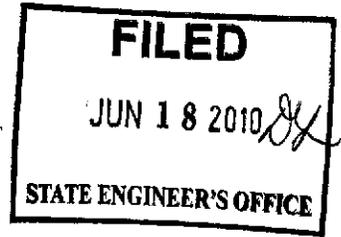


IN THE OFFICE OF THE STATE ENGINEER OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION NUMBER 79699
FILED BY Amargosa Solar I LLC
ON March 18, 20 10, TO APPROPRIATE THE
WATERS OF Underground



PROTEST



Comes now U.S. Fish and Wildlife Service
Printed or typed name of protestant
whose post office address is 4701 N Torrey Pines Drive, Las Vegas, NV 89130
Street No. or PO Box, City, State and ZIP Code
whose occupation is Federal agency and protests the granting
of Application Number 79699, filed on March 18, 20 10
by Amargosa Valley Solar I LLC to appropriate the

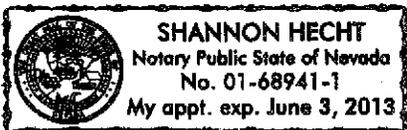
waters of underground situated in Nye
Underground or name of stream, lake, spring or other source
County, State of Nevada, for the following reasons and on the following grounds, to wit:
See Attachment A

RECEIVED
2010 JUN 18 AM 11:44
STATE ENGINEER'S OFFICE

THEREFORE the Protestant requests that the application be Denied
Denied, issued subject to prior rights, etc., as the case may be
and that an order be entered for such relief as the State Engineer deems just and proper.

Signed Cynthia T. Martinez
Agent or protestant
Cynthia T. Martinez
Printed or typed name, if agent
Address 4701 N Torrey Pines Drive
Street No. or PO Box
Las Vegas, NV 89130
City, State and ZIP Code
702-515-5250
Phone Number

Subscribed and sworn to before me this 17th day of June, 20 10



Shannon Hecht
Notary Public
State of Nevada
County of Clark

+ \$25 FILING FEE MUST ACCOMPANY PROTEST. PROTEST MUST BE FILED IN DUPLICATE.
ALL COPIES MUST CONTAIN ORIGINAL SIGNATURE.

**ADDITIONAL INFORMATION TO SUPPORT THE PROTEST
OF THE U.S. FISH AND WILDLIFE SERVICE
IN THE MATTER OF APPLICATION 79699**

Application 79699 was filed by Amargosa Valley Solar I, LLC (Solar Millennium) on March 18, 2010 requesting a change in manner of use and place of use for 400 acre-feet per year (afy) at a diversion rate of 1.75 cubic feet per second from an existing underground source in Amargosa Valley, Hydrographic Basin 230. Application 79783 states that water applied for under Application 79699 will be used as a back-up (supplemental) source of water for two solar power plants and that water under Application 79783 will be used as the primary source of supply for those operations, with a combined duty of 400 afy. The point of diversion for the existing well (Application 79699) is located approximately 15.5 miles northwest of the Devils Hole Unit of Death Valley National Park (Devils Hole) and approximately 11 miles northwest of Ash Meadows National Wildlife Refuge (NWR). In effect, these two applications seek to change the point of diversion, manner of use and place of use of water previously used for irrigation purposes to an industrial use for a solar power plant in the Amargosa Valley, Hydrographic Basin 230.

The U.S. Fish and Wildlife Service (FWS), National Park Service (NPS) and Bureau of Land Management (BLM) are currently working with Solar Millennium to develop a plan to eliminate any adverse effects to Devils Hole and Ash Meadows NWR that could result from groundwater withdrawals associated with Applications 79699 and 79783. As such, FWS respectfully requests that Applications 79699 and 79783 be held in abeyance until such time as a formal agreement between the FWS, NPS, BLM and Solar Millennium is achieved and certain critical elements of such an agreement have been implemented. Once these tasks have been completed, the FWS will expeditiously withdraw its protests to the above referenced applications. If, however, Applications 79699 and 79783 are not held in abeyance until such a formal agreement is reached and critical elements are implemented, FWS requests that Application 79699 be denied because:

1. Granting this new application for underground water in Hydrographic Basin 230 will cause injury to FWS-owned senior water rights at Ash Meadows NWR.
2. The proposed activity is not likely compatible with the purposes of the national wildlife refuges. Granting this application will threaten or damage habitat for species that are endangered, threatened, or considered for future listing under the Endangered Species Act and, therefore, is not in the public interest. In particular, this change application has the potential to negatively affect sensitive water-dependent biological resources at Devils Hole and Ash Meadows NWR, including seven threatened and endangered plant species, one threatened insect, and four endangered fish at Ash Meadows NWR and the endangered Devils Hole Pupfish at Devils Hole.

Specifically, Solar Millennium proposes to lease and utilize 400 afy of groundwater from GENEERCO, Inc., Permit 15893 to support industrial operations, with a change in the

manner of use and place of use through Application 79699. Whereas the annual duty of Permit 15893 (Certificate 5717) is 603 afy, historical groundwater pumping under Permit 15893 has been an average of 398 afy based on estimates prepared by your agency, 1983 to 2009. Should the permit holder, GENEERCO, Inc. choose to utilize the remaining 205 afy available under Permit 15893 to irrigate fields subsequent to the lease of 400 afy to Solar Millennium, actual pumping in Hydrographic Basin 230 will increase by 205 afy to the full duty of Permit 15893, 603 afy.

Additionally, Solar Millennium proposes to convert the use of 400 afy under GENEERCO, Inc., Permit 15893 from irrigation to solar energy production under Application 79699 with a likely zero recharge to the basin fill aquifer during mirror washing operations in the Amargosa Desert. Whereas groundwater pumping by GENEERCO, Inc. under Permit 15893 has been unmetered, actual historical pumping by GENEERCO, Inc. under the permit has likely exceeded amounts accounted for by your agency in annual pumping inventories. That is, GENEERCO, Inc., likely pumped more than the 400 afy which Solar Millennium proposes to convert and utilize on an annual basis. As such, some adjustment for the loss of irrigation return flow associated with the conversion from irrigation to solar energy production is 'built-in' to Application 79699. However, the only information that can be used to estimate this built-in adjustment is published in "Evapotranspiration and Net Irrigation Water Requirements for Nevada" (Nevada Division of Water Resources, January 2010). The latter indicates that the net irrigation water requirement for alfalfa in Hydrographic Basin 230 is 5.3 acre-feet per acre, which exceeds the rate used by your agency to prepare the annual pumping inventories (5.0 acre-feet per acre) by 6%, our estimate of the built-in adjustment. In contrast, Stonestrom et al. 2003 (U.S. Geological Survey Open-File Report 03-104), "Estimates of Deep Percolation Beneath Native Vegetation, Irrigated Fields, and the Amargosa-River Channel, Amargosa Desert, Nye County, Nevada", estimates that the percentage of irrigation return flow on one of three investigated fields in the Amargosa Farms area, the field most closely duplicating conditions in fields irrigated under Permit 15893, is 14 percent. Investigated field #2 was irrigated for alfalfa on and off since the early 1960's. Consequently, we propose that the approximate uncompensated rate of lost irrigation return flow which is likely to occur as a result of the change in use of 400 afy from irrigation to solar energy production under Application 79699 is 8 percent. Since the applicant's estimated water requirement for their industrial operations is 400 afy, zero recharge to the basin fill aquifer is likely during future mirror washing operations, and the amount of the change application is for 400 afy, we believe an increase in the consumptive use of groundwater in Hydrographic Basin 230 would result from approval of Application 79699.