

# LLNL CATEGORICAL EXCLUSION DETERMINATION FORM

<b>ESPM LOG No: 17-15038</b>	<b>NNSA/LFO LOG No: NA-17-07</b>
<b>1. PROJECT/ACTIVITY TITLE:</b> Site 300 Granulated Activated Carbon (GAC) Filtration System	
<b>DATE: November 2017</b>	
<p><b>2. PROJECT DESCRIPTION:</b></p> <p>The purpose of the proposed project is to install a granulated activated carbon (GAC) filtration system to treat the Hetch Hetchy surface water received onsite. The current Site 300 ground water supply is not desirable due to: 1) high mineral contents causing excessive cooling tower scaling 2) potential communication between contaminated upper aquifers and well water and 3) reliability of current well system. In order to address these concerns, GAC filtration is necessary to continue use of the Hetch Hetchy water supply. The ground water system at Site 300 would be used as a redundant backup system.</p> <p>The scope of this project is to install a Granulated Activated Carbon (GAC) water treatment system for removal of disinfection by-products from Site 300 potable water system. The system would be located within the Central GSA near Corral Hollow Road.</p> <p>The GAC filtration system would be comprised of:</p> <ul style="list-style-type: none"> <li>• Two pressure filters piped to operate a series of lead and lag filters;</li> <li>• A backwash water supply tank with an approximate capacity of 6,000 gallons;</li> <li>• A backwash feed pump and a waste backwash tank capable of holding approximately 6,000 gallons;</li> <li>• A 160-gallon sodium hypochlorite feed system; and</li> <li>• A 250-gallon sodium hydroxide feed system</li> <li>• Two 1,500-gallon vessels with approximately 6,000 pounds of GAC each</li> </ul> <p>The GAC filtration system would treat less than 240,000 gallons per day. Both the sodium hypochlorite and the sodium hydroxide would be contained within double-walled tanks situated on weigh scales to monitor supply. The tanks would be refilled by a contractor approximately every 40 days. The GAC filter tanks would be replaced approximately every 3 to 6 months, depending on need. The GAC would be replaced and disposed of by a contracted vendor. It may be possible that the used GAC could be cleaned and regenerated, potentially resulting in no waste disposal.</p> <p>The project would require grading and repaving of an existing 60-foot x 26-foot section of parking lot to allow for the installation of the GAC filtration system with built-in secondary containment, leak detection and a sump connected to the existing sewer pond. Additional site modifications would include, but are not limited to installation of a security fence with gate, a covered concrete structure approximately 19-feet in height for the filtration system, emergency power supply, upgrades to bring the facility up to code, and safety bollards. Safety basis and security risk assessment analyses would be completed prior to commencement of construction.</p>	
<p><b>3. Categorical Exclusion(s) Applied:</b></p> <p>B1.26 Small water treatment facilities</p>	

\*-For the complete DOE National Environmental Policy Act regulations regarding categorical exclusions, see Subpart D of 10 CFR 10.21

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: