



US Army Corps  
of Engineers  
Sacramento District  
1325 J Street  
Sacramento, CA 95814-2922

# Public Notice

Public Notice Number: SPK-2007-00121

Date: May 26, 2009

Comments Due: July 9, 2009

In reply, please refer to the Public Notice Number

**SUBJECT:** The U.S. Army Corps of Engineers-Sacramento District (Corps) is evaluating an amended permit application to construct the Great Salt Lake Minerals Corporation Solar Evaporation Ponds Expansion Project, which has expanded in scope from 33,000 acres to a proposed 80,000 acres of waters of the United States, including wetlands, in or adjacent to the Great Salt Lake. This notice is to inform interested parties of the proposed activity, to provide notice that the Corps is preparing a draft Environmental Impact Statement and will be conducting public scoping meetings, and to solicit comments. This notice may also be viewed at the Corps web site at <http://www.spk.usace.army.mil/regulatory.html>.

**AUTHORITY:** This application is being evaluated by the Corps under Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States and by the State of Utah for Section 401 for water quality certification.

**APPLICANT:** Corey Milne  
Great Salt Lake Minerals Corporation  
765 North 10500 West  
Ogden, Utah 84404

**LOCATION:** The project sites are located in and adjacent to the Great Salt Lake in:

Sections 15-22, 28-32, Township 7 North, Range 4 West;  
Sections 5, 6 and 7, Township 6 North, Range 4 West;  
Sections 1-3, 10-12, Township 6 North, Range 11 West;  
Sections 5-17, Township 6 North, Range 10 West;  
Sections 7-8, Township 6 North, Range 9 West;  
Sections 2-5, 8-16 and 22-24, Township 7 North, Range 10 West;  
Sections 7-10, 15-22, 26-29 and 32-35, Township 8 North, Range 10 West;  
Sections 12, Township 8 North, Range 11 West;  
Sections 25-28, 33-36, Township 10 North, Range 11 West;  
Sections 27-34, Township 10 North, Range 10 West;  
Sections 1-4, 10-15, 22-26, 35-36, Township 9 North, Row 11 West;  
Sections 3-10, 13-22, 27-34, Township 9 North, Range 10 West;  
Sections 1 & 12, Township 8 North, Range 11 West;  
Sections 3-10, Township 8 North, Range 10 West;  
Sections 3, 4, 5, 10, 11, 12, Township 6 North, Range 9 West;  
Sections 8, 7, 9, 10, 14, 13, 15, Township 6 North, Range 8 West;  
Sections 16, 17, 18, 20, 21, 22, 23, 24, Township 6 North, Range 7 West;  
Sections 19, 26, 27, 28, 29, 30, Township 6 North, Range 6 West;  
Sections 6 and 7, Township 6 North, Range 3 West;  
Section 31, Township 1 North, Range 6 West; and  
Sections 33 – 36, Township 1 North, Range 7 West;

This area can be seen on the Hogup Ridge North, Dolphin Island West, Crocodile Mountain SE and Willard Spur USGS Topographic Quadrangles.

**PROJECT DESCRIPTION:** In accordance with the National Environmental Policy Act (NEPA), the U.S. Army Corps of Engineers-Sacramento District (Corps) will prepare an Environmental Impact Statement (EIS) for Corps authorization actions for the proposed Great Salt Lake Minerals Corporation Solar Evaporation Ponds Expansion project. The basic project purpose is potassium sulfate extraction/mining. The overall project purpose is to increase production/output of organically certified potassium sulfate to help meet the increasing demand for this type of fertilizer. The applicant believes there is a need to increase production of potassium sulfate in order to maintain its market share over the next 50 years.

The proposed expansion would add approximately 91,000 acres of solar evaporative ponds, impacting approximately 80,000 acres of waters of the United States, including wetlands, and reduce the need to import raw potassium from other sources. The EIS will address impacts such as wildlife habitat, water quality, Great Salt Lake water elevations, wetlands, hydrology, cultural resources, transportation, endangered species and industry. The projected date for public release of the Draft EIS is October 30, 2009.

**PUBLIC SCOPING MEETINGS.** Three public scoping meetings will be held. The first scoping meeting will be held on **June 4, 2009 from 5-8 pm at the Davis County Library, 725 South Main Street, Bountiful, Utah.** The second public meeting will be on **June 9, 2009 from 5-8 pm at the Comfort Suites Hotel, 2250 South 1200 West, Ogden, Utah.** The third meeting will be held on **June 11, 2009, from 5-8 pm at West High School, 241 North 300 West, Salt Lake City, Utah.** Public comments will be accepted at the scoping meetings or may be mailed to Mr. Jason Gipson, Nevada-Utah Regulatory Branch, 533 West 2600 South, Suite 150, Bountiful, Utah 84010, or emailed to: [jason.a.gipson@usace.army.mil](mailto:jason.a.gipson@usace.army.mil). All comments must be received on or before **July 9, 2009.**

**SUPPLEMENTAL INFORMATION:** Great Salt Lake Minerals Corporation (GSL Minerals) currently operates approximately 47,000 acres of evaporative ponds located on the east and west shores of the Great Salt Lake. A 25,000-acre evaporation facility is located on the west shore of the North Arm of the Great Salt Lake and a 22,000-acre evaporation facility is located on the east shore of the Bear River Bay. The existing solar evaporation pond facilities are located within the Great Salt Lake, i.e., the ponds are located below 4205 feet mean sea level, which is below the high water mark of the Great Salt Lake. The company draws naturally occurring brine from the lake into shallow ponds and allows solar evaporation to produce sulfate of potash, as well as salt and magnesium chloride minerals. Sulfate of potash is a specialty fertilizer that improves the yield and quality of high-value crops such as fruits, vegetables, tea, tree nuts and turf grasses. The GSL Minerals facility has operated on the lake for 40 years.

The applicant originally proposed in late 2007 to construct three additional solar evaporation ponds totaling approximately 33,000 acres. The 2007 proposed project included adding two new solar ponds to the existing west side complex, an 18,000-acre Dolphin Island expansion pond and a 7,000-acre pond at the southern end of Clyman Bay between the Union Pacific Railway and several existing ponds. A new feed canal into the lake and a new pump station would be constructed on the north end of the proposed Dolphin Island pond. Diesel driven pumps, similar to those currently in use, would pump brine from the new feed canal to the new pond. Existing pumps would be used to pump brine from the new pond to an existing pond. The total 25,000-acre pond expansion on the west side would increase the concentration of brine transferred to an existing gravity-flow trench for transport to the east ponds in the Bear River Bay. Additionally under the 2007 proposal, an 8,000-acre pond would be constructed on the east side of the Great Salt Lake in the Bear River Bay. Brine would be pumped to and from the new pond with existing pump stations; however, the capacity of these pump stations would be increased proportional to the new pond acreage. Additional feed brine for this new pond would come from the North Arm of the Great Salt

Lake (Gunnison Bay), flowing through existing east side ponds.

Under the 2007 proposal, dikes would be built to accommodate the pond expansion and impound the waters of the respective areas. On the east side of the lake, approximately 540,000 cubic yards of fill would be discharged into Bear River Bay to create the dikes. On the west side, approximately 900,000 cubic yards of fill would be discharged into open water in the vicinity of Clyman Bay to create dikes.

The 2009 revised project proposes to: 1) retain the proposed construction of an 8,000-acre pond in Bear River Bay, 2) decrease the previously proposed 8,000 acre pond on the west shore of the lake along the north side of the railroad causeway to 6,000 acres, 3) increase the 18,000-acre pond to 23,000 acres, 4) add an additional 2,000-acre pond west of the above described 6,000-acre pond along the north side of the railroad causeway, 5) add a 14,000-acre pond on the south side of the railroad causeway, and 6) add an additional 38,000-acre pond in the Dolphin Island area of the lake (See attached figures). On the east side of the lake, approximately 540,000 cubic yards of fill would be discharged into Bear River Bay to create the dikes. On the west side, approximately 4.7 million cubic yards of fill would be discharged into open water in the vicinity of Clyman Bay to create dikes.

The total 83,000-acre West Pond Expansion (including Lakeside Lease areas) would increase the concentration of brine transferred to an existing gravity-flow trench (Behrens Trench) for transport to the GSL Minerals east solar evaporation ponds in the Bear River Bay (Figures 1, 2 and 3). Ultimately as part of the proposed project the efficiency of the Behrens Trench would be improved to reduce mixing of concentrated brine with lake water surrounding the trench by either by improving the existing the open Behrens Trench by excavating the trench wider and deeper or by laying pipes in the existing trench (Figures 2 and 3).

In addition the project includes the purchasing and transporting SOP from the U.S. Magnesium ponds located along the southwestern margin of the lake to the existing processing facility. GSL Minerals will also increase SOP production by constructing an SOP processing plant within the U.S. Magnesium pond area (Figure 4).

The proposed project habitat areas include saline open water, sporadically inundated playa lakebed, seasonally flooded playa, saline wetlands, potential freshwater springs, rip-rapped dikes and sandy upland habitats. These areas are located adjacent and to the north of the existing evaporation pond facilities. The Corps verified a jurisdictional wetland delineation for the 2007 proposed project on October 10, 2007, which identified approximately 34,180.08 acres of waters of the U.S, including 21.4 acres of saline wet meadow wetlands, 1,102.94 acres of seasonally inundated playa above the high water mark of the western side of the Great Salt Lake and 33,055.74 acres of seasonally or sporadically inundated playa lake bed below the high water mark of the Lake. A delineation of waters of the U.S. has not been completed or verified for the additional areas proposed under the 2009 revised application. However, it is estimated the additional 50,000 acres are all located within the ordinary high water mark of the Great Salt Lake, resulting in the same acreage of additional impacts to waters of the U.S. The proposed project would result in approximately 80,000 acres of permanent adverse impacts to waters.

**Alternatives.** The applicant has not provided information concerning project alternatives. Other alternatives may develop during the review process for this permit application. All reasonable project alternatives, in particular those which may be less damaging to the aquatic environment, will be developed and analyzed during the preparation of the Draft EIS.

**Mitigation.** The Corps requires that applicants consider and use all reasonable and practical measures to avoid and minimize impacts to aquatic resources. If the applicant is unable to avoid or minimize all impacts, the Corps may require compensatory mitigation. The applicant has not proposed a mitigation plan at this time. The determination of appropriate compensatory mitigation will be determined through public

scoping and impact analysis of the EIS process.

**OTHER GOVERNMENTAL AUTHORIZATIONS:** Under Section 401 of the Clean Water Act, water quality certification or a waiver is required from the State of Utah for this project. The Utah Division of Water Quality intends to issue certification, provided the proposed work will not violate applicable water quality standards. Projects are usually certified where the project may create diffuse sources (non-point sources) of wastes which will occur only during the actual construction activity and where best management practices would be employed to minimize pollution effects. Written comments on water quality certification should be submitted to Ms. Shelly Andrews, Utah Division of Water Quality, 288 North 1460 West, P.O. Box 144870, Salt Lake City, Utah 84114-4870, or email [shellyandrews@utah.gov](mailto:shellyandrews@utah.gov) on or before **July 9, 2009**.

**HISTORIC PROPERTIES:** Based on the available information, cultural resources may be located within the project's area of potential effect. The Corps has initiated coordination with the State Historic Preservation Office, local Tribes and other consulting parties with information regarding the existence and interest in Cultural and Historic Properties. If information regarding the impacts to Historic Properties is identified during the EIS process, the Corps will initiate formal consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act.

**ENDANGERED SPECIES:** Based on available information the project will not affect any Federally-listed threatened or endangered species.

**ESSENTIAL FISH HABITAT:** The proposed project will not adversely affect Essential Fish Habitat (EFH) as defined in the Magnuson-Stevens Fishery Conservation and Management Act.

These determinations are based on information provided by the applicant and our preliminary review.

**EVALUATION FACTORS:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**SUBMITTING COMMENTS:** Written comments, referencing Public Notice SPK-2007-00121 must be submitted to the office listed below **on or before July 9, 2009**.

Jason Gipson, Project Manager, U.S. Army Corps of Engineers, 533 West 2600 South, Suite 150, Bountiful, Utah 84010, Email: [jason.a.gipson@usace.army.mil](mailto:jason.a.gipson@usace.army.mil)

The Corps is particularly interested in receiving comments related to the proposal's probable impacts on the affected aquatic environment and the secondary and cumulative effects. Anyone may request, in writing, that a public hearing be held to consider this application. Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Please note that all comment letters received are subject to release to the public through the Freedom of Information Act. If you have questions or need additional information, please contact the applicant or Corps project manager Jason Gipson, 801-295-8380, x14, [jason.a.gipson@usace.army.mil](mailto:jason.a.gipson@usace.army.mil).

Attachments: 5 drawings