From:	Philip Johnson
To:	Ferrigan, Jennifer (EGLE)
Cc:	Wygant, Adam (EGLE); Snow, Mark (EGLE); Carey, Kevin (EGLE); Dusenbury, Stafford (EGLE); jean@sargentsand.com
Subject:	Re: Sargent Sand request for information
Date:	Thursday, February 17, 2022 9:54:58 AM
Attachments:	Site Photos_Sargent Sand Co_Permit Renewal 2022.pdf

Dear Ms. Ferrigan:

I am writing in response to the EGLE Office of Oil Gas and Mineral (OGM) letter to Sargent Sand Co (SSC) dated February 4, 2022 requesting additional information as part of OGM's review of SSC application for permit renewal. OGM has requested additional information from SSC on the following items below in bold. Responses to these questions follow each section along with the attached photos.

Confirm in writing if economic production of sand is now complete in Cell Unit 2. Provide a timeline and details for reclamation of the western-facing slope of the dune in Cell Unit 2, such that no destabilization of the dune occurs from protracted final reclamation.

Sargent Sand has not completed economic production of sand from Cell Unit 2 (CU-2). Both surface and subaqueous reserves remain. The time frame for completion of mineral extraction from CU-2 is based on market demand. The western-facing slope of the dune in CU-2 is stable. During mining operations interim measures are taken to reduce the potential for destabilization of the dune and wind driven off-site landward migration of sand. These measures have been successful and may include grading slopes to stable angle of repose, placement of snow/wind fence, redistribution of surface overburden over disturbed areas, temporary seeding and/or mulching, graveling of temporary haul roads or a combination of these and other best management practices (BMP's).

The western facing slope of CU-2 has been rough graded and temporarily stabilized through the installation of over 6,100 feet of snow/wind fencing, distribution of overburden containing native plant material, and transplanting of dune grass from on-site nursery stock to impacted areas (see attached photos). Perimeter edges of the CU's are monitored for potential off-site migration of wind-blown sand. When areas of sand migration are identified the sand is mechanically removed, returned to the mining area, and measures are taken (dune grass plantings and strategic placement of wind fence) to stabilize the area. This process has been approved and observed by OGM inspectors over the years and recently completed again in select areas during the 2021 mining season.

The extent of permitted surface and sub-aqueous mining activities of CU-2 are still within authorized limits. Any further significant excavation to the east of the upper CU-2 westerly slope face is not anticipated. Minimal reduction in dune elevation may occur during final shaping in order to create/complete stable westerly facing slope profiles. Sufficient distance between the currently authorized mining activity and the west limit of the the easterly 100' buffer remains to complete this activity. Once final shaping is complete impacted areas are planted with dune grass or seeded and mulched dependent on conditions. The snow/wind fence shall be maintained until successful revegetation of the slope and impacted areas occur.

As verified by OGM inspection, these practices have successfully prevented destabilization of the westerly facing slope in CU-2 and significantly reduced potential for off-site migration of sand. These BMP's will continue until extraction in CU-2 is complete, is final graded and revegetated, is placed into interim status, and SSC request OGM inspection and final closure of CU-2. Completion of mineral

extraction and final reclamation of CU-2 could occur in this permitting cycle, but is entirely dependent on market demand. As mining progresses towards completion SSC continues to shape and revegetate completed areas within the active CU's. SSC remains committed to taking all necessary steps to prevent destabilization of the CU-2 dune or other areas impacted during the mining operations.

Please confirm in writing, as notification consistent with Sargent Sand's 1994 amendment of the PCUMRP, if there were Pitcher's Thistle relocation activities that have transpired since the 2017 permit renewal. Provide the map indicating the location of the Pitchers Thistle plants. If no plants were found, provide a statement to that affect as well and the reason(s) why none were found.

The last renewal of the Sargent Sand permit occurred February 2, 2017. In late 2017, subsequent to the last permit renewal, an additional 112 juvenile Pitcher's Thistle (PT) plants were identified in CU-17 and relocated to the designated Protected Plant Areas (PPA). This relocation occurred in late August of 2017 and maps (referenced in OGM letter dated Feb 4, 2022) were updated prior to OGM site visit of August 30. No new changes have been made. OGM staff reviewed the updated mapping and inspected portions of the designated PPA's during the August 30 site inspection. These areas have been inspected annually by OGM during routine site inspections. A significant number of relocated PT seedlings have survived to maturity over the past 5-8 years. The areas designated as PPA are well marked and outside the area of potential disturbance by human activity (see attached photos).

In late 2019 OGM was notified by SSC of their intent to complete activity in CU-17 and requested to open CU-20. Prior joint inspections by OGM and SSC of both CU-19 and CU-20 identified these cells as primarily forested with a lack of suitable habitat for PT. The email received by OGM referenced an incomplete walk through of CU-20 due to snow cover and the inspection would be completed in the spring. A walk though was completed by trained SSC staff in the spring of 2020 and no PT was observed. Due to a lack of market demand and other business considerations, land clearing and mining related activities did not commence in CU-20 until late in the 2021 mining season. As is common practice by SSC, prior to recommencing mining operations in the spring, previously impacted areas are again inspected for any new occurrences of PT as mining operations create optimal conditions (disturbed open dune environment) for natural PT propagation. None were identified in these CU's due to the lack of suitable habitat.

SSC remains committed to this process to ensure no impacts to PT occur. SSC confirms and commits that it is their intention and practice to mitigate potential damage to PT by complying with the terms and conditions of their mining permits including those conditions prescribed in the 1994 amendment to the Progressive Cell Unit Mining and Reclamation Plan. SSC has complied with all terms and conditions of their mining permit without violation. SSC remains committed to successful completion of the mining operation while accomplishing long term stabilization of the site as they have continued to successfully demonstrate. SSC respectfully request OGM proceed with reissuance of their Part 637 mining permit. Should OGM need additional information to complete their review please contact me.

Sincerely,

Philip M. Johnson, Agent for Sargent Sand Co.
Resource Planning & Design, LLC
Environmental Planners & Consultants
Grand Haven, MI
Direct (616) 638-5735
email johnsonphilip@sbcglobal.net

Please see attached request for information regarding Sargent Sand Company's permit renewal application for the Ludington Site, permit number SAS-LS-108.

Thank you,

Jennifer A. Ferrigan

Geologist – Bond Specialist

Oil, Gas, and Minerals Division

Michigan Department of Environment, Great Lakes, and Energy

Mobile: 517-290-6982 | FerriganJ2@michigan.gov

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From: Philip Johnson
To: Ferrigan, Jennifer (EGLE)
Cc: Wygant, Adam (EGLE); Snow, Mark (EGLE); Dusenbury, Stafford (EGLE)
Subject: Sargent Sand T&E Mapping
Date: Thursday, February 17, 2022 6:25:02 PM

Hi Jennifer. As a follow-up to the responses submitted to OGM's questions about identification, relocation, and mapping of Pitcher's thistle (PT), no new relocation has occurred that required updates to mapping already provided. Although most of the remaining cells are significantly forested and do not provide suitable habitat for PT, all areas impacted during the previous mining season will be re-inspected for PT prior to recommencing mining activity or moving into new cell units. If encountered, PT plants will be flagged, relocated, mapped, and OGM notified. Sargent Sand invites OGM to conduct on-site inspection and verification of existing conditions, PT mapping, and the Protected Plant Areas during the regular spring and seasonal site inspections. Please let me know if anything else is needed to complete review of Sargent Sand permit renewal request. Thanks Jennifer.

Phil

Philip M. Johnson
Resource Planning & Design, LLC
Environmental Planners and Consultants
Direct (616) 638-5735
email johnsonphilip@sbcglobal.net