TOWN OF LIMERICK LARGE SCALE WATER EXTRACTION ORDINANCE

I. PURPOSE

The intent and purposes of this ordinance are:

- to protect the quality and quantity of groundwater, spring water and/or water in aquifers and their recharge areas located wholly or partially within the Town of Limerick
- to ensure that any large scale water extraction is subjected to prior review and approval so as to establish the ongoing sustainability and quality of said water supplies and the avoidance of any interruption or degradation of water quality and quantity to members of the general public within the Town of Limerick
- to generally protect the health, safety and welfare of persons dependent upon such water supplies
- to protect all private and public property, including all structures and facilities, and to ensure no degradation of existing or new roadways
- to guarantee that any water extraction does not impair vegetative growth, including forested areas, and to ensure the continuing stability and health of topsoil and surface land, especially in the extraction area

II. AUTHORITY

These regulations are adopted pursuant to 22 M.R.S.A. § 2642 ("Municipal Regulations Authorized") and 30-A M.R.S.A. § 3001.

Other Maine statutes referenced in this document:

- 38 M.R.S.A. § 404
- 22 M.R.S.A. § 2660-A
- 30-A M.R.S.A. § 4452

III. EFFECTIVE DATE

This ordinance shall become effective immediately upon its adoption and enactment by secret ballot vote of the citizens of Limerick.

IV. **DEFINITIONS**

In this article, the words and phrases listed below have the following meanings unless a contrary meaning is required by the context or is specifically prescribed. Terms related to groundwater extraction that is not listed below shall be defined in accordance to the following order:

- in accordance with their generally accepted technical meaning within the applicable scientific disciplines
- by their common dictionary definitions
- as defined by applicable State of Maine Statutes

AGRICULTURAL PURPOSES

The science or practice of farming including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products.

AQUIFER

An underground body of water and earth, sand, gravel or rock that contains sufficient saturated permeable geologic material to hold, conduct and yield significant quantities of groundwater to wells and springs.

COMMERCIAL PURPOSES

The use of lands, buildings or structures, the intent and result of which activity is the production of income from buying and selling of goods and/or services.

DROUGHT

A period of abnormally dry weather that is sufficiently prolonged to cause serious hydrologic imbalance in the affected area, as determined by Maine State Climate Office.

EXTRACTION POINT OR EXTRACTION FACILITY

The physical location where groundwater is extracted from the ground through the use of springs, wells, pumps, piping apparatus, catchments, weirs or other extractive devices, methods or technologies.

GROUNDWATER

Underground water resources located at or below the water table and within the pore space of consolidated sediments or in fractures in bedrock.

GROUNDWATER DIVIDE

The boundary between two groundwater basins which is represented by a high point in the water table or piezometric surface.

LARGE SCALE WATER EXTRACTION

The daily (meaning on any given day) extraction of more than five thousand (5000) gallons of ground water, spring water and/or water from aquifers or their recharge areas by any one entity or person, or consortium or association of entities or persons acting in concert, regardless of the number of extraction facilities.

INDUSTRIAL PURPOSES

The use of lands, buildings, structures, equipment, and/or raw materials to manufacture, finish, and/or package products by means of a large scale operation.

RECHARGE AREA

The physical area where water moves downward from surface water to groundwater. The recharge area contributes to replenishment of the aquifer.

RECHARGE RATE

The quantity of water per unit of time that replenishes or refills an aquifer.

REVIEWING AUTHORITY

As used in this ordinance, the Planning Board and the Select Board of the Town of Limerick is the reviewing authority.

WATER BODIES OR SURFACE WATERS

Lakes, ponds, rivers, wetlands, streams and similar surficial water bodies.

WATER EXTRACTION ACTIVITIES

The withdrawal, removal, diversion, taking or collection of groundwater by any means from aquifers, springs, wells or other groundwater resources through the use of wells, pumps, piping apparatus, catchments, weirs or other extractive devices, methods or technologies.

WATERSHED OR DRAINAGE BASIN

The area of land in which all precipitation (rainfall, snow melt, etc.) drains towards a single location or area and water body or watercourse. Ridges of higher ground generally form the boundaries between watersheds. At the linear boundaries of a drainage basin, precipitation falling on one side flows toward the low point of one drainage basin while precipitation falling on the other side of the boundary flows toward the single location or area and water body or watercourse of the adjacent drainage basin.

WATER TABLE

The level of the surface of groundwater or the water saturated zone within the underground substrate. The location of a water table is revealed by the level at which water stands in a well open along its length and which penetrates into adjacent groundwater resources.

ZONE OF CONTRIBUTION

The area of an aquifer that is capable of contributing groundwater to a well or other extraction point under the most severe pumping and limited recharge conditions that can be realistically anticipated (i.e. 180 days of pumping at the maximum approved yield rate with no recharge of the groundwater resources from precipitation). A zone of contribution is bounded by groundwater divides which are evidenced by the pumping of the well and/or by the contact zones of supplying aquifers with adjacent low-permeable geologic materials such as glacial till or bedrock. Depending on local geologic and hydrologic conditions, surface water bodies, such as rivers, streams, wetlands, ponds or lakes may act as recharge boundaries and define a zone of contribution.

In all cases, a zone of contribution will extend up gradient within the related aquifer areas to the point of intersection of the aquifer with prevailing site-specific hydrogeological boundaries such as a groundwater divide, a contact zone with low-permeable geologic materials such as a glacial till or bedrock, or a recharge boundary which may be demarcated by a surface water body.

ZONE OF INFLUENCE

The area surrounding a pumping well within which there are or will be physical changes in the water table due to groundwater relocation, extraction or withdrawal or the interruption of groundwater recharge conditions.

V. LARGE SCALE WATER EXTRACTION

A. Permit Required

The daily (meaning on any given day) extraction of more than five thousand (5000) gallons of ground water, spring water and/or water from aquifers or their recharge areas by any one entity or person, or consortium or association of entities or persons acting in concert, regardless of the number of extraction facilities utilized, shall require a written permit issued by the reviewing authority of the Town of Limerick.

B. Water extraction activities not requiring a permit:

The requirements of review and approval shall not apply to extraction of water which is to be used within the Town of Limerick for agricultural purposes, drinking water and domestic water supply to private residences, water supply for public facilities such as schools, public water utilities, fire suppression, or for commercial purposes and industrial purposes within the Town of Limerick.

C. Application Requirements

- 1. The application shall be in writing and be accompanied by the site plans prepared by a licensed surveyor, licensed engineer, or similar appropriately licensed professional and applicable application fees.
- 2. The reviewing authority shall determine that an application is complete before voting to accept the application. The date of acceptance and the beginning of the review process shall start at the time of the successful vote to accept.

3. The application shall include:

- a. Evidence of an applicant's right, title and interest in and to the property(s) from which the water is extracted. If such evidence is other than outright ownership and title as evidenced by a deed duly recorded in the York County Registry of Deeds, the entire document/documentation whether by lease, option, contract or otherwise establishing right, title and interest shall be submitted with the application.
- b. A statement of the total maximum daily quantity of water to be extracted, from all extraction points operated by the same individual or entity, or consortium or association of individuals or entities.
- c. The locations(s) and number of extraction points.
- d. The method(s) of extraction.
- e. The proposed use for which the water is to be extracted, including the identity of any end user of the extracted water whose facilities for use, processing, transporting, storage, bottling, sales or other similar activities are located outside of the Town of Limerick.
- f. A copy of any application and exhibits and reports for such extraction filed or to be filed with any other municipal authority or any agency or department of the State of Maine, including as required by 22 M.R.S.A. § 2660-A et seq. (transport of water for commercial purposes), or under applicable Department of Health and Human Services rules and regulations

- g. A copy of any permit, approval, or denial for such extraction as may have been issued by any agency referred to in (f) above.
- h. A written report, certified to the reviewing authority procured and paid for by the applicant, of a hydrogeologic investigation and study, conducted and prepared by a licensed professional hydrogeologist, geologist, hydrologist, registered professional engineer or other appropriately licensed professional possessing, in the judgment of the reviewing authority, comparable credentials and qualifications. The report must address at the least the following:
 - The rate of draw down and recharge rate of any aquifer or other ground water source as may have been established by a pumping or "stress test" or other similar testing regime in accordance with accepted standards within the geology and engineering professions.
 - The characteristics of the aquifer or other ground water source, including rates of draw down and recharge, sustainable extraction rates, aquifer boundaries, recharge areas, impacts on the water table, and impacts on any and all existing water bodies including, but not limited to, lakes, ponds, rivers, streams and wetland areas, and private wells or other existing extraction locations within the zone of contribution.
 - Possible effects on the aquifer or other ground water resources which might result in the disturbance of existing minerals such as, but not limited to, iron, manganese, arsenic, and uranium, and any health hazards raised by such disturbances(s) or other impacts including issues such as drinking water turbidity, clarity and aroma.
- 4. The application shall be accompanied by:
 - a. Written notification of the application and an explanation of the intent, scope and location of the proposed water extraction in terms readily understandable to a layman to be addressed and mailed to, via certified mail, return receipt requested, the following:
 - The owners of record of all parcels of land lying above the aquifer or other water source cited in the application.
 - The owners of record of all parcels of land lying within 500 feet of the outside perimeter of the aquifer or other water source cited in the application.
 - The owners of record of all parcels of land having frontage on any body of water whether lake, pond, river, stream or wetland within five hundred (500) feet of the outside perimeter of the aquifer or other water source cited in the application, even though such individual parcels may themselves lie more than five hundred (500) feet from the outside perimeter of said aquifer or other water source.
 - For purposes of these notifications, the actual posting of the certified mail notices is required when the application is declared or deemed to be complete (see V.D.6.).

- For good cause shown, the above notice requirements may be modified by the Planning Board where, for example, it can be established that a body of water, a portion of which lies within 500 feet of the outside perimeter of the aquifer or other water source, extends so far from the proposed extraction point(s) that actual notice to the owners of all land having frontage on that body of water is not necessary.
- b. A small-scale site plan depicting at least the following:
 - The limits (outside perimeter) of the aquifer or other water source cited in the application, and the bounds of the land of the applicant.
 - The location of all water bodies located within five hundred (500) feet of the outside perimeter of the aquifer or other water source.
 - The location(s) of the proposed extraction points.
 - The existing network of public or private roads leading to or by the extraction point(s).
 - Any proposed new streets or driveways to be constructed for access to and egress from the extraction point(s), and the point(s) of intersection of such proposed streets or driveways with existing streets.
 - Any existing or proposed utility lines to be utilized in the extraction operation(s).
 - The location and type of monitoring and test wells.
 - Any existing or proposed pipes, pipelines, aqueducts or similar that are intended to facilitate transport of extracted water from the extraction point(s) towards the intended end user, if any part of the extracted water is ultimately to be transported outside the geographic limits of the Town of Limerick.
 - Any other relevant and material detail(s) bearing on the proposed extraction process, the omission of which would tend to hinder the ability of the reviewing authority, affected land owners, or the public from developing a full understanding of the scope and impact of the proposal.
 - c. A large-scale site plan depicting at least the following:
 - A detailed plan of the extraction point(s), including without limitation, well heads, pumping facilities, monitoring or test wells, buildings, sheds, paving, vehicular drives, parking and turn around, utility lines, fencing, access roads or driveways, elevation and contour lines.
 - Any other relevant and material detail(s) bearing on the proposed extraction process the omission of which would tend to hinder the ability of the reviewing authority, affected landowners or the public from developing a full understanding of the scope and impact of the proposal.

d. Traffic impact analysis:

• A traffic impact analysis, prepared, signed and sealed by a Professional Engineer registered in the State of Maine with experience in traffic engineering. The analysis shall indicate routes to be used, the expected average daily vehicular trips, peak hour volumes, access conditions at the site, distribution of traffic, types and weights of vehicles expected, and assessment of the load capability of the road/streets to be used, effect upon the level of service of the street giving access to the site and neighboring streets which may be affected, and recommended improvements to maintain the desired level of service on the affected streets.

e. Application fees:

Initial Application Fee: \$1,000
Amended Application Fee: \$750.00
Annual Renewal Application Fee: \$750

D. Application Review Process

- 1. Eleven copies of the entire application, including studies, reports, site plans, fees and all other items referred to above shall be submitted to the reviewing authority.
- 2. The reviewing authority shall have sixty (60) days from the date of submission to conduct a preliminary review of the application solely for the purpose of determining whether the application is complete as required by these regulations.
- 3. If within said sixty (60) day period the reviewing authority deems the application incomplete in any material or relevant respect it shall so inform the applicant by the best practical means, either by writing or verbally at a regularly scheduled meeting of the reviewing authority at which the applicant, or its duly authorized representative, is present after which the applicant shall have a reasonable period of time, not to exceed thirty(30) days, to complete its application in accordance with these regulations, upon failure of which the application shall be deemed withdrawn.
- 4. If by the end of the sixty (60) or ninety (90) day period for review for completeness the reviewing authority deems the application complete, the reviewing authority shall schedule a public hearing on the application at a date not later than thirty (30) days from the date the application was deemed complete.
- 5. If the application is determined to be incomplete 90 days from the original submission, the reviewing authority shall notify the applicant in writing that the application is deemed withdrawn.
- 6. Any review of the application by the reviewing authority or its agent for completeness is preliminary only and is not to be deemed a substantive review, and confers no vested right upon the applicant or under the application. Substantive review shall not be deemed to occur until the convening of a public hearing on the application under these requirements.

7. The applicant's obligation of written notification via certified mail of property owners as set forth in V.D.3. above shall not accrue until the application is determined to be complete under these regulations.

E. Application Hearing Process

- 1. The completed application shall be reviewed by the reviewing authority at a public hearing after a fifteen (15) day published notice in a newspaper of general circulation within the Town of Limerick and posting of notice at three conspicuous public places within the Town, and upon confirmation on the hearing date that certified mail notice has been sent to all affected landowners.
- 2. The reviewing authority shall be entitled to adopt whatever procedural rules for the hearing including the imposition of reasonable time limits for the presentations of the applicants, opponents, if any, and the general public, it deems appropriate, fair and reasonably calculated to afford a full consideration of the issues pertaining to the application.

F. Application Decision Process

- 1. Upon the adjournment of the initial public hearing the reviewing authority shall schedule another public session to occur not later than thirty (30) days from the adjournment of the initial public hearing in order to deliberate and make a decision.
- 2. The reviewing authority's decision may be:
 - a, To approve the application;
 - b. To deny the application; or
 - c. To approve the application on a conditional basis, with conditions or stipulations that must be completed prior to the boards final approval. Any approval (conditional or unconditional) shall require the reviewing authority's determination that the applicant has satisfied all of the performance standards set forth below.
 - d. Any approval shall specify that it is only for a daily extraction total not exceeding the maximum daily quantity as set forth in the application or this Ordinance, whichever is less.
- 3. The reviewing authority shall issue a written decision with rulings and conclusions not later than thirty (30) days from the date of the decision to approve or deny, or approve with conditions. A copy of such decision shall be provided promptly to the applicant and otherwise be available publicly.
- 4. Any extraction authority granted hereunder shall be for a period not to exceed one (1) year.

- 5. With respect to an application for a permit renewal if, after notice and hearing as referred to in section V. E. above, the reviewing authority finds the following, a renewal permit for another one (1) year period shall be issued.
 - a. There is no increase in the permit holder's extraction activities in terms of the quantity of water to be extracted; and
 - b. There is no change in the location or configuration of the extraction facility; and
 - c. There has been no material failure by the permit holder to comply with any conditions of the expiring permit; and
 - d. There has been no material failure by the permit holder to meet the performance standards applicable to the expiring permit; and
 - e. There is no significant, credible evidence that the permit holder's continuing operation would be unable to meet the performance standards of the regulation during any renewal period; and
 - f. The application for a renewal permit must be filed with the reviewing authority not less than ninety (90) days prior to the expiration of the existing permit.

VI. PERFORMANCE STANDARDS

No application shall be approved until and unless the reviewing authority shall have affirmatively found that each of the following performance standards has been or will be met, the burden of establishing and demonstrating compliance with which is solely the applicant's. The applicant must also demonstrate to the reviewing authority that it possesses the expertise and financial resources to provide continuing adherence to these standards.

A Geologic and Hydrologic Standards

- 1. The quantity of water to be extracted will not adversely affect existing uses of groundwater or surface water surfaces, including private wells.
- 2. The quantity of water to be extracted will not cause undesirable changes in ground water flow patterns relating to the aquifer, its recharge areas, or other ground water sources within the Town.
- 3. The quantity of water to be extracted will not negatively impact, diminish or alter any surface waters within the Town, including during any period of drought.
- 4. The quantity of water to be extracted will not cause any ground subsidence beyond the limits of the aquifer or other water source cited in the application.
- 5. The quantity of water to be extracted will not adversely affect the long-term sustainability of the aquifer, or its recharge areas, or other ground water sources, including during periods of drought.

If at any time the Maine State Climate Office (MSCO) declares a drought in York County, all water extraction shall cease and not resume until the drought condition has been alleviated and has been declared over by MSCO.

The drop in groundwater level at monitored locations more than three (3) inches below the mean monthly level (as determined by the groundwater level measured in the test wells prior to the commencement of any extraction) shall be cause for the Town of Limerick to demand that all extractions cease until the groundwater level returns to two (2) inches below the original mean monthly level as defined above. This is to prevent the loss of future aquifer volume as hydrological data and research have proven that severe withdrawal of an aquifer causes it to lose its original capacity forever in the future.

- 6. The proposed extraction will not create a health risk or issues such as drinking water turbidity, clarity or aroma resulting from the disturbance of existing minerals, or from any other cause, with ongoing follow up monthly testing for this purpose, results to be provided in writing to the Limerick Code Enforcement Officer on at least a monthly basis.
- 6. The establishment of an ongoing follow up monitoring system and development of a system of recording and documenting extraction and recharge data, within the zone of contribution, to be reported in writing to the Limerick Code Enforcement Officer on at least a monthly basis. At least twenty-five (25) percent of monitoring locations shall be private wells located within the zone of contribution.
- 8. The amount of withdrawal will not exceed 10,000 gallons per day. This amount can be reduced or eliminated at any time with appropriate cause such as drought conditions as specified in Section VI.A.4. or other circumstance (s) which the CEO deems applicable and appropriate.

B. Impacts on General Vicinity

- 1. The Code Enforcement Officer may enter the property where the extraction operation is located and at reasonable hours. Entry into any building may occur with the consent of the owner, occupant, or agent to conduct the inspection.
- 2. The applicant assumes any and all liability for the loss, interruption, degradation or interference with the pre-existing beneficial domestic use of groundwater by a landowner or lawful land occupant, or other public or private water supply, caused by the applicant's withdrawal or extraction of water, as established by 38 M.R.S.A. § 404.
- 3. Provision shall be made for vehicular access to the extraction facility (s) and for circulation, loading and unloading upon the lot in such a manner as to safeguard against hazards to traffic and pedestrians on adjacent streets or roads, to avoid traffic congestion with traffic safety hazards, or other safety risks.
- 4. Any driveways or access roads to the extraction facility (s) shall be designed in profile and grading and located so as to provide sight distance as set out in the Limerick Zoning Ordinance and State DOT requirements.
- 5. Driveways or access roads to the extraction facility(s) shall conform to the standards set out in the Limerick Zoning Ordinance and State DOT requirements.

- 6. Additional vehicular demand on existing town roads or public easements occasioned by the operation of the extraction facility (s) will not exceed the capacity of those roads, or cause the premature failure, aging or diminished utility of those roads, as determined by the Limerick Road Commissioner. Should such damage occur, all repair cost shall be borne by the applicant.
- 7. To the extent the extraction facility (s) will be served by pipes, pipelines, aqueducts or similar that such installations will be sited and constructed in a manner which will not:
 - interrupt the public's use of any existing street
 - interrupt the public's access to any public facility great pond or similar
 - interrupt private access to private property or
 - pose the risk of damage to any property along or through which such installation traverses as a result of any failure or malfunction which might cause ponding, erosion, run off or similar.
- 8. The proposed extraction and activities incident to such extraction such as increased traffic (volume and type), parking hours or operation, noise, glare from lights, or similar potential for nuisances are unlikely to cause a negative impact on adjacent properties and the nearby vicinity as a whole.

VII. INDEPENDENT EXPERT ASSISTANCE

If the reviewing authority reasonably determines it requires independent expert assistance to assist it in its preliminary review of the application, or in evaluating the substance of the application at a public hearing, or in developing appropriate conditions of approval, it may engage the services of such expert assistance, to serve as the reviewing authority's own expert. The applicant shall be required to pay to the Town, in advance of the scheduling of any public hearing, a sum equal to said projected or estimated cost, the failure of which payment shall excuse the reviewing authority from scheduling any public hearing until such payment is made in full.

VIII. CONCURRENT JURISDICTION

As applicable, jurisdiction of the reviewing authority under these regulations is concurrent with such jurisdiction as may presently be vested in the Limerick Planning Board, the Select Board, the Limerick Board of Appeals, the Limerick Code Enforcement Officer and is not intended to divest them of existing jurisdiction as applicable, but rather establishes and imposes additional requirements and procedures as set forth herein.

IX. ENFORCEMENT AND SEVERABILITY

These regulations may be enforced by the municipal officers of the Town of Limerick under 30 A M.R.S.A. § 4452, the fines and penalties set forth therein to apply hereto. Should any section or provisions of these regulations be declared by a court of competent jurisdiction to be invalid, such decision shall not invalidate or effect the enforcement of any other section or provision of these regulations.

As an additional means of enforcement, the Planning Board may suspend or revoke any permit issued hereunder if it determines, after notice and hearing, that it was issued in error or upon incomplete or false information, or that applicant has failed to comply with any conditions of approval, and upon such suspension or revocation all water extraction addressed by said permit shall cease until a new approval or permit is obtained under these regulations by the applicant.

Appeal of any suspension or revocation of a permit shall be governed by Article X – Board of Appeals within Limerick's Zoning Ordinance.

X. AMENDMENTS

The ordinance may be amended by a majority secret ballot vote at any legal town meeting when such amendment is published in the warrant calling for the meeting and when such amendment has received a public hearing, which hearing has been advertised and given a legal ten (10) day notice.

XI. INCONSISTENT ORDINANCE PROVISIONS

If the provisions of this ordinance are inconsistent with provisions found in other adopted ordinances or regulations of the Town of Limerick, the more restrictive provision governs unless otherwise stated.