

Response to comments

Cayuga Salt Mine – Cargill Incorporated Department Initiated Modification

DEC ID#: 0-9999-00075/00001

Mined Land ID: 70052

We thank you for your comments on the Cayuga Salt Mine – Cargill Incorporated Department Initiated Modification (DIM). The New York State Department of Environmental Conservation (Department) has carefully reviewed them and given them due consideration in our decision-making process. The Department has made a determination, to issue a permit, with conditions. Below are the comments received and the Department's responses. A copy of the permit is attached.

Response to John Dennis' September 25, 2020 comments -

Comment 1: EIS -Why hasn't the DEC required Cargill—during the 50 years they have owned and operated Cayuga Salt Mine--to conduct an Environmental Impact Statement (EIS) on the Cayuga Salt Mine, when American Rock Salt has performed two EISes in the past 18 years on their newer and safer room and pillar salt mine in Livingston County?

Response: Comments raised in the EIS section are largely unrelated to the Department Initiated Modification (DIM) and have been considered and addressed through Department staff affidavits, court proceedings, as well as negative declarations and responsiveness summaries. These comments refer back to previously reviewed and approved applications and are not subject to review under the DIM. DEC's analysis of previous applications submitted by Cargill have not identified adverse significant impacts that would require an EIS.

Comment 2: "We hire the world's best consultants". It may be that Cargill does hire some of the world's best consultants. One of their mining consultants, RESPEC in Rapid City, SD, has an excellent reputation. In its 4-page annual 2019 annual report to the DEC, it is written that geophone data are "reviewed weekly by RESPEC."

2.1 Cargill's rock mechanics consultant, Gary Petersen of RockTec Solutions. I find it truly alarming that Mr. Gary Petersen is Cargill's rock mechanics consultant for Cayuga Salt Mine. According to the web site (<http://www.rocktecsolutions.com/aboutusRockTec.html>), the firm RockTec Solutions consists of Mr. Gary Petersen, his son, Brad Petersen and someone named Kristen Petersen. As can be seen, the attached CV for Gary Petersen indicates that he obtained a B.S degree in mining engineering in 1975 from Michigan Tech. However, no subsequent training or participation in professional conferences is listed.

2.2 A missing publication. On page one of the attached CV for Mr. Petersen, he writes in the first paragraph under “work experience”) that an “Applied Rock Mechanics (ARM) protocol which has been recently published...”. He writes that this publication “incorporates the last 22 years of evaluating underground mines.”

Response: These comments are unrelated to the DIM.

Comment 2.3: Lessons learned from the Retsof Salt Mine Disaster. To my knowledge, Mr. Petersen has never authored any published reports regarding the causes of the Retsof Salt Mine Disaster of 1994-95 and how it was that two of his experimental mining panels at Retsof that failed and resulted in the flooding of what was at the time the largest salt mine in North America. On the attached CV, Mr. Petersen merely lists in his list of “Clients”, “Akzo Nobel – Retsof Mine (Rock Salt), Retsof, NY.”

Response: These comments are unrelated to the DIM

Comment 2.4: The decision to mine under Anomaly C at Cayuga Salt Mine.

Dr. Vincent Scovazzo, the John T. Boyd geology consultant who is paid by Cargill who presently reports to DEC wrote in his review of Cargill’s 2018 Annual Report to DEC that:

“The required additional investigations and reports have been performed for Anomaly C. Undermining of Anomaly C will be completed using large pillar configuration and not the more yielding pillar production pillar typically used at the Cayuga Mine. Cargill has agreed that no additional mining will occur under Anomaly E and no mining will occur under Anomaly D and the Frontenac Point Anomaly. Additional investigations and reports need to be undertaken for anomalies A and B, and mining in these areas should be avoided until reviewed and approved by the NYSDEC.” Etc.

Response: Conditions in the DIM permit have been updated to reflect the additional investigations and the approvals/restrictions of mining. Special conditions were added to the mining permit in 2003 requiring the submission of additional investigations of a disturbed salt zone and thin rock overburden before DEC authorized mining to proceed into certain areas. Anomaly C was identified as one of these areas. Once investigations were completed and reviewed, DEC determined that mining under Anomaly C could be conducted using large pillar configuration. These investigations and reviews also concluded that mining the Frontenac Point Anomaly would not occur or be permitted.

Comment 3: Release of reports to the public. Why haven’t Cargill’s technical consultants’ reports—which ostensibly have been released to the DEC and/or to the independent mining consultant that is retained to advise the DEC—been FOILable? How is the DEC able to responsibly regulate Cargill’s mining operations under Cayuga Lake if it consistently replies that DEC has “no responsive records” when such reports are FOILED?
Release of reports to the public

Response: Comments raised in this section are unrelated to the DIM and have been previously addressed through Department responses to information requests, staff affidavits, and court proceedings and rulings. However, requests submitted to DEC under FOIL are reviewed by DEC's Office of General Counsel who determine, based on the provisions of the Freedom of Information Law, what can be disclosed.

Comment 4: Proposed transfer of control over the "independent consultant" to Cargill.

Why is DEC proposing to hand over to Cargill the choice, control and ownership of the "independent consultant" whose job it is to advise the DEC on mining issues? Once the "independent consultant" becomes Cargill's consultant they will own those reports and they will very likely become non-FOILable. How is it that an agency whose job is to regulate mining appears to be ready to collude with the client to prevent the public from having any oversight of the exploitation of publicly-owned resources under one of New York most valuable lakes?

Response: Cargill is continuing to utilize John T. Boyd as their consultant. The consultant retained by Cargill as required by the permit condition will advise DEC in its review of the Annual Report and any application for permit modification or alteration involving technical expertise review and response to any issues that arise regarding potential stability issues, Monitoring (Item 18), and/or Non-routine Incidents (Item 19).

Comment 5: Financial Assurance. This topic has already been address above, but it is worth remembering that about a decade after the Retsof Mine collapse, Akzo Nobel reportedly paid a sum of \$20M to be releasing from liability for salinizing the deepest freshwater aquifer that was above the mine. As I recall, \$3M went to the DEC and \$17M to Livingston County. It may be that the \$3M was soon expended and the DEC plugged and abandoned the wells that had been installed to monitor salinity levels in the affected aquifer. In any event, the reported \$3.5M that DEC requires Cargill to post for financial assurance is a de minimus amount. Like the on-going surface brine releases in the Tully Valley, there will essentially be no way to halt brine venting into Cayuga Lake once a rubble chimney has established a hydraulic connection between the flooded or flooding mine and the lake. The salinization risk cannot be computed by simply injecting one volume of saturated brine from the mine into the lake over a period of time. On-going sources of fresh water may continue to dissolve additional salt with new brine continuing to flow to the surface as it does in the Tully Valley.

Response: These comments are unrelated to the DIM.

Comment 6: Mining under land. Why hasn't DEC proceeded with the logical solution to the ever-increasing risks associated with mining under Cayuga Lake and required Cargill to shift all its salt mining operation to under land with no physical connectivity to the mine under the lake?

Response: These comments are unrelated to the DIM. Cargill is permitted to operate beneath Cayuga Lake and all mining operations conform with the permit conditions and the Mined Land Reclamation Law.

Response to Serena McCloud's comments (9/11/2020) submitted on behalf of her client CLEAN

Comment: As stated, our Prayer for Relief (Petition dated December 13, 2017, Index No. EF2017- 0285, NYSCEF Doc. No. 2):

Petitioners respectfully pray that the *Court void the actions of the DEC in issuing the modified mining permit* and enjoin any activity resulting in the digging of Shaft No. 4, the new tunnel and ongoing mining in the permitted northern reserves until SEQRA has been fully complied with and *until production by DEC and Cargill of all documents and studies and related information that show the reasoned elaboration of the basis for their determinations.* (emphasis added)

This case is still pending and therefore CLEAN considers it inappropriate for DEC to:

1. make changes to the disputed permit without either notifying or consulting the court and parties, and to fail to produce the supporting documents and studies and related information that show the reasoned elaboration of the basis for such changes, and to mischaracterize the changes as “mostly housekeeping changes;”
and
2. further shield DEC’s determinations from public review and participation, and further insulate relevant documents and studies and related information from disclosure under established administrative (FOIL) or legal (discovery) procedures. These defects in the proposed permit modification are discussed below in more detail.

Response: The Third Judicial Department recently dismissed the appeal by the appellants. The DIM was made available for public comment and does not propose to authorize any material or significant changes in the operations and mining methods utilized at the mine.

Comment: CLEAN has emphasized the mining risks associated with the FPA, including evidence that the 1000-foot setback from the FPA was violated by Cargill and the DEC took no action to reprimand or punish a blatant permit violation.

Response: Comments raised are largely unrelated to the DIM, and have been considered and addressed through DEC staff affidavits, court proceedings, as well as negative declarations and responsiveness summaries. These comments refer back to previously reviewed and approved applications and are not subject to review under the DIM.

Comment: This summary by DEC fails to mention a crucial change. The consultant is currently DEC’s consultant (“*The choice of the consultant shall rest in the sole discretion of the Department. The Department reserves the right to change its choice of consulting firm at any time upon written notice...*”) but would become Cargill’s consultant under the proposed new permit language (“*The Consultant is Cargill’s consultant...*”).

Response: Incorporated above under Comment 4.