CW-846663

Brad S. Merrell, PE Consulting City Engineer City of Barstow Barstow CA 92311-2839 bmerrell@barstowca.org

Subject: Letter, City of Barstow to Lahontan Water Board, Revised City LAMP, August 10, 2018.

Brad,

Water Board's comments on the subject revised LAMP is presented in the Attachment.

Please submit a second revised city LAMP to our office at

lahontan@waterboards.ca.gov

by <u>**Tuesday, Aug 21, 2018</u>** so that we can issue a tentative resolution approving the LAMP by August 31, 2018. Please reference Lahontan's primary index number for the LAMP, which is CW-846663.</u>

If you have any questions, please contact either me or my supervisor, Jehiel Cass (760-241-2434, jehiel.cass@waterboards.ca.gov).

Francis (Mike) Coony, Water Resources Control Engineer 15095 Amargosa Road Building 2, Suite 210 Victorville, CA 92394 Phone: 760-241-7353 Fax: 760-241-7308 Email: <u>Mike.Coony@waterboards.ca.gov</u>

cc: Mark Rowan Mark.Rowan@merrelljohnson.com

3.1 Setback Requirements

Minimum Setback Required From	Septic Tank	Disposal Field	Seepage Pit
Non-Public Water Supply Well ^{1,8}	100	100 ²	150 ^{2,44<u>12</u>}
Public Water Supply Well ¹	100	100 ²	200 ¹¹ 12
Buildings or Structures ³	5	8	8
Property line adjoining private property	5	5	8
Streams and other flowing bodies of water ^{9,11}	100	100	150
Drainage Course	50	50	50
Lakes, ponds, and other surface water bodies ^{10,11}	200	200	200
Mojave River	50	200	200
Large Trees ⁴	10	-	10
Seepage pits	5	5	12
Disposal field	5	46	5
Private domestic water lines (building service line)	5	5	5
Public Domestic Water Lines	25	25	25
Distribution Box	N/A	5	5
Ground surface on sloping ground	N/A	15	15
Groundwater ⁵	5	57	10

¹ Drainage piping will clear domestic water supply wells by not less than 50 feet. This distance will be permitted to be reduced to not less than 25 feet where the drainage piping is constructed of materials approved for use within a building.

² For any system discharging 5,000 gallons per day (GPD), or more, the required setback will be increased to 200 feet.

³ Includes porches and steps whether covered or uncovered, breezeways, roofed porte cocheres, roofed patios, carports, covered walls, covered driveway, and similar structures or appurtenances.

⁴ Any tree with a trunk diameter of one foot or more within 5 feet of the system that will not be removed during construction.

⁵ The highest known level to which groundwater is known to have occurred rather than the level at the time when testing occurred.

⁶ Plus 2 feet for each additional foot or depth in excess of 1 foot below the bottom of the drain line.

⁷ For any system utilizing advanced treatment, this minimum separation may be reduced to 2 feet with approval under the Advanced Protection Management Program (APMP) (refer to Chapter 6 for more information regarding the APMP) and the Regional Water Quality Control Board (RWQCB).

⁸ Unless regulatory or legitimate data requirements necessitate that monitoring wells be located closer.

⁹ Where the edge of the water body is the natural or levied bank for creeks and rivers, or may be less where site conditions prevent mitigation of wastewater to the water body.

¹⁰ Where the edge of the water body is the high water mark for lakes and reservoirs and the mean high tide line for tidally influenced water bodies. ¹¹ Where the effluent dispersal system is within 1,200 feet from a public water systems' surface water intake point, within the catchment of the drainage, and located such that it may impact water quality at the intake point (such as upstream of the intake point for flowing water bodies), the dispersal system will be no less than 400 feet from the high water mark of the reservoir, lake or flowing water body. Where the effluent dispersal

system is located more than 1,200 feet but less than 2,500 feet from a public water systems' surface water intake point, the dispersal system will be no less than 200 feet from the high water mark of the reservoir, lake or flowing water body.

¹²The bottom of the seepage pit must be equal to or greater than 11 feet above the groundwater level of the well.

8.2.3 Constituents of Concern

As part of the County of San Bernardino's WQAP, areas near the City of Barstow have been identified which have elevated levels of constituents of concern. The following table indicates the constituent of concern for county areas located near the City. In addition to total coliform and nitrate testing, sampling will be required by the county for all new well construction in the areas indicated. This data will be regularly reviewed by the City.

Constituent	Areas	
Arsenic	Hinkley	
Perchlorate	• Barstow (near the I-15 and Hwy 58	
	intersection)	
Chromium VI	Hinkley	
<u>Nitrate–N</u>	• Near wastewater treatment plant and	
	up-gradient and down-gradient of Barstow	