

Chapter 12 - Project Well

Section A: Health & Safety Issues

Principle: Use of the project well for commercial cannabis cultivation and processing must follow County ordinances, California Health & Safety Code and California Water Code. Agricultural well permits are not allowed for human consumption nor certain industrial uses. Industrial wells (in some cases reclassified agricultural wells) may be needed when the water is used in a processing or manufacturing facility. Statewide Department of Water Resources (DWR) Well Standards place domestic-safety obligations on local agencies. [A1]. State agencies also require water-source documentation for cannabis licensing.

If a well is within the 100-year Flood Plain, the well casing must extend at least 1 foot above the 100-year floodplain or any known flood condition, ensuring safety and accessibility. [A4]

Argument: The project's well permit identified the well's planned use for irrigation. Lake County Environmental Health requires well use description to match actual use. [A2] If well use changes, the well must be reviewed and possibly re-permitted.

Onsite processing (washing, extraction, trimming, bottling, etc.) may trigger a required well reclassification.

- If the water is used in ways that could affect public health (employee use, product rinsing, cleaning), Environmental Health may require the well to meet domestic/industrial water standards.
- Cannabis facilities often fall under “food-like handling” rules, meaning water must meet potable standards, even if it’s not bottled for direct consumption.

If the well is non-exempt (i.e., not domestic or minor use) and, it is classified as industrial, a report from a California licensed Professional Geologist with Hydrogeologist Certification must be made. The report must confirm:

- The well's operation won't interfere with nearby wells.
- It won't cause subsidence that could damage infrastructure (minimal interference risk).

FEMA (Federal Emergency Management Agency) has not mapped High Valley for flooding. Historically, High Valley is known to flood. Families who live and have lived in High Valley for generations testify to the area's flooding. Mauldin Files [A3] describe High Valley's high water table and frequent flooding; Requiring the project's well casing to be at least one foot higher than known flood level is advised.

Conclusion: The project does not have a permitted well allowing the operation of the project as described in the IS MND. The well is designated for Irrigation not Industrial (for processing) use. To change its use designation, the well must be reviewed and possibly re-permitted. To reclassify an agricultural well to industrial requires: marking the well as Industrial on the well permit application form, meeting Lake County Ordinance 1823 well construction and siting standards, setback requirements and a report prepared by a California licensed Professional Geologist with Hydrogeologist Certification as described above.

Footnotes for Section A

[A1] Lake County Well Permit Application

<https://www.lakecountyca.gov/DocumentCenter/View/1190/Agricultural-Public-and-Industrial-Well-Permit-Application-Package-PDF>; , California Department of Water Resources Statewide Groundwater Management (Wells

<https://water.ca.gov/Programs/Groundwater-Management/Wells/Permitting-Agencies>

[A2] Lake County Ordinance 1823 and the Well Construction Standards based on California Department Water Resources (DWR), Bulletin 74.

<https://portal.laserfiche.com/Portal/DocView.aspx?id=105715&repo=r-4c096358&searchid=04a0ce70-e0e2-48c6-bdef-1caa3519ee84>

[A3] See Mauldin Files, pp. 601-800; p. 98 entry for Julia Shaul. Link:

<https://museumsoflakeca.wixsite.com/website>

[A4] <https://www.lakecountyca.gov/DocumentCenter/View/1190/Agricultural-Public-and-Industrial-Well-Permit-Application-Package-PDF>

Section B: Project Well not Classified Correctly, Sealed Without Witness

Principle: To support (cannabis) processing, a well must be classified as Industrial. An Industrial well has an annular seal extending of least 50 feet below ground surface. Lake County well construction and minimum sealing depth requirements must at least meet or exceed California Department Water Resources' [B1]. An Industrial well must meet disinfection: "During placement of the gravel in the annular space disinfectants (usually calcium hypochlorite in tablet or granular form) shall be added to the gravel at a

nummiform rate (two tablets per cubic foot or one pound of the granular form per cubic yard).” [B2]

Lake County requires a well’s annular seal to be verified and witnessed by Lake County Environmental Health. Without a witness, it is not known whether a well is sealed improperly and “may allow the impairment of the quality of water in the groundwater basin or otherwise constitutes a hazard to health, safety, or welfare”, a violation of CA Water Code § 13801 [B3]. This well’s annular seal is considered incomplete or non-compliant with County requirements. This poses legal risk and risk to permit validity. A seal that has not been certified puts the well at risk of allowing groundwater contaminant migration—especially critical if upgrading to Industrial classification, which has stricter sealing depth and sanitary expectations.

Argument: The project’s well does not meet requirements to be classified as an Industrial well:

- The **well’s annular seal was not verified nor witnessed** by Lake County Environmental Health Officer or their designee. The project Well Completion Report does not explain this Lake County ordinance violation [B4]
- The well does not meet requirements for cannabis processing. The **project well was not disinfected as required** for Industrial wells, required for cannabis processing. No gravel nor annular space disinfectants are identified as annular material, required for Industrial wells [B4].
- The project well does not meet annular seal depth minimum (50 feet) from the surface for Industrial wells, required for (cannabis) processing. The well was sealed 21 feet from the surface.

Conclusion: The project cannot proceed without a properly permitted and constructed well. Because Lake County Environmental Health did not witness the sealing of the project well, this creates a presumption of noncompliance [B6]. This well is considered “open”; it can contribute to water quality hazards that could breach water quality protections and provoke enforcement action. The project could be subject to fines for violation of groundwater regulations (e.g. well contamination of groundwater) and daily liability for ongoing non-compliance.

Footnotes for Section B

[B1] California Department of Water Resources Bulletin 74 standards, Part II, Section 9; California Department of Water Resources (DWR), Statewide Groundwater Management,

Well Standards, CA Wells Standards (Combined):

<https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Construction>

[B2] Ibid., Section 11; <https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Construction>.

[B3] Ibid., Bulletin 74-81/90, Well Standards; Lake County Code Chapter 30 (Wells); Lake County Code of Ordinances, Article VIII, § 68.1: “No annular seal shall be installed or placed for any well except in the presence and with the approval of the Health Officer or his designee.”

https://library.municode.com/ca/lake_county/codes/code_of_ordinances?nodeId=COOR_CH9HESA_ARTVIIIREWEPGR_S9-68INCOWO

[B4] See [00] Hydrology report and DMP.pdf; see Project Well Completion Report, (August 11, 2022), PDF p. 18.

[B6] California Water Code §13751, DWR Bulletin 74-81/90.