

STATE OF NEW YORK  
SUPREME COURT : COUNTY OF TOMPKINS

IN THE MATTER OF THE APPLICATION OF CAYUGA LAKE ENVIRONMENTAL ACTION NOW (CLEAN), an Unincorporated Association by its President JOHN V. DENNIS; LOUISE BUCK; BURKE CARSON; JOHN V. DENNIS; WILLIAM HECHT; HILARY LAMBERT; ELIZABETH and ROBERT THOMAS; and KEN ZESERSON,

Index No. EF2021-0422

*Petitioners,*

**AMENDED VERIFIED  
PETITION**

For a Judgment Pursuant to Article 78 of the New York Civil Practice Laws and Rules

-vs-

THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, and CARGILL INCORPORATED,

*Respondents.*

Petitioners by their attorneys, LIPPES & LIPPES, Richard J. Lippes, of counsel, respectfully allege as follows:

**I. INTRODUCTION**

1. Petitioners are commencing this special proceeding challenging the February 12, 2021 modified mining permit issued to Cargill Incorporated (hereinafter cited as “Cargill”) for its Cayuga Salt Mine, issued by Respondent New York State Department of Environmental Conservation (hereinafter cited as “DEC”), which properly precludes Cargill from mining under the Frontenac Point Anomaly (hereinafter “FPA”) and a 1000-foot setback or buffer from the anomaly, and precludes mining under anomalies A and B until further study is undertaken, as will be more fully explained in this Petition and Affidavits. The basis of Petitioners’ challenge is the failure of the DEC to take a hard look at the full range and location of the FPA and anomalies

A through E in violation of the New York State Environmental Quality Review Act; Environmental Conservation Law § 8-0101, et. seq. (hereinafter cited as “SEQRA”). Therefore, due to the violation of SEQRA, Petitioners seek to void the grant of the modified mining permit, and enjoin any further mining under the FPA and other anomalies, and also under a 1000-foot setback from such anomalies, until a hard look is taken at the location and condition of all of the anomalies so that SEQRA will be fully complied with.

## II. PARTIES

2. Petitioner, Cayuga Lake Environmental Action Now (hereinafter cited as “CLEAN”) is an unincorporated association that was formed in April 2017 for the express purpose of protecting Cayuga Lake from manmade sources of pollution, and from damage to the lake that may be incurred through Cargill’s mining under the lake, through Cargill’s brine and salt dust releases into the lake, and through mine flooding or mine collapse. Members of CLEAN use and recreate on Cayuga Lake and its shoreline. John V. Dennis is a co-founder and President of CLEAN, and brings this action on his own behalf and on behalf of the association membership. Petitioner Dennis resides in the Village of Lansing at 893 Cayuga Heights Road, Ithaca, New York.

3. Petitioner Louise Buck resides at 1162 East Shore Drive, Ithaca, New York. Dr. Buck is a member of CLEAN, and since her home is right at water’s edge, she uses Cayuga Lake for daily activities such as kayaking, sailing, swimming, paddle boarding, birding and general enjoyment of the Lake’s other wildlife and scenic offerings. She also monitors for harmful algal blooms (HABs) along a stretch of shoreline in the vicinity of her home where such blooms of harmful algae have been observed.

She has been a faculty member of Cornell University's College of Agriculture and Life Sciences for 30 years and specializes in natural resources and environmental management. She is a Petitioner in this proceeding due to her concerns of significant adverse effects if there were a mine collapse, particularly where the thinning bedrock occurs at anomalies A through E. She is also concerned that the modified permit at issue herein allows Cargill to choose and manage the consultant that will report to the DEC, rather than allowing the DEC to choose and manage the consultant as was the case prior to this modified permit.

4. Petitioner Burke Carson resides at 10 Willow Point Road, in Ithaca, New York. His drinking water, garden watering and washing comes directly from Cayuga Lake water. He also regularly uses the Lake for boating and for observing wildlife on the Lake. He is concerned about the already high levels of sodium in his drinking water, and any increase in salinity of the water through Cargill's continuing mining under the anomalies and the potential disastrous effects of a mine collapse under or near such anomalies.

5. Petitioner John V. Dennis, previously indicated as the President of CLEAN, resides in the Village of Lansing at 893 Cayuga Heights Road, Ithaca, New York. He receives municipal water from Bolton Point Water, a facility which belongs to the Southern Cayuga Lake Intermunicipal Water Commission and which provides water from Cayuga Lake to about 35,000 homes in the Towns of Lansing, Ithaca, and Dryden as well as the Villages of Lansing and Cayuga Heights. Dr. Dennis is an avid kayaker and uses a motorboat on the lake for pleasure and for research on water quality.

6. Petitioner William Hecht resides at 5525 State Route 90, Fire Lane 20, Union Springs, New York. Mr. Hecht resides directly on the shoreline of Cayuga Lake, and receives his drinking water from the lake. He regularly hikes and recreates on the shoreline and on the

lake. As a retired geologist, Mr. Hecht is also concerned about a potential mine collapse under the anomalies and its consequences to the lake and his property.

7. Petitioner Hilary Lambert resides at 1676 Hanshaw Road, Ithaca NY. She has a water resources-focused Ph.D. in geography. She also enjoys hiking along the lakeshore and wades and swims in its waters with her family, including grandsons. She works full time for an organization to educate the public about, and to protect, Cayuga Lake. Its good health is at the center of her life and work.

8. Petitioners Elizabeth and Robert Thomas own lakeshore property at 8627 Green Lane Shore, Interlaken, New York, on Cayuga Lake. They receive their drinking water directly from the lake and are concerned that a catastrophic mine collapse could occur due to the thinning bedrock at the roof of the mine at anomalies A through E.

9. Petitioner Ken Zeserson resides at 83 Maplewood Road, in Ithaca, New York. His property abuts Cayuga Lake on the west shore, and his drinking water comes directly from the lake. He is concerned that if the mine suffers a catastrophic collapse, lake sodium levels will be elevated way above the Environmental Protection Agency's Secondary Drinking Water Standard for many years.

10. Each of the individual Petitioners enjoys the lake for aesthetic and recreational purposes and, with one exception, they all rely on the lake for their drinking water. In the event of a mine collapse or flooding their use and enjoyment of the lake would be severely and adversely impacted.

11. Respondent New York State Department of Environmental Conservation's headquarters is located at 625 Broadway, Albany, New York. They are a New York State agency responsible for approving or denying mining permits under Environmental Conservation

Law, Article 23, Sections 2701 et. seq. As such, they have jurisdiction over the Respondent Cargill and its salt mining operation and are responsible for assuring that SEQRA is fully complied with prior to a determination to approve or deny a permit.

12. Respondent Cargill, Inc. is a corporation incorporated under the laws of the State of Delaware. Their headquarters are located at Wayzata, Minnesota. As the applicant and recipient of the modified mining permit, they are made a Respondent herein as a party necessary to effectuate the equitable relief requested in this proceeding.

### **III. FACTS**

13. Cargill has a permit to mine salt under about 9,500 acres of land under Cayuga Lake of which Cargill has already mined about 3,000 acres.

14. As mining continues northward under Cayuga Lake, the strata between the roof of the mine and lake continually thin. Based on information and belief, as little as 80 feet of geological section remains above the comparatively weak unit termed the “evaporite section” in certain sections of the Cayuga Lake glacial valley, which means that the mechanically strong “carbonate beam” layer has been thinned or glacially-gouged out at the center of the lake. Therefore, the excavation of mine cavities in the zones which may have water penetration and weakened strata jeopardizes global mine stability and degrades the capacity of the evaporite section to resist water intrusion and ceiling collapse in the mine itself.

15. The DEC has now recognized that hazardous conditions exist in various areas within Cargill’s permitted reserves where this thinning bedrock presents a hazard of potential mine collapse. Cargill’s consultants have referred to areas already identified as Anomalies A through E, and the FPA (collectively the “Anomalies”).

16. It is because of the hazards presented at the Anomalies that the DEC has modified Cargill's permit, prohibiting mining under the FPA and within a 1000-foot buffer around the FPA, and mining under Anomalies A and B until further study can be completed concerning the potential hazards under these two Anomalies. The DEC has not modified the permit as it relates to Anomalies C, D and E.

17. While Petitioners applaud DEC's finally recognizing the hazards presented under FPA and Anomalies A and B, the DEC failed to take a hard look at the actual configuration of the anomalies, and particularly at Anomalies C, D, and E, where similar conditions exist.

18. Moreover, in geographically determining the extent of the FPA, the DEC has accepted a generalized oval area utilized by Cargill in their mine map included in their 2017 Annual Report to DEC, and in a similar map included in a February 2018 letter sent to DEC by their consultant Boyd, to indicate the geographic area where the FPA exists.

19. However, neither Cargill nor the DEC has explained why a 2016 map of the FPA produced by Cargill consultant, RESPEC, is not the more accurate map of the FPA. Nor do they appear to have taken a hard look at the extent to which mining within 1000 feet of the glacial scour anomaly running from Anomaly A to Anomaly E, consisting of a continuous "trough" of thin bedrock, does not pose an unwarranted risk to global mine stability.

20. This issue has been fully explained by Dr. Raymond Vaughan in his Affidavit of June 7, 2021, attached hereto as Exhibit "A". Dr. Vaughan has provided the disputed maps as Exhibits B, C, and D, to his Affidavit, indicating why the maps at Exhibits B and C are more likely to show the actual geographical area of the FPA fault line and adjacent anomalies, and why the generalized oval does not properly depict the hazardous areas that should be protected.

21. Cartographer Karen Edelstein describes her methodology for layering the anomalies and their putative 1000-foot setbacks over Cargill's 3-year mining plan map in her Affidavit of June 8, 2021. Ms. Edelstein provides her maps in her affidavit as Exhibits A, B, C, and D. Ms. Edelstein's affidavit is attached hereto as Exhibit "B".

22. In his affidavit attached hereto as Exhibit C, CLEAN president John V. Dennis explains the extent to which Cargill has reaped economic benefits of as much as \$173M as a result of the DEC not learning of the existence of Anomaly E until after Cargill had mined under it. He also provides the figure of as much as an additional \$34M that would accrue to Cargill if DEC allows Cargill's preferred "representative oval" map of the FPA to trump RESPEC's linear version of the FPA. The RESPEC map version of FPA is 5.3 times longer than Cargill's preferred "representation oval."

23. The nature and extent of the hazards posed by mining under and near anomalies are explained by Dr. John K. Warren in his Affirmation of June 7, 2021, attached hereto as Exhibit "D". In his Affirmation, Dr. Warren describes how the slow, ongoing distortion of bedrock above a mine, known as subsidence, affects both leakage through bedrock and its mechanical strength. Thus, while water leakage into a mine may be currently manageable, such leakage tends to worsen over time. Dr. Warren warns that most active salt mines are lost to flooding, as detailed in his 2017 paper titled *Salt usually seals, but sometimes leaks*. Such mine failure risks are aggravated by thinning bedrock and faulting, and he therefore emphasizes the need for a protective buffer around the FPA and recommends that further mining beneath the trough of thin bedrock between Anomalies A and E be halted until the risks are fully evaluated.

24. By not properly investigating the proper geographic extent of the FPA and Anomalies A through E, including the continuous trough of thinning bedrock that runs from

Anomaly A through Anomaly E, and by not recognizing the associated hazards and the need to provide protective requirements for all of the Anomalies and a 1000-foot buffer around them, the DEC has failed to take a hard look at this important safety issue.

25. During the comment period on DEC's proposal to modify the mining permit, John Dennis objected in a letter dated September 25, 2020, that the proposal would give Cargill control over the independent consultant advising the DEC on mining at Cayuga Salt Mine. See [https://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/cayugasmdimcmmnts.pdf](https://www.dec.ny.gov/docs/permits_ej_operations_pdf/cayugasmdimcmmnts.pdf) at page 3. In part, Mr. Dennis expressed concern that access to mine-related documents under FOIL---already excessively restricted---would become even more limited. DEC responded by repeating portions of his comment without directly addressing it. Id. It is true that Cargill has paid for DEC's consultant since about 2002, but this consultant has always—until February of this year—reported directly to the DEC.

**FOR A FIRST CAUSE OF ACTION:**  
**VIOLATION OF SEQRA**

26. Petitioners repeat, reallege and incorporate each paragraph hereinbefore mentioned.

27. Prior to issuing the modified permit, DEC, as the lead agency for SEQRA compliance was required to apply a “hard look standard” in fulfilling its SEQRA responsibilities, which requires an agency to:

- “(1) Identify all areas of environmental concerns; and
- (2) Take a hard look at the environmental issues identified; and
- (3) Provide a reasoned elaboration for the decisions that are made, including whether or not to do an Environmental Impact Statement.”



28. In issuing the Negative Declaration indicating that there will be no significant adverse environmental consequences and amending the permit, the DEC failed to meet the requirements of SEQRA. The DEC has not met the hard look standard by identifying relevant areas of environmental concern, including the potential significant adverse environmental consequences of mining under all anomalies, taking a hard look at the multiple Anomalies and the extent to which they are part of a single “trough” of thin bedrock. Moreover, the DEC has not made the required reasoned elaboration of the basis why these Anomalies were not considered.

29. Furthermore, in issuing the modified permit, the DEC failed to specify a definitive shape and orientation of the FPA Anomaly. Similarly, the DEC has failed to provide a reasoned basis for drawing a 1000-foot buffer around only the short oval version of the FPA as opposed to drawing a buffer drawn around both versions of the FPA. As a result, DEC has not performed an independent analysis, as required by SEQRA and its regulations, of the potential adverse environmental consequences that may occur when mining takes place under anomalies associated with thinning bedrock and faulting. The areas at risk include not only the FPA and Anomalies A through E and their respective 1000-foot setbacks, but also the intervening portions of the trough of thinning bedrock that extends from Anomaly A through Anomaly E. The modified permit ignores both the RESPEC map of the FPA and the Boyd map that shows Anomalies A through E as one long continuous trough-like anomaly rather than five discrete “islands” of thin bedrock.

30. Due to the foregoing, the DEC should immediately halt any further mining under the areas known to be affected by thinning bedrock and faulting, including areas within 1000-

foot setbacks around both versions of the FPA and around the continuous trough of thinning bedrock extending from Anomaly A to Anomaly E.

31. This suit also seeks restoration of the previous permit language which allows DEC to manage their own consultant

32. No previous proceeding concerning these issues has been brought in this or any other court concerning DEC's modified permit.

**WHEREFORE**, Petitioners respectfully pray that the Court:

1. Enjoin any activity resulting in mining under the FPA, including both versions thereof, and under the continuous trough of thinning bedrock extending from Anomaly A through Anomaly E, and under the 1000-foot buffer surrounding all of these, until SEQRA has been fully complied with; and
2. Order the DEC to independently evaluate all data and reports relating to the Anomalies; and
3. Order the DEC to restore the prior permit language whereby DEC has the authority to manage their technical consultant which will be paid by Cargill.

DATED: Buffalo, New York  
June 16, 2021

Yours etc.,



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Attorneys for Petitioners

VERIFICATION

STATE OF NEW YORK )

COUNTY OF ERIE ) SS.:

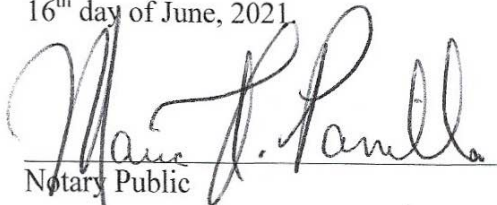
**RICHARD J. LIPPES, ESQ.**, being duly sworn, deposes and says:

I am the attorney for Petitioners in this proceeding; that I have read the foregoing **AMENDED VERIFIED PETITION** and know the contents thereof; that the same is true to my own knowledge, except as to matters therein stated upon information and belief and as to those matters, I believe them to be true. The grounds for my belief as to all matters not stated upon his knowledge are based upon my investigation of the facts and circumstances in this action, and the reason why the verification is not made by the Petitioners is that the Petitioners reside in a county other than the county where your deponent maintains his law office.



Richard J. Lippes

Sworn to before me, this  
16<sup>th</sup> day of June, 2021.

  
Notary Public

MARIA T. PARRILLA  
Notary Public, State of New York  
No. 01PA4891745  
Qualified in Erie County 2023  
My Commission Expires May 4, 2023