, Pages 18, 19, 27. LAMP Part 2 Manual: Section 2, Page 14. Table 2-1, Page 15 (see Footnote on Page 16). Section 14, Page 105.	YCC 6-19.501, 6-19.601 (g), 6-19.611			

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9.2.4	Qualifications for Persons who Work on OWTS	Qualifications generally cover requirements for education, training, and licensing. <i>We suggest that Local Agencies review information available from the California Onsite Water Association (COWA).</i> see: http://www.cowa.org/	LAMP Part 1: YCC Chapter 19, Pages 6, 13, 15, 14, 16, 20, 31	YCC 6-19.414, 6-19.453, 6-19.454, 6-19.461, 6-19.474, 6-19.603, 6-19.702			
9.2.5	Education and Outreach for OWTS Owners	Education and Outreach generally supports owners on locating, operating, and maintaining OWTS. At minimum, ensure that you will require OWTS designers and installers to provide owners with sufficient information to address critical maintenance, repairs, and parts replacements within 48 hours of failure; <i>see also Tier 4.</i> Also, provide information to appropriate volunteer groups. <i>At minimum, we suggest providing this information on your webpage.</i>	LAMP Part 1: YCC Chapter 19, Pages 18, 24. LAMP Part 2 Manual: Section 10, Page 95.	YCC 6-19.5, 6-19.606 (h)	OWTS Policy Section 9.2.5 in part requires system designers and installers to provide owners with a document of procedures to ensure maintenance, repair, or replacement of critical items within 48 hours following failure. We suggest providing relevant information on your website.		Homeowner Septic System Maintenance Manual is available on our Website, see the link below. http://www.yolocounty.org/community-services/environmental-health-services/land-environmental-protection/onsite-wastewater-treatment . On the same a page there is guidance for emergency repairs, contact information and sewage spill clean-up.
9.2.6	Septage Disposal	Assess existing and proposed disposal locations, and their adequacy.	LAMP Part 1: YCC Chapter 19, Page 33.	YCC 6-19.10	OWTS Policy Section 9.2.6 in part requires an assessment of existing and proposed disposal locations - whether or not adequate capacity is available.		See updated Draft Policy and Procedure 6-5-3.1
9.2.7	Maintenance Districts and Zones	<i>These generally refer to Homeowners Associations, special maintenance districts, and similar responsible entities. Requirements for responsible entities should generally reflect the Local Agency's judgment on minimum sizes of subdivisions that could potentially cause environmental impacts. LAMPs should ensure that responsible entities have the financial resources, stability, legal authority, and professional qualifications to operate community OWTS.</i>	LAMP Part 1: YCC Chapter 19, Pages 6, 18, 24, 30 LAMP Part 2 Manual: Section 2, Page 14. Section 2N, Page 23. Section 5L4 and 5L7, Page 83.	YCC 6-19.415, 6-19.5, 6-19.606 (j), 6-19.622		Does Yolo County have specific current Maintenance Districts and Zones (e.g., HOAs) that monitor water quality?	See updated Draft Policy and Procedure 6-5-3.1

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9.2.8	Regional Salt and Nutrient Management Plans	Consider development and implementation of, or coordination with, Regional Salt and Nutrient Management Plans; <i>see also State Board Resolution 2009-0011:</i> http://www.waterboards.ca.gov/centralvalley/water_issues/salinity/laws_regs_policies/rw_policy_implementation_mem.pdf	N/A	Yolo County does not anticipate developing or implementing a Regional Salt and Nutrient Management Plan.		Pending results of Water Quality Assessment Reports, Central Valley Water Board staff may request a Regional Salt and Nutrient Management Plan. For annual reports, we will at minimum need compilations of electrical conductivity and nitrate data from all sources.	See updated Draft Policy and Procedure 6-5-3.1
9.2.9	Watershed Management Groups	Coordinate <i>with volunteer well monitoring programs</i> and similar watershed management groups.	Draft Policy and Procedure 6-5-3.1	Draft Policy and Procedure 6-5-3.1		Do regulated small water systems serve as local watershed management groups, or does Yolo County have volunteer programs?	See updated Draft Policy and Procedure 6-5-3.1
9.2.10	Proximity of Collection Systems to New or Replacement OWTS	Evaluate proximity of sewer systems to new and replacement OWTS. <i>See also Section 9.4.9.</i>	LAMP Part 1: YCC Chapter 19, Page 37.	YCC 6-19.12			
9.2.11	Public Water System Notification prior to permitting OWTS Installation or Repairs	Give your notification procedures to inform public water services of pending OWTS installations and repairs within prescribed setback distances.	LAMP Part 1: YCC Chapter 19, Pages 28.	YCC 6-19.616 and 6-19.617.	YCC 6-19.616(c) provides that DEH would notify the Central Valley Water Board if it cannot identify a Public Water System Owner. DEH should instead notify the State Water Resources Control Board Division of Drinking Water (DDW). DEH should check with DDW on any Public Water Systems for which it currently has no contact information.	OWTS Policy Section 7.5.6 gives Tier 1 standards for setbacks from public wells as 150 feet, only if effluent dispersal systems are <10 feet deep. Does Yolo County have any existing OWTS near public wells with deeper dispersal systems?	DEH will notify the State Water Resources Control Board, Division of Drinking Water if it cannot locate the PWS owner. See Ordinance Page 30.
9.2.12	Policies for Dispersal Areas within Setbacks of Public Wells and Surface Water Intakes	Discuss supplemental treatments; see Sections 10.9 and 10.10. A Local Agency can propose alternate criteria; <i>however we will need rationale in detail.</i>	LAMP Part 1: YCC Chapter 19, Page 27. LAMP Part 2 Manual: Section 2, Page 15.	YCC 6-10.611		Does Yolo County have any existing OWTS within 150 feet?	No, there are two public water systems using surface water. One is called Canyon Creek Resort drawing water from putah creek in Winters. The septic system is at least 300' from the intake. Another surface water system is currently being built by Woodland/Davis Clean Water Agency to draw water from Sacramento river.

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9.2.13	Cesspool Discontinuance and Phase-Out	Provide plans and schedule.	LAMP Part 1: YCC Chapter 19, Pages 12, 29, 31. LAMP Part 2 Manual: Section 3, Page 28. Section 14, Page 106.	YCC 6-19.450(c), 6-19.620, 6-19.623 (e)			
9.3	Minimum Local Agency Management Responsibilities:	For Section 9.3 et seq, discuss minimum responsibilities for LAMP management. Responsibilities should generally cover data compilation, water quality assessment, follow-up on issues, and reporting to the Central Valley Water Board:	See below	See below			
9.3.1	Permit Records, OWTS with Variances	Describe your records maintenance; numbers, locations, and descriptions of permits where you have granted variances.	LAMP Part 1, YCC Chapter 19, Pages 18, 19. LAMP Part 2 Manual: Section 14, Page 105.	YCC 6-19.5, 6-19.601 (g)	Provide further details on records maintenance. Cite Part 3, add detail as appropriate.		See updated Draft Policy and Procedure 6-5-32.3
9.3.2	Water Quality Assessment Program:	In the Water Quality Assessment Program, generally focus on areas with characteristics covered in Section 9.1. Include monitoring and analysis of water quality data, complaints, variances, failures, and inspections. Also include appropriate monitoring for nitrate and pathogens; you can use information from other programs. <i>We are available to provide further guidance on reporting requirements. In the interim, to assist with analyses and evaluation reports (Section 9.3.3), we suggest posting data on appropriate maps; for example consider the following links:</i> http://www.nrcs.usda.gov/wps/portal/nrcs/site/ca/home/ http://www.cdpr.ca.gov/docs/emon/qmndwtr/qwpa_maps.htm http://ngmdb.usgs.gov/maps/mapview/ http://www.conservation.ca.gov/cqs/information/publications/ms/Documents/MS58.pdf http://www.water.ca.gov/groundwater/data_and_monitoring/northern_region/GroundwaterLevel/SacValGWContours/100t400_Wells_Spring-2013.pdf http://www.water.ca.gov/waterdatalibrary/ http://www.waterboards.ca.gov/gama/docs/hva_map_table.pdf http://geotracker.waterboards.ca.gov/gama/ http://msc.fema.gov/portal	LAMP Part 1: YCC Chapter 19, Page 18, 39. LAMP Part 2 Manual: Section 10, Pages 101. LAMP Part 3: Policy and Procedure 6-5-2.3.	YCC 6-19.5, 6-19.1402	Provide further details on records maintenance. Cite Part 3, add detail as appropriate.	As part of the Water Quality Assessment Report, a Qualified Professional should compile appropriate data from sources including, but not limited to, Geotracker GAMA-secure, small community water systems, and monitoring wells from permitted facilities and other programs, and water quality testing at time of well construction (Part 3, Water Quality Data)	See updated Draft Policy and Procedure 6-5-2.3

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9.3.2.1	Domestic Well Sampling	<i>Apply your best professional judgment to ensure that well sampling focuses on hydrogeologically reasonable pollutant (primarily nitrate) flow paths. A qualified professional should generally design an appropriate directed, judgmental, sample (i.e., statistically non-random). Of the links provided, the Geotracker GAMA website might be particularly useful to the professional; at minimum we suggest reviews of available nitrate data in relevant domestic wells, up-gradient, within, and down-gradient of an area of interest. For some instances, for example where a developer proposes a relatively large project, a Local Agency might require a special study to distinguish between wastewater and non-wastewater sourced nitrate. In such cases, we suggest your consideration of requiring focused sampling and analyses, for example of $\delta^{18}O$ and $\delta^{15}N$ of nitrate (Megan Young, USGS, 2014 pers comm), and the artificial sweeteners sucralose and acesulfame-K (Buerge et al 2009, Van Stempvoort et al 2011, and more recent publications as they become available).</i>	LAMP Part 3: Policy and Procedure 6-5-2.3.	N/A			
9.3.2.2	Domestic Well Sampling, Routine Real Estate Transfer Related	This applies only if those samples are routinely performed and reported.	N/A	N/A			
9.3.2.3	Water Quality of Public Water Systems	Reviews can be by you or another municipality.	LAMP Part 3: Policy and Procedure 6-5-2.3.	N/A			
9.3.2.4	Domestic Well Sampling, New Well Development	This applies if those data are reported.	LAMP Part 3: Policy and Procedure 6-5-2.3.	N/A			
9.3.2.5	Beach Water Quality Sampling, H&S Code §115885	<i>Public beaches include those on freshwater.</i>	N/A	N/A			
9.3.2.6	Receiving Water Sampling Related to NPDES Permits	This refers to existing data from other monitoring programs.	N/A	N/A			
9.3.2.7	Data contained in California Water Quality Assessment Database	This refers to existing data from other monitoring programs.	N/A	N/A			

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9.3.2.8	Groundwater Sampling Related to Waste Discharge Requirements	This refers to existing data from other monitoring programs.	N/A	N/A			
9.3.2.9	Groundwater Sampling Related to GAMA Program	This refers to existing data from other monitoring programs.	N/A	N/A			
9.3.3	Annual Status Reports Covering 9.3.1-9.3.2	Reports are due 1 February, annually beginning one year after Regional Board approves LAMP. Every fifth year also include an evaluation report. Submit all groundwater monitoring data in Electronic Delivery Format (EDF) for Geotracker; submit all surface water data to CEDEN.	LAMP Part 3: Policy and Procedure 6-5-2.3.	N/A			
9.4	Not Allowed or Authorized in LAMP:	For Section 9.4 et seq, ensure that your LAMP covers prohibitions.	LAMP Part 1: YCC Chapter 19, Page 25.	YCC 6-19.610			
9.4.1	Cesspools	Local Agencies cannot authorize cesspools of any kind or size.	LAMP Part 1: YCC Chapter 19, Pages 12, 29, 31. LAMP Part 2 Manual: Section 3, Page 28. Section 14, Page 106.	YCC 6-19.450 (c), 6-19.620, 6-19.623 (e)			
9.4.2	Projected Flow > 10,000 gpd	<i>Apply professional judgment to further limit projected flows.</i>	LAMP Part 1: YCC Chapter 19, Pages 4, 19. LAMP Part 2 Manual: Introduction, Page 7, Section 3 Page 31 (3E).	YCC 6-19.301 (i), 6-19.602 (a)	Manual Introduction, page 7, YCC Section 6-19.301 (i) and 6-19.602 apply to OWTS < 5,000 gpd design flow. OWTS Policy Section 9.4.2 allows OWTS < 10,000 gpd. These system should remain under Local Agency jurisdiction. Regional Board WDRs of systems 5,000 to 10,000 gpd would burden the applicant with likely increased fees and permit processing times, relative to a Yolo County permit.	The applicability has been increased to include systems with domestic wastewater flow up to 10,000 gallons. See Ordinance pages 4 and 20. See Manual Pages 7, 31.	
9.4.3	Effluent Discharger Above Post-Installation Ground Surface	For example, Local Agencies cannot authorize effluent disposal using sprinklers, exposed drip lines, free-surface wetlands, and ponds.	LAMP Part 1: YCC Chapter 19, Page 26.	YCC 6-19.610 (k)			

GENERAL REQUIREMENTS FOR LAMPS							
OWTS Policy Section	OWTS Policy Section Summary	Region 5 Comments (These do not replace your review of OWTS Policy. Italics and websites are specific explanations, more detailed than in the Policy.)	Relevant LAMP Section	Legal Authority/ Code Section	Deficiency; Address Prior to Our Scheduling for Board Approval.	Potential Concern; Address in First Water Quality Assessment Report.	Yolo County Response 2/17/2016
9.4.4	Installation on Slopes >30% without Registered Professional's Report	<i>See also earlier comments, Section 9.1.1, regarding potential geotechnical concerns.</i>	LAMP Part 1: YCC Chapter 19, Page 26. LAMP Part 2 Manual: Section 2, Page 23.	YCC 6-19.610 (l)			
9.4.5	Decreased Leaching Area for IAPMO-Certified Dispersal System with Multiplier <0.70	IAPMO, International Association of Plumbing and Mechanical Officials. <i>Decreased leaching area refers to alternatives to conventional (stone-and-pipe) dispersal systems; these alternatives require relatively less area. The multiplier, <1, allows for a reduction in dispersal field area relative to a conventional system.</i>	LAMP Part 1: YCC Chapter 19, Page 18. LAMP Part 2 Manual: Section 3, Page 33.	YCC 6-19.5	Part 2, YCC Manual, Article 5, Section F1 (c) allows a 35% reduction in dispersion field, (multiplier of 0.65).		Manual Section 3 ((F1(b) and (c)) has been updated to reflect a maximum allowable reduction of 30%.
9.4.6	Supplemental Treatments without Monitoring and Inspection	<i>Therefore, ensure that the LAMP describes periodic inspection and monitoring for OWTS with supplemental treatments.</i>	LAMP Part 1: YCC Chapter 19, Pages 11, 14, 18, 23, 26, 32. LAMP Part 3 Manual: Section 1G, Page 12. Section 5, Pages 46, 48 and System management requirements tables for each type of alternative systems. Section 10, Page 95. Table 10-1, Page 96.	YCC 6-19.445, 6-19, 461, 6-19.5, 6-19.606, 6-19.610 (m), 6-19.703.			
9.4.7	Significant Wastes from RV Holding Tanks	<i>We interpret significant amounts to mean amounts greater than incidental dumping, such that volume, frequency, overall strength, or chemical additives preclude definition as domestic wastewater; see Definitions in OWTS Policy. See also, State Water Resources Control Board Order WQ 2014-0153-DWQ, Attachment B-2.</i>	LAMP Part 1: YCC Chapter 19, Pages 7, 26. LAMP Part 2 Manual: Introduction Page 7. Section 14, Page 105.	YCC 6-19.421, 6-19.610 (n).			
9.4.8	Encroachment Above Groundwater	Bottom of OWTS dispersal systems cannot be less than 2 feet above groundwater, or bottom of seepage pits, less than 10 feet above groundwater. <i>We interpret groundwater to include inter-flow and perched zones, along with the shallowest main unconfined aquifer. Degree of vulnerability to pollution due to hydrogeological conditions, Section 9.1.1, and the Water Quality Assessment, Section 9.3.2., should cover in detail means of assessing seasonally shallowest depth to groundwater.</i>	LAMP Part 1: YCC Chapter 19, Pages 18, 27. LAMP Part 2 Manual: Section 3, Page 28. Table 5-2, Page 47.	YCC 6-19.5, 6-19.612.			

GENERAL REQUIREMENTS FOR LAMPs

OWTS Policy Section	OWTS Policy Section Summary	Region 5 Comments (These do not replace your review of OWTS Policy. Italics and websites are specific explanations, more detailed than in the Policy.)	Relevant LAMP Section	Legal Authority/ Code Section	Deficiency; Address Prior to Our Scheduling for Board Approval.	Potential Concern; Address in First Water Quality Assessment Report.	Yolo County Response 2/17/2016
9.4.9	Installations Near Existing Sewers	New and replacement OWTS cannot occur on any lot with than 200 feet from a building or exterior drainage facility plus construction costs are greater than 2 times the Local Agency determines no impairment to any drinking water.)	LAMP Part 1: YCC Chapter 19, Pages 37. LAMP Part 2 Manual: Section 2F, Page 12.	YCC 6-19.12			
9.4.10	Minimum Setbacks:	These setbacks are from public water systems.	LAMP Part 1: YCC Chapter 19, Pages 27. LAMP Part 2 Manual: Section 2D, Page 15. Section 14 (b12), Page 107	YCC 6-19.611		Part 1: Yolo County Draft Ordinance Chapter 19, Article 6: General requirements, Table 1, page 28, and Part 2, Manual, Section 2, Table 2-1, page 15, provide minimum horizontal setback from a public well of 150 feet. OWTS Policy Section 9.4.10 requires 200' for dispersal systems deeper than 10 feet, and a microbiological study for systems deeper than 20 feet within 600 feet of the well. Perhaps this warrants a contingency for discoveries of previously undocumented systems.	Table 2-1 on page 15 of the Manual has been updated with a footnote which addresses this requirement.
9.4.10.1	From Public Supply Wells	If the dispersal system is less than 10' in depth, then the setback must be greater than 150' from public water supply well.	LAMP Part 1: YCC Chapter 19, Pages 27. LAMP Part 2 Manual: Section 2, Page 15. Section 14 (b12), Page 107	YCC 6-19.611			
9.4.10.2		If the dispersal system is greater than 10' in depth, then the setback must be greater than 200' from public water supply well.	The item is not applicable because the maximum trench depth is 8'. LAMP Part 1: YCC Chapter 19, Pages 18. LAMP Part 2 Manual: Footnote for Table 2-1, Page 16. Section 4 (table 4-1), Page 40.	YCC 6-19.5			

GENERAL REQUIREMENTS FOR LAMPs							
OWTS Policy Section	OWTS Policy Section Summary	Region 5 Comments (These do not replace your review of OWTS Policy. Italics and websites are specific explanations, more detailed than in the Policy.)	Relevant LAMP Section	Legal Authority/ Code Section	Deficiency; Address Prior to Our Scheduling for Board Approval.	Potential Concern; Address in First Water Quality Assessment Report.	Yolo County Response 2/17/2016
9.4.10.3	From Public Supply Wells, Regarding Pathogens	If the dispersal system is greater than 20' in depth, and less than 600' from public water supply well, then the setback must be greater than the distance for two-year travel time of microbiological contaminants, as determined by qualified professional. In no case shall the setback be less than 200'.	The item is not applicable because the maximum trench depth is 8'. LAMP Part 1: YCC Chapter 19, Pages 18. LAMP Part 2 Manual: Footnote for Table 2-1, Page 16, Section 4 (table 4-1), Page 40.	YCC 6-19.5			
9.4.10.4	From Public Surface Water Supplies	If the dispersal system is less than 1,200' from public water system's surface water intake, within its drainage catchment, and potentially threatens an intake, then the setback must be greater than 400' from the high water mark of the surface water body.	LAMP Part 1: YCC Chapter 19, Pages 27. LAMP Part 2 Manual: Section 2D, Page 15.	YCC 6-19.611			
9.4.10.5	From Public Surface Water Supplies	If the dispersal system is greater than 1,200', but less than 2,500', from public water system's surface water intake, within its drainage catchment, and potentially threatens an intake, then the setback must be greater than 200' from high water mark of surface water body.	LAMP Part 1: YCC Chapter 19, Pages 27. LAMP Part 2 Manual: Section 2D, Page 15.	YCC 6-19.611			
9.4.11	Supplemental Treatments, Replacement OWTS That Do Not Meet Minimum Setback Requirements	Replacement OWTS shall meet minimum horizontal setbacks to the maximum extent practicable.	LAMP Part 1: YCC Chapter 19, Pages 3, 30	YCC 6-19.301 (g), 6-19.623 (d)			
9.4.12	Supplemental Treatments, New OWTS That Do Not Meet Minimum Setback Requirements	New OWTS shall meet minimum horizontal setbacks to the maximum extent practicable, and meet requirements for pathogens as specified in Section 10.8. and any other Local Agency's mitigation measures.	LAMP Part 1: YCC Chapter 19, Pages 16, , 18, 27. LAMP Part 2 Manual: Section 5, Pages 46, 48 (Section 5B2)	YCC 6-19.471, 6-19.472, 6-19.6, 6-19.611.			
9.5	Technical Support of LAMP	Include adequate detail to ensure that the combination of all proposed criteria will protect water quality and public health sufficiently to warrant the Central Valley Water Board's waiver of Waste Discharge Requirements, pursuant to §13269, California Water Code.	LAMP Part 1: YCC Chapter 19, Pages 1, 2.	YCC 6-19 Summary, 6-19.1, 6-19.2		Pending Water Quality Assessment reports, we may require further technical support.	Acknowledged
9.6	Regional Water Quality Control Board Consideration of LAMP	Regional Boards shall consider past performance of local programs to protect water quality. <i>We will generally consider past performance based on our reviews of annual status and evaluation reports; see Section 9.3.3.</i>					

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