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ATTACHMENTS

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Posted 7/9/2013

CESPK-RD-U

SUBJECT: The U.S. Army Corps of Engineers, Sacramento District, (Corps) is evaluating a permit application to construct the Great Salt Lake Minerals Solar Evaporation Pond Expansion project, which would result in impacts to approximately 37,497 acres of waters of the United States in or adjacent to the Great Salt Lake. This notice is to inform interested parties of the proposed activity and to solicit comments.

AUTHORITY: This application is being evaluated under Section by the Corps 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 Water Quality Certification..

APPLICANT: Joe Havasi, Compass Minerals, 9900 West 109th Street, Overland Park, Kansas 66210

LOCATION: The approximately 51,000-acre project site is located on the Great Salt Lake, in the following locations:

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, Range 11 West;
 Sections 3-10, 13-22, 27-34, Township 9 North, Range 10 West;
 Sections 1 and 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 near Lakeside in Box Elder County and West Ogden in Weber County, Utah.

This area can be seen on the Hogup Ridge North and South, Dolphin Island East and West, Strongs Knob, Lakeside, Promontory Point and Willard Spur USGS Topographic Quadrangles (see attached Figure 1).

PROJECT DESCRIPTION: The applicant through its subsidiary Great Salt Lake Minerals (GSLM) currently operates solar evaporation ponds on the west and east side of the Great Salt Lake and proposes to construct additional solar evaporation ponds on both sides of the lake. Based on the available information, the basic project purpose is mineral extraction/mining. The overall project purpose is to increase production/output of potassium sulfate, also known as sulfate of potash or SOP, to meet the increasing demand for this specialty fertilizer, a crop nutrient with low chloride content. The applicant believes there is a need to increase production of potassium sulfate in order to meet market demand over the next 30 years.

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 proposed expansion would add approximately 51,548 acres of solar evaporative ponds, impacting approximately 37,497 acres of waters of the United States, and reduce the need to import raw potassium from other sources. No wetlands will be impacted directly by this project. The EIS will build on previous information gained during the 2007 and 2009 public scoping meetings and any new information identified during this public notice period. The EIS will address impacts to public interest factors 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 December 1, 2013.

PUBLIC SCOPING MEETINGS. New areas are being proposed for use that were not identified in previous public notices/scoping meetings; however, additional public scoping meetings are not being planned at this time since the overall project has been reduced in scope from the 2009 proposal. This public notice serves the intent of presenting new information regarding the revised proposed project and soliciting additional concerns and/or issues the public may have regarding GSLM's proposal. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation or if other significant issues not previously raised are identified during this period, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time (s), date(s), and location(s).

ENVIRONMENTAL SETTING. The proposed project areas include habitats characteristic of the Great Salt Lake, including saline open water, sporadically inundated playa lakebed, seasonally flooded playa, freshwater/brackish springs, fringe wetlands, rip-rapped dikes and sandy and saline upland habitats. These project areas are located adjacent to the existing evaporation pond facilities along the west shore of Clyman Bay, Promontory Point and the east shore of the South Arm of the Great Salt Lake. Since 2007, the Corps has verified jurisdictional waters within the revised project areas, and identified approximately 37,497 acres of waters of the U.S, including 76.57 acres of saline wet meadow wetlands, 4,005.90 acres of seasonally inundated playa above the ordinary high water mark of the western side of the Great Salt Lake and 33,414.5 acres of seasonally or sporadically inundated playa lakebed (Great Salt Lake) below the ordinary high water mark of the lake. The proposed project avoids

impacts to the fringe wetland and saline wet meadow wetland areas. Further, the Corps has preliminarily identified the additional 4,341 acres of new project area adjacent to Promontory Point and the existing east side GSLM facilities as jurisdictional since they are located below the ordinary high water mark of the lake.

SUPPLEMENTAL INFORMATION: Great Salt Lake Minerals Corporation (GSLM) currently operates approximately 47,000 acres of evaporative ponds located on the east and west shores of the Great Salt Lake (Figures 1 – 3). 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. The company draws naturally occurring brine from the lake into shallow ponds and harnesses 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 GSLM facility has operated on the lake for 40 years.

In 2007, GSLM originally proposed 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. Additionally, a new 8,000-acre pond was proposed on the east side of the Great Salt Lake in the Bear River Bay (see Figure 12).

In June of 2009, GSLM revised their application to request a total of 91,000 acres of ponds to: 1) retain the proposed construction of an 8,000-acre pond in Bear River Bay; 2) decrease the previously proposed 7,000-acre pond on the west side of the lake to 6,000 acres; 3) add an additional 2,000-acre pond east of the 6,000-acre pond; 4) increase the 18,000-acre pond to 23,000 acres; 5) add a 14,000-acre pond on the south side of the causeway; 6) add an additional 38,000-acre pond in the Dolphin Island area of the lake and 7) widen the existing Behrens Trench to accommodate the increased volume that would be pumped to the east side for processing (see Figure 13).

With this 2013 revised application, GSLM is proposing to reduce the scope of their 2009 proposal (Figure 1) in the following manner. On the west side of the lake in Clyman Bay, the proposed 38,000-acre pond (Area C) and Behrens Trench improvements have been eliminated and the 8,000 acres of west side ponds adjacent to the railroad causeway would be reduced to 7,502 acres (Figure 4). The other westside ponds proposed in 2009 would remain, but the 23,000-acre pond (former Area B) is now proposed to be split into two separate ponds, 11,123 acre Phase B (Figure 5) and 11,800-acre Phase C (Figure 6). Further, operation of the ponds is proposed to change. Under existing operations, unused minerals deposited in the west side ponds remain trapped and do not return to the lake. GSLM proposes to operate the ponds in a manner that would take one west side pond offline each season in order to return the accumulated minerals back to the lake by moving south arm brine through the offline pond, and subsequently returning the brine to the lake. This would be accomplished by constructing a feeder canal starting at the current railroad causeway breach at Lakeside to deliver water to the pond system. Additional canals to deliver this less saline water would be constructed throughout the existing west side pond system (see detailed Figures 4-6).

On the east side, the 8,000-acre pond in Bear River Bay has been eliminated. Instead, GSLM has proposed to reduce the acreage to 4,341 acres and split it into five smaller ponds. All ponds would be located outside of Bear River Bay, with 1,753 of these acres in the North Arm of the lake on the western side of Promontory Point, 1,347 acres in the South Arm along the southern end of Promontory Point, and 1,241 acres in a trapezoidal area bordering GSLM's east side ponds, north of the Union Pacific causeway as seen on Figure 7-9. A pile supported breakwater would also be constructed adjacent to the

Promontory Point ponds (Figure 11). This breakwater would encompass a 377-acre area in the south arm along the southeastern end of Promontory Point. The structure would allow free movement of water in and out of the breakwater area but would be used to protect the western edge of the solar ponds from wave action.

The SOP processing plant GSLM previously considered adjacent to the U.S. Magnesium facility in the south arm of the lake has been eliminated because constructing a plant would not be cost effective given the quantity and quality of the potassium sulfate produced at that location.

An additional change to the original two permit applications is that the additional ponds are now proposed to be constructed in a phased manner. Phase A would be constructed first and brought online. Once an increased need for more potassium sulfate fertilizer is identified, in approximately 10 years, Phase B is proposed to be constructed and brought online. Similarly, Phase C would be constructed approximately 10 years after Phase B as an additional need was identified.

Lastly, under GSLM's 2009 proposed project, they applied to the Utah State Engineer for an additional 353,000 acre-feet of water right from the lake. As part of this revised proposal, GSLM has withdrawn that application and plans to operate within its existing water right. Using the same amount of water in a larger pond system is possible since they have incorporated additional efficiency measures into their operations, namely sealing of the outside perimeter of the eastside ponds by constructing a bentonite core in the middle of the dike. This pond sealing prevents the concentrated brine in GSLM's evaporation ponds from leaking back into the lake and reduces the amount of brine withdrawals necessary to maintain their operations. Similarly, GSLM proposes to construct the dikes of the new ponds in Clyman Bay in the same manner, incorporating a bentonite or similar impervious material core.

Alternatives. The applicant has provided information concerning project alternatives. Alternatives evaluated by the Corps since 2007 include, but are not limited to, increasing evaporation rates via covering ponds with permeable membranes, darkening ponds with dye to increase heat absorption and spraying brine into the air; smaller and/or relocated ponds and production efficiency measures such as piping Behrens Trench to decrease concentrated brine dissolution and sealing the pond dikes to decrease pond leakage back to the lake. 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 considered. Additional information concerning project alternatives will be fully described in 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 proposed a mixture of mitigation restoration approaches to include: 1) re-establishment of natural/historical aquatic functions through utilization of freshwater water rights to be used for wildlife habitat and/or irrigation of managed wetlands areas; 2) rehabilitation of degraded aquatic resources; and 3) enhancement of aquatic resources.

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 Mr. Bill Damery, Utah Division of Water Quality, 195 North 1950 West, Third Floor, P.O. Box 144870, Salt Lake City 84116-4810, or email

wdamery@utah.gov on or before **August 8, 2013**.

HISTORIC PROPERTIES: The Corps will initiate consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act, as appropriate.

ENDANGERED SPECIES: The project will not affect any Federally-listed threatened or endangered species or their critical habitat that are protected by the Endangered Species Act.

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.

The above 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 will also be 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-UO must be submitted to the office listed below on or before **August 8, 2013**.

Jason Gipson, Project Manager
US Army Corps of Engineers, Sacramento District
533 West 2600 South, Suite 150
Bountiful, Utah 84010
Email: 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 the Corps' project manager Jason Gipson, 801-295-8380 x14, Jason.A.Gipson@usace.army.mil.

Attachments: 21 drawings