

ARTICLE 14: MINING ACTIVITY

SECTION 14.01 DERIVATION AND FINDINGS

This Article is based on a report entitled “Mineral Extraction and Topsoil Removal Ordinance Study” conducted by Land Use Consultants for the City of Bath (April, 1994), the response to that report and subsequent recommendations by the Natural Resource Committee of the Bath Comprehensive Plan CORE Committee. The report and Committee findings are incorporated as part of the Bath Comprehensive Plan of 1983, and will be incorporated into the new Comprehensive Plan, now under development.

This Article is designed to develop a strategy for responsible management of mining activities in the City of Bath. The necessity for this Article is reflected in the change in State Statute and Department of Environmental Protection Rules that reduce the review responsibility of the Department in the area of mining activities. This Article reflects the concern that the mining of mineral resources within the City is inherently incompatible with, and must be balanced against, other more appropriate uses of scarce land, acknowledging that the City of Bath's future development is severely restricted by its configuration and geography.

As a precursor to the implementation of a balanced management strategy, the following findings are made:

- A. That there are a series of threshold issues that are critical to Bath's future development, including, loss of developable land, impact on existing neighborhoods and their environs, impact on the natural ecosystem (i.e. water quality, groundwater supply, wildlife, visual qualities) and impact on the man-made environment, especially the traffic corridors and supporting road systems.
- B. That based on changes in State Statute and regulation, there is a need to expand the Ordinance definitions and meanings applicable to mining activities.
- C. That there do exist pockets of clay and silt resources scattered primarily throughout the north Bath area that are important as resources for public and private sector development.
- D. That mining activities, particularly in an urban community like Bath, present particular impact issues for the community and environment, some of which can have severe and long-lasting detrimental impacts. Hence, there is a need for sound performance standards that lead to responsible management of these activities, mitigating short and long term impact and balance the interests of the community at large.

SECTION 14.02 PURPOSE

The purpose of this Article is to define the scope of mining activities and to provide standards and procedures for a fair and equitable review of those activities in the City of Bath. This Article is enacted on the basis that the activity regulated by this Article constitutes a public nuisance and that this regulation is primarily for the purpose of protecting the public health, safety, and welfare of the inhabitants and for the purpose of protecting the City's environment. This Article is enacted pursuant to Home Rule Powers under the Constitution and Laws of the State of Maine. The specific purposes and policies of this ordinance are as follows:

- A. To provide for the protection of groundwater, surface water, and air quality in the City of Bath;
- B. To conserve and protect the City's natural resources, to preserve property values, recreational opportunities, and the quality of life of the inhabitants of the City;
- C. To provide for the protection of public and private drinking water sources within the City;
- D. To provide water quality which will enhance the propagation of fish and wildlife;
- E. To insure that mining activities are compatible with other land and water uses within the City;
- F. To insure that mining operators and not the taxpayers of the City of Bath bear the expenses associated with protecting human health and the environment from the adverse effects of mining activities; and
- G. To control and monitor through a permitting and licensing system the environmental impact of mining activities, to conduct necessary oversight activities, and to provide enforcement authority to insure compliance with all permits and licenses and all applicable standards.

SECTION 14.03 SITE PLAN APPROVAL REQUIRED

No mining activity may be commenced or continue without a site plan approval granted by the Planning Board of the City of Bath. Upon application by the operator, the Planning Board must act to approve, deny, or approve with conditions in accordance with the procedures of site plan review (Article 12 of this Ordinance), and must in addition to the standards outlined in Article 12, also meet the requirements and standards outlined in this Article. With the submission of an application for approval, the applicant must submit a fee of \$500.00. Any permit issued by the Planning Board is limited to no more than 10 years of

operation or any mining activity beyond that period requires a new application and permitting procedure.

SECTION 14.04 REQUIREMENTS AND LIMITATIONS FOR MINING ACTIVITY

Operators must conduct all mining activities in accordance with the following specific requirements:

A. Setbacks

The following setbacks for mining activity must be applied:

1. 200 feet from any waterbody, stream or wetland;
2. 200 feet from any public right-of-way, private property boundary line or private right-of-way;
3. 200 feet from a private water supply; and
4. 300 feet from a public water supply.

B. Excavation to Seasonal Watertable

No mining activity may excavate within 5 feet or less of the seasonal high water table.

C. Natural Vegetation

Where natural vegetation exists within a buffer area, no more than 40% of the existing vegetation may be removed.

D. Reclamation

With the exception of changes in topography associated with the removal of mining resources, the site, for reclamation purposes, must be returned to its original condition, including topsoil conditions, unless the Planning Board approves an alternative future land use scheme. The following requirements apply:

1. The development of retention ponds or other water bodies are restricted to 10% of the total land area of the property mining activity.
2. If the re-use plan provides for open space, whether as an original condition or a new condition, no other such use may be permitted for 20 years after the reclamation is deemed approved by the CEO, said condition to be enforced by recorded deed restriction running with the land.

3. Where future use is proposed to be residential, the reclamation use plan must show capacity for subsurface waste disposal, including proposed loading and generalized layout.

E. Routes For Removing Mining Resources

Proposed routes for removing mining resources, subject to the review standards in Section 14.05(B), are restricted to the following routes:

1. Congress Avenue;
2. Oak Grove Road;
3. Whiskeag Road;
4. Ridge Road; and
5. North Bath Road

No activity may exceed the posted weight limits of appropriate crossings; however, an applicant may be permitted to improve those crossings for the purpose of allowing heavier loads.

F. Slope

All excavated areas must be improved to no steeper than a 4:1 slope.

G. Monitoring

Monitoring may be required to assure that there is no impact on any water supplies in the area, public or private. Because of ledge and clay configurations, there is no limit in distance when examining potential impact.

H. Soil Sediments

No soil sediments may leave the area of active excavation.

SECTION 14.05 REVIEW STANDARDS

A. Natural Buffers and Visual Assessment

The applicant must submit to the Planning Board a plan for the management and maintenance of natural buffers. Should the mining activity impact a street or neighboring property from a visual assessment, then the Planning Board may require a

visual assessment plan of how the project impact will be mitigated. This plan must include:

1. Topography and elevation of mining excavation;
2. Existing natural vegetation in terms of type and location, and common cycles typical to the site in question; and
3. Other resources on site that may be used for buffer management.

The use and maintenance of natural vegetation is encouraged.

B. Traffic Impact

The mining activity scale must be considered in relationship to the capacity of the proposed routes for removal of mining resources. The applicant must provide information on vehicle use, frequency of trips and proposed routes in allowing the Board to assess what improvements may need to be made to the existing road network system. Road improvements decisions must be based on the following related factors:

Rural roads throughout the City of Bath are considered to be adequate for rural traffic with little truck traffic (source: "Geometric Design" from *Transportation and Traffic Engineering Handbook*, Institute of Transportation Engineers, Prentice Hall, 1982). With the introduction of truck traffic associated with Mineral Excavation, road geometric design improvements must be made or provided as follows:

Roadway Width	20-24 feet
Gravel Shoulders	4-8 feet
Border Areas (Beyond Shoulders)	10-20 feet
Slope of Border Areas	4:1 or flatter
Road Base	
Pavement Coarse B	3 inches
Base Crushed Gravel	6 inches
Sub-Base	18 inches
Stopping Sight Distance	*See Below
Decision Sight Distance	*See Below
Corner Sight Distance	*See Below

*Consistent with standards set out in "Geometric Design," pp. 590-592, *Transportation and Traffic Engineering Handbook* as is currently constituted and as may be from time to time amended.

The Planning Board must utilize the analysis conducted by the applicant to apply the above standards. The application must take into consideration the proposed route, weight of the vehicles, number of trips per day, speed limit and any other unusual site

circumstances. The Board may waive any of these requirements, but may do so only within the following parameters:

1. The applicant must demonstrate, through appropriate engineering standards that are consistent with Institute for Transportation Engineers publications, Federal Highway publications, Maine Department of Transportation or the Asphalt Institute, as appropriate, that the proposed engineering alternative is acceptable.
2. Require that the applicant post a bond for all potential road repairs, establish weight limits in conjunction with the Public Works Department and continue to meet various site distance requirements.

As a condition of approval prior to the start of operation, where the proposed route is insufficient to handle the proposed traffic activity, the applicant must be required to bring the proposed route up to a condition which is sufficient to handle the proposed traffic impact. In addition, and not being limited by the foregoing, the applicant may also be required to post a surety bond, or other acceptable surety instrument acceptable to the Board, to cover damages during and after operation.

C. Noise and Vibrations Impact

Noise and vibration for on site activities must be of ambient quality at the lot lines. The applicant is required to demonstrate how this will be achieved using natural contours and vegetation of the property, or other temporary means during operation.

D. Dust and Mud Impact

The applicant must provide a plan for how dust, mud, and similar nuisances will be confined to the site. Applicant must demonstrate how dust and mud will be prevented from entering onto any public way.

E. Hours of Operation

Based on the neighborhood, topographical conditions, selected travel routes, vegetative buffers and other applicable factors, the Board may elect to restrict the hours of operation of this activity in order to avoid impact on surrounding properties along the site and the proposed route. In considering such a restriction, the Board must consider the impact of the operation on residential neighborhoods, area businesses and other neighborhood uses, insuring that these uses are not negatively impacted.

F. Water Quality Impact

The applicant must demonstrate that the project will not affect the quality and/or quantity of area groundwater both adjacent to the site and hydrogeologically connected. The applicant must establish the seasonal high water mark and describe how to maintain excavations above the 5 foot seasonal high-water level. In order to establish the level, the Planning Board may require the applicant to provide an analysis of groundwater conditions related to -the particular site in question, to be conducted by a registered engineer with a specialty in the area of hydrogeologic assessments.

G. Erosion and Sedimentation

All plans must be accompanied by an erosion and sedimentation plan consistent with the standards laid out by the Department of Environmental Protection, best management practices and the most recent Soil Conservation Service directives. Such plans must be made a part of the application and must be developed by a registered engineer. Particular attention will be focused on the spill associated with clay and silt sediment in order to demonstrate that such particles must be confined to the site and not be allowed to enter any surrounding water bodies or groundwater.

H. Stormwater Management Plan

The applicant must provide a stormwater management plan, consistent with Department of Environmental Protection standards, that includes a design for 2, 10 and 100 year storms. The design must describe measures taken to mitigate the impacts of each event and must relate that mitigation to the erosion and sedimentation plan.

I. Reclamation Plan

Every application must include a reclamation plan tied to the phasing of the mineral activity project. That reclamation plan must be tied to the future use of the property, including insuring that the materials and design are sufficient to allow that future use to occur. In developing the plan, the applicant must address the following factors:

1. The applicant must describe whether the plan will call for new open space, a return to the original condition, or be developed for residential or other permitted uses.
2. Where an open space plan is proposed, the reclamation plan should demonstrate how vegetation, topographical shaping and other natural considerations consistent with the site's location will be utilized. For clay and silt and sand and gravel pits, at least 4 inches of topsoil must be retained to help reestablish the original conditions.
3. Where residential uses or other permitted uses are proposed, the plan must insure that remaining land is capable of supporting the proposed use in terms of water

supply, septic disposal, infrastructure development and other standards addressed in the subdivision, or site plan review ordinances of the City of Bath.

4. The reclamation plan must demonstrate each stage consistent with the annual 1 acre limit on mining activity and must demonstrate the degree of reclamation necessary to reach the point where the site becomes self sustaining.
5. All other aspects of the reclamation plan must be consistent with the specifications and best management practices developed by the Soil Conservation Service and the Department of Environmental Protection.
6. In the case of clay and silt mining activities, the reclamation plan must demonstrate how vegetation and topsoil are to be stabilized on clay and silt surfaces. Programs for soil development, erosion control and vegetative development must be clear so that the CEO, during the licensing process, can determine whether the reclamation is succeeding and becoming self sustaining.

J. Environmental Impact Report

Where deemed necessary due to the scope of the activity, site conditions, location, or any other relevant factor, the Planning Board may require the applicant to submit an environmental impact report.

SECTION 14.06 MINING ACTIVITY PHASING

All mining activity permitted under this Article is limited to a 10 year period. The activity must be phased so that no more than 1 acre of mining activity per year will be permitted within the site. No activity may be allowed for additional 1 acre sites or expansion beyond the original 1 acre site where the reclamation plan has not been implemented. For purposes of application of this Section, no property may be divided for the purposes of defeating the phasing definition above where 10 acres of mining activity must be applied to the original lot of record, irrespective of its size at the time of the original adoption of this Article. Any division of the property within 10 years of the date of application, may not be recognized in terms of the phasing activity.

SECTION 14.07 MINING ACTIVITY LICENSE

Subsequent to the granting of a site review permit under the terms and conditions of this Article, the applicant must annually, during the month of April, but not later than April 30th of each year submit an application for re licensing to the CEO. This license must request a continuation of the mining activity which was approved and the site review permit issued in

accordance with this Article. The CEO must inspect the mining activity, where applicable with the assistance of the Soil Conservation Service and such other experts as may be necessary in order to conduct an appropriate review of the mining activity and implementation of the reclamation plan. The applicants must demonstrate that they are in full compliance with the approved plan and that the reclamation plan to the extent required in the approval has been implemented. The license application and inspection must continue for each mining operation annually until it has been shown that the mining activity has ceased, the reclamation plan fully implemented, and the site has become self sustaining. Each application shall be accompanied by a fee of \$250.00.

SECTION 14.08 NON-TRANSFER OF PERMIT

The permits issued by the Planning Board under this Article and the yearly licenses issued by the CEO, are site specific and inure to the benefit of the owner/operator of the property and no other. The permit/licenses are not transferable and do not run with the land and any subsequent owner or operator will be required to re permit the site.

SECTION 14.09 EXPERTS

To the extent deemed necessary and appropriate, the Planning Board in reviewing an initial application for a mining activity permit, and the CEO in consideration of the annual licensing of the operation, has the authority to employ, at the applicant's expense, such experts as they deem necessary and advisable in order to assure full and complete compliance with all standards and requirements of this Article or any other applicable rules, laws or standards. The total amount of such expert assistance may not exceed \$2,500.00 for the initial application or \$1,500.00 for the re-licensing process.

SECTION 14.10 FINANCIAL FEASIBILITY-ESCROW

Each applicant must demonstrate to the satisfaction of the Planning Board in the initial permitting process, and to the satisfaction of the CEO upon yearly re licensing, that the applicant/operator has and has maintained sufficient financial assets to support the operation and the full implementation and completion of the reclamation plan. Where full financial feasibility has not been demonstrated, the Board may refuse to issue the permit, the CEO may refuse to re-license the operation, or require that an escrow fund in an amount adequate to support the reclamation effort be established or if necessary enhanced.

SECTION 14.11 FAILURE TO RECLAIM

Where an operator has failed to conduct appropriate reclamation activities, in addition to nonrenewal of the annual license or revocation of an existing license, the City has the right to exercise any or all of the following options:

- A. Seek injunctive relief before a court of competent jurisdiction requiring the operator to come into compliance with the approved reclamation plan.
- B. If escrow funds exist, to cause the reclamation work to be accomplished, to be paid for out of escrowed monies.
- C. Where escrowed funds are insufficient, to cause the reclamation to occur, the City of Bath has the right to conduct the reclamation activities and enforce the costs as a lien against the property in favor of the City of Bath to recover all expenses involved in reclamation, including all City costs, administrative time, contractor's fees, legal expenses and court costs.
