

Regulatory Process and Uncertainty – John V. Dennis and George Patte

**Is Regulatory Process adequate to meet the complex geological and hydrological science? How is the potential for natural resource damage assessed? Might MSHA be able to make the mine safer if DEC participated in quarterly inspections and was able to share mine consultant reports with MSHA?**

The New York State Mined Land Reclamation Law (MLRL) regulates the extraction of minerals from the earth and outlines the technical elements required in a Mined Land Reclamation Permit application and mined land use plan, including the proposed mining and reclamation activities. The State Environmental Quality Review Act requires examination of the environmental impacts and mitigation potential of proposed activities for permits including Mined Land Reclamation Permit applications. The implementing regulations for these laws ensure sound technical review of mining permit applications by experienced DEC Mined Land Reclamation Specialists and other associated DEC technical programs as necessary. When circumstances warrant the need for review of more complex underground mine engineering design and rock mechanics, experienced third party consultants assist DEC with the review process.

The Retsof Mine collapse in 1994 brought about significant changes to how DEC regulates underground mining. It demonstrated the need for independent third-party consultants to review the complex technical aspects of underground mine design and rock mechanics. When assessing potential environmental impacts to natural resources and the public, DEC considers the information provided in the application and the subsequent technical review. The MLRL also requires that financial security be furnished before a permit is issued to ensure the performance of reclamation. Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Section 423.1 provides that the amount of financial security be based on the total estimated cost for completion of reclamation consistent with the basic reclamation requirements described in 6 NYCRR 422.3. This is recalculated during the processing of each permit renewal or modification application. However, neither statute nor regulations intend for a reclamation plan to be an insurance policy for catastrophic loss and development of such a policy would be outside DEC's scope and the current MLRL.

The primary focus for the Mine Safety and Health Administration (MSHA) is the regulation of miners' health and safety. DEC's focus is compliance with the permit conditions and the MLRL. Due to these differences in regulatory authority, DEC and MSHA work independently at mine sites to cover their respective jurisdictions. If MSHA or DEC require the assistance of the other agency to further their regulatory goals, they may collaborate, but that has not been necessary at Cargill. The MLRL does not contain specific miner safety provisions or otherwise overlap with the jurisdiction of MSHA.

**Is the public participating in the Regulatory Process?**

There are public participation opportunities in the rulemaking process, which is also known as the regulatory process. Whenever DEC amends the mining regulations, the public may comment on the proposed changes, and those comments are considered, before final regulations are adopted (Section 202 of the State Administrative Procedures Act). DEC responds to and investigates public complaints alleged violations, and/or potential noncompliance with permit conditions. Additionally, the public has the opportunity for input during the permitting process for new mining applications or modifications to existing mines.

## **What happens to historical technical data and reports if the mine changes ownership?**

All historic reports and mined land use plans required for submittal by permitted mine sites are maintained by DEC for currently permitted mines. All records for mines that have been reclaimed and closed are maintained for a minimum of three years, per DEC's records retention policy. Some records are maintained for a longer period of time at the discretion of DEC.

## **Who's responsible for a potential mine failure and resource damage? Cargill, new owner, NYSDEC?**

The permittee is responsible for the operation of the mine in compliance with the MLRL, consistent with MLRL regulations, the mined land-use plan and the specific conditions of the permit. Cargill, as the current permittee, is the responsible party for any potential mine failure and natural resource damage. DEC's actions and responsibilities include monitoring the mine for global stability. The State would take appropriate legal action to hold Cargill responsible for damages to environmental and natural resources. If the salt mine is sold, then the new owner/permittee assumes liability.

## **Supporting Information and Questions – John Dennis and Raymond Vaughan**

### **1. How and why have Anomaly A and Anomaly B been allowed to shrink over the years without any express justification?**

According to Cargill's permit, paragraph 8:

***8. Maintain Area Markers for Permit Term - The permittee shall provide permanent markers such as stakes, posts or other devices acceptable to the Department to identify and delineate the permit area, as outlined on the approved Mining Plan Map. These markers are to be installed prior to the start of mining and shall be maintained for the duration of the permit term.***

Even though stakes and posts can't be driven into the waters of Cayuga Lake, the requirement of "other devices acceptable to the Department" indicates Cargill needed to physically define and demarcate the permit area, perhaps by electronic, GIS-based, or other means. The shrinkage of Anomalies A and B, as indicated in Fig. 1, doesn't satisfy the permit requirement to establish definite limits for approved mining. If the size of Anomalies A and B in Fig. 1 are "just" Boyd depictions, not approved Mining Plan Maps, then the question could be rephrased as follows: **Boyd and its staff are recognized as experts. How did DEC justify the shrinkage of anomaly boundaries, from the larger Boyd boundaries to the smaller boundaries shown on approved Mining Plan Maps?**

In mining, an anomaly refers to an area where there is a difference between what is observed at a particular location and what would normally be expected. DEC first became aware of the lake scour areas identified as Anomalies A and B in the late 1990s during the review of the modification for the 5,000 plus acre expansion. Available seismic data from the late 1980s and early 1990s were initially evaluated by Cargill and reviewed by the John T. Boyd Company (Boyd). Over the past 20 plus years Cargill continued to perform additional seismic studies and processing of the seismic data to further define the anomalies. These include additional seismic surveys (2009, 2016 and 2019), reprocessing of older data, geologic studies, annual reporting and inspections, and geomechanical and engineering information reviewed by Boyd. Data and information from the 1980s and 1990s provide the basis for the original delineation of the anomalies. The additional studies and analyses refined the perimeter and orientation of the anomalies. The additional studies and data processing are reflected in the variations in

the size and orientation of these potential features from the original locations and shapes depicted on the maps.

The delineation of these anomalies is defined using seismic data, collected by technical consultants contracted by Cargill and reviewed by a qualified third party. Additional seismic data and reprocessing of previously collected data has resulted in a better understanding of the horizontal and vertical extent of the anomalies. Cargill provides the data and the results of the processing to Boyd who reviews the information and confirms the location, size and shape of these features.

**2. Accepting for the sake of argument that the newer (smaller) boundary of Anomaly B is correct or justified, how is it possible that Cargill's map (e.g., right-hand panel of Fig. 1) shows intended mining to the edge of Anomaly B, without any safety zone standoff or justification for zero standoff? Is Cargill already mining right up the Anomaly B boundary? In any event, where are the stability analysis and DEC review? According to Cargill's permit, paragraph 10:**

***...further investigation and reporting shall be conducted for areas identified as anomalies A and B (and any other anomalous areas identified through additional investigations) if Cargill proposes to mine under these areas, or up to these areas without an established standoff. The aforementioned conditions must be thoroughly analyzed for stability by Cargill and reviewed by the Department before mining proceeds in these areas.***

As noted above, Cargill continues to perform additional studies to assess the adequacy of the thinner rock over the mine and the anomalies in the northern reserves as fully contemplated by the mining permit by completing additional seismic analysis and geological studies. Cargill provided an updated mining plan map as part of the 2017 renewal application titled "Cayuga Mine 5 YR Mine Plan 2017/2018 Fiscal Yr." dated August 2017 that depicts the locations of the anomalies. The map is included in the approved document list made part of the Conformance with Plans permit condition. As shown on the August 2017 map, mining was approved to be completed up to Anomaly B without an established standoff. At this time, Cargill is nearing the southern perimeter boundary of Anomaly B, but has not been authorized to mine under it. Cargill is required to follow the same procedure to be authorized to mine under Anomaly B as they did for Anomaly C.

**3. a) Can we have greater access to technical studies and reports that have been done to understand the geology and the stability of the mine? Cargill's practice of claiming confidentiality has prevented the public and third-party experts from reviewing many substantive technical studies done on behalf of Cargill over the past 20 years and more.**

**b) If the mine is sold, will the many substantive technical studies that have already been done on behalf of Cargill be forever shielded from review?**

**c) If the mine is sold, will DEC and/or the new owner claim either confidentiality or "no responsive records" when FOIL requests are made for new records such as substantive technical studies done on behalf of the new owner?**

DEC can only release technical studies and reports that have been submitted to DEC and determined not to be Confidential Business Information or Trade Secret. Absent the procedures detailed below, DEC may not independently or unilaterally identify any information it receives as being Confidential Business Information or Trade Secret. Pursuant to 6 NYCRR Part 616, section 616.7(a), a person who submits information to DEC may request that DEC except such information from disclosure under the Freedom of Information Law (FOIL). The request must be in writing and must state the reason(s) why the information should be excepted from disclosure. Furthermore, the person submitting the records

must clearly identify those records or the portions thereof for which an exception is sought. The record should be clearly and conspicuously marked "trade secret," "confidential commercial [and/or business] information (CCI/CBI)," or "critical infrastructure information." It is only when the report(s)/data/record(s) are identified as such by the person submitting the records, that DEC reviews the validity of the claim of confidentiality. If a record in DEC's custody is identified as being responsive to a FOIL request, and if the record is marked "CBI" or "trade secret," DEC will contact the person/entity who submitted the record to notify them of the pending FOIL request. Per 6 NYCRR 616.7(c), DEC will allow 10 business days for the submission a written statement describing the necessity for granting or continuing a record's exception from release. If DEC agrees that the information is, in fact, bona fide trade secret and/or CBI, the information will be withheld from release. In making this determination, DEC will consider the factors detailed at 6 NYCRR Part 616.7(2). DEC's determination to release or withhold the records from disclosure is subject to an administrative appeal by the aggrieved party. In addition, DEC's regulations provide that a person requesting an exception from disclosure who receives an adverse decision may commence a proceeding pursuant to article 78 of the Civil Practice Law and Rules within 15 days of service of such determination (6 NYCRR 616.7(d)(2)). If a FOIL request seeks records that are not in the possession of DEC or otherwise required to be retained pursuant to the mining law, regulations or permit, DEC will respond accordingly that it does not have responsive records.

If the mine were to be sold, it would be the decision of the new owner to choose whether new records submitted to DEC are considered CBI or trade secrets. Any records submitted and identified as such would go through the FOIL review and appeals process described above to determine the validity of such claims.

**4. RESPEC and others have used the term "carbonate beam" to refer to the sequence of relatively strong carbonate beds above the mine. Does DEC agree, based on the cross-section known as Profile A, that the carbonate beam is missing (thickness has been reduced to zero by erosion) at the center of Profile A at a location that's within or immediately adjacent to Anomaly B?**

Since CLEAN has not specified where Profile A appears in Cargill's documentation, this response is based on Profile A in the Expanded Environmental Assessment. The cross-section does depict scour of the carbonate beds of at least 75 feet between the beds and Syracuse Salt Formation. The early seismic data and the profiles depicting the scours were the basis for DEC's permit conditions requiring Cargill to assess the adequacy of the thinner rock over the mine and the anomalies in the northern reserves. As noted above, Cargill has continued to perform additional seismic studies and processing of the seismic data to further define the thickness of the carbonate beam at these anomaly locations. The additional analyses have shown that the carbonate beam is more than 400 ft thick.

**5. Come time for renewal of permit (but with no proposed sale announced) in April 2024, what process and what public input will be involved? Will you recommend an EIS be done then? Will data gathered by Cargill claimed as proprietary be disclosed then? Will OGS be consulted about its consent?**

Renewals are processed as Type II ministerial actions under SEQR unless the permittee is proposing a substantial or material change to the mining operations. Type II actions under SEQR require no SEQR determination of significance, EIS, or findings statements. Public comment is not sought during the renewal process. If any material or substantial changes are proposed at the time of renewal, the proposed modification would be subject to SEQR review, but not those aspects of mine operations that are not changing. Upon completion of the review, a determination of significance would be made for the

modification. If the proposed action was determined to have a potentially significant adverse environmental impact, then a positive declaration would be made and an EIS would be required. The scope of the EIS would be for the proposed action – modification - only. If DEC receives a timely and sufficient renewal application, the permittee may continue to operate in accordance with the existing permit pursuant to the New York State Administrative Procedures Act (SAPA) until DEC makes a final determination on the permit application, or if there is judicial review, until a final determination is issued by the reviewing court.

If Cargill were to submit data marked CBI or trade secrets during the renewal process, disclosure of this information would be dependent on the FOIL process described above.

The New York State Office of General Services (OGS) will be consulted to make them aware of the renewal.