

ATTACHMENT D
ADDITIONAL INFORMATION REQUIREMENTS
FOR A REPORT OF WASTE DISCHARGE
NAPA BERRYESSA RESORT IMPROVEMENT DISTRICT
WATER TREATMENT PLANT

Please submit a technical report, providing the following information. The technical report must be prepared under the direct supervision of a registered civil engineer.

Please provide the following information:

1. Site information which includes the following:
 - a. Depict the water treatment plant, conveyance systems (i.e., piping, etc.), and disposal site on a 7.5 U.S.G.S quadrangle map (site map) and indicate the township, range, and section of the area;
 - b. Identify Assessors Parcel Number for the water treatment plant and disposal areas;
 - c. Identify the area of the site (disposal areas), in acres, and the total acreage of parcel;
 - d. Report distance to residences within 1000 feet and to the nearest community. Depict nearby residences on the site map;
 - e. Indicate uses of surrounding land (i.e., agricultural, residential, etc.) and the site;
 - f. Report annual average precipitation and evaporation;
 - g. Indicate locations of all groundwater wells, surface streams, drainage ditches (including seasonal), canals, and channels within 500 feet of the treatment plant, wastewater conveyance system on the site map. Identify the nearest identifiable water body or water course to which the site is tributary and its approximate distance;
 - h. Report direction and typical velocity of the prevailing winds;
2. A narrative description of all proposed waste conveyance (i.e., ditches, piping etc.), treatment, and disposal systems. For the water treatment process, please include a list of chemicals and coagulants used in the water treatment process
3. A copy of the California Environmental Quality Act (CEQA) document for the project. If the CEQA document has not yet been prepared, provide the name of the lead agency and anticipated adoption date.
4. For any proposed wastewater disposal pond, provide the following information:
 - a. Identification (name) and function of the pond;
 - b. Surface area, depth, and volumetric capacity at two feet of freeboard;
 - c. Height (relative to surrounding grade), crest width, interior slope, and exterior slope of each berm;
 - d. Estimated steady state percolation rate for each unlined pond based on site-specific testing;
 - e. Depth to shallow groundwater below the planned base of the pond;
 - f. Overfilling/overflow prevention features;
 - g. Storm water diversion features;

5. A chemical characterization of the waste. Include a discussion of potential seasonal variations and supporting analytical data for at least the following tests:
 - a. Total dissolved solids (TDS)
 - b. Total suspended solids (TSS)
 - c. Settleable Matter (SM)
 - d. Total Coliform organisms
 - e. Anions (EPA Method 300): bromide, chloride, nitrate, nitrite, phosphate, sulfate, sulfite
 - f. Trace metals (EPA Method 6010B): barium, beryllium, chromium, cobalt, copper, silver, tin, vanadium, and zinc
 - g. Antimony and arsenic (EPA Method 7062)
 - h. Cadmium (EPA Method 7131A)
 - i. Lead (EPA Method 7421)
 - j. Mercury (EPA Method 7471A)
 - k. Nickel (EPA Method 7521)
6. A description of the types of soil underlying the planned disposal area (with reference to any geotechnical reports).
7. A projected monthly water balance demonstrating adequate containment capacity for the 100-year return period total annual precipitation, including consideration of at least the following.
 - a. A minimum of two feet of freeboard in each pond (ponds used to store wastewater) at all times;
 - b. Historical local evaporation data (monthly average values);
 - c. Local precipitation data with the 100-year return period annual total distributed monthly in accordance with mean monthly precipitation patterns;
 - d. Proposed wastewater loading rates distributed monthly in accordance with expected seasonal variations; and
 - e. Projected long-term percolation rates (including consideration of percolation from unlined ponds and the effects of solids plugging on unlined ponds).
8. Proposed flow limits and basis for the limit for disposal system. Consider seasonal variations and include the technical basis for the proposed flow limit (e.g., design water treatment capacity; hydraulic capacity of a main discharge pump or other system element; and demonstrated effluent disposal capacity).
9. An irrigation management plan demonstrating adequate disposal capacity, including at least the following information:
 - a. Scaled plans showing the limits of all effluent irrigation areas, including their relationship to storm drains, surface waters, and wells;

- b. For each discrete irrigation area, specify the following:
 - i. Total available area;
 - ii. Net available area (considering setbacks required per 22 CCR, Division 4 water reclamation regulations);
 - iii. Type of irrigation systems;
 - iv. Structural and operational Best Management Practices (BMPs) used to control potential runoff quality impacts associated with use of reclaimed effluent; and
 - v. Means and methods to control public access and/or provide legally required notice regarding exposure to treated effluent.

10. Provide a preliminary groundwater assessment of the following:

- a. What is the groundwater elevation and gradient at the existing facility?
- b. What are subsurface conditions at the disposal site?
- c. What is the character of groundwater quality at the disposal site?
- d. Based on site hydrogeology, the nature of the waste, and the proposed disposal method, what level of degradation is expected to result from the discharge (if any)?
- e. If the discharge might cause degradation, how will the degradation be confined or controlled?