

LLNL CATEGORICAL EXCLUSION DETERMINATION FORM

ESPM LOG NO: 22-21718	NNSA/LFO LOG NO: 1-22
1. PROJECT/ACTIVITY TITLE: Site 300 Well 21	DATE: October 14, 2022
2. PROJECT DESCRIPTION:	
<p>The purpose of the proposed project is to replace an existing water supply well at Site 300. The project is needed because an existing water supply well is failing and experiencing a decrease in reliability and water quality due to well screen degradation.</p> <p>Site 300 draws drinking water from two onsite groundwater production wells, which operate under a domestic water supply permit issued by the California State Water Resources Control Board, Division of Drinking Water (Permit No. 03-10-13P-003 issued on January 24, 2014 and 01-10-16PA-003 amended on March 24, 2016). The existing water supply system includes a primary well (Well 20) and a backup well (Well 18), both located in the southeastern part of Site 300, as well as several holding tanks and a distribution network.</p> <p>The proposed project would include the installation of a new drinking water supply well (Well 21) and associated piping required for connection to the existing water supply system. The project would include the well head and an adjacent well house for the water meter, treatment equipment, and electrical and control equipment, including a new emergency generator. The existing water supply permit would be amended to include the new drinking water source. Wells 18 and 20 would remain in operation and would serve as backup sources for Well 21.</p> <p>After Well 21 is installed, a specific capacity test would be performed to determine the safe operational yield for the well. The drawdown induced by pumping Well 21 would be assessed, and operation of the system would be managed to maintain a safe yield for the aquifer. The new well is sited further away from the existing wells to minimize any well-interference, and the planned operation of this well is not anticipated to cause significant long-term decline of the water table. The location of Well 21 was carefully selected to eliminate potential degradation of the aquifer due to overdrafting and/or due to potential impact from adjacent aquifers with lower quality water.</p>	
3. Categorical Exclusion(s) Applied:	
<p>B1.18 Water supply wells: Siting, construction, and operation of additional water supply wells (or replacement wells) within an existing well field, or modification of an existing water supply well to restore production, provided that there would be no drawdown other than in the immediate vicinity of the pumping well, and the covered actions would not have the potential to cause significant long-term decline of the water table, and would not have the potential to cause significant degradation of the aquifer from the new or replacement well.</p>	

*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 1021

This action would not: threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders; require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities, but may include such categorically excluded facilities; disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; or adversely affect environmentally sensitive resources (including but not limited to those listed in paragraph B.(4)) of Appendix B to Subpart D of 10 CFR 1021). Furthermore, there are no extraordinary circumstances related to this action that may affect the significance of the environmental effects of the action; this action is not "connected" to other actions with potentially significant impacts, is not related to other proposed actions with cumulatively significant impacts, and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211.

Based on my review of information conveyed to me and in my possession (or attached) concerning the proposed action, as NEPA Compliance Officer (as authorized under DOE Order 451.1B), I have determined that the proposed action fits within the specified class(es) of action, the other regulatory requirements set forth above are met, and the proposed action is hereby categorically excluded from further NEPA review.

NEPA Compliance Officer:

Date Determined:
