SIGNIFICANT GROUND WATER WELLS PERMIT

ISSUE # 1 THAT IS THE SUBJECT OF THIS APPEAL

The Planning Board admitted and relied on hearsay.

The Board, at its meeting of May 27, 2020 (Note- All Board meetings between May 6, 2020 and December 21, 2020 were conducted via a ZOOM webinar because of COVID), conducted a specific meeting on groundwater and water use. Matt Reynolds, Drumlin Environmental, presented his assessment of Nordic's application, including his assessment of the Department of Environmental Protection's review of Nordic's groundwater proposals.

In spite of an admonition by its counsel not to attend or participate in the DEP proceedings, the Board entertained and relied on a secondhand analysis of the DEP proceedings and conclusions by Board consultant Matt Reynolds. Mr. Reynolds "assessment" of the DEP activity is hearsay. Hearsay is inadmissible an any court because it is unreliable. Mr Reynolds "assessment" should be stricken from the record and the Board asked to reconsider its actions based on information properly before it. OR The permit should be declared invalid as having been granted upon evidence fatally tainted by hearsay.

ISSUE #2 THAT IS THE SUBJECT OF THIS APPEAL

The Application was, and remains, incomplete.

The Planning Board conducted its review of draft Findings of Fact for Nordic's Preliminary Site Plan Permit application, including standards related to groundwater, at its meetings of June 17, July 8 and July 15, 2020. The Board, at its meeting of July 15, approved Nordic's Preliminary Site Plan application and adopted Findings of Fact that describe its decision. This action allowed Nordic to submit a Final Site Plan application and also led to the process whereby the Board would review the specific requirements of the other 4 Permits the Nordic project requires from the Planning Board, including this Significant Groundwater Well Permit.

The Board lacked the authority to approve the Significant groundwater well Permit because the application was incomplete because Nordic failed to show:

1. The quantity of water to be taken from a ground water source will not substantially lower the water table beyond the property lines, cause saltwater intrusion that would affect groundwater located on a property not owned by the applicant, cause unreasonable impacts to ground water flow patterns, or cause unreasonable ground subsidence beyond the property lines.

2. Any proposed use will not cause unreasonable adverse diminution in water quality or quantity of the aquifer or surrounding surface/ground water.

3. That it possesses the expertise and financial resources to construct and operate the requested significant groundwater wells and to adhere to appropriate conditions.

6. SPECIFIC FINDINGS OF THE BELFAST PLANNING BOARD ON OVERALL SIGNIFICANT GROUNDWATER WELL PERMIT REQUIREMENTS.

ISSUE #3 THAT IS THE SUBJECT OF THIS APPEAL

The failed groundwater model predicate invalidates the modeled result on which the Board relied.

The Planning Board made the following findings regarding the applicability of certain zoning standards for the Nordic application for a Significant Groundwater Well Permit:

a) The Board found that Nordic's Permit submission, reference Attachment 23, and subsequent information provided by Nordic to the Board satisfied the application submission requirements identified in Chapter 102, Zoning, Article VIII, Supplementary District Regulations, Section 102-1077, Application and Information Requirements, Subsection c), Application Requirements, clauses 1) through 6). The Board particularly noted that Nordic submitted the required hydrogeologic report [clause 4)] from a licensed Maine professional geologist, and that it submitted a proposed monitoring program. Further, the City obtained the DEP Permit Orders and Findings, and these Orders identified conditions that the DEP will implement with respect to Nordic's monitoring of groundwater use.

The hydrologic report, Attachment 23, is predicated on a model of the site in its present state and reports that recharge of the groundwater from which the wells will extract water is provided primarily by rainfall. Yet, in its stormwater management plan, Nordic would remove almost all of the rainfall landing on the site in a series of catch basins and perimeter drains discharging below the site near the ocean. That stormwater management system invalidates the model. The 455 gallons per minute predicted by the model must be adjusted downward to account for the water diverted as aforesaid. So, the number is less than 455, and no one knows how much less. The applicant should be directed to recalculate its groundwater availability based upon the stormwater management plan for which it obtained approval. Until that calculation is performed the permit should be suspended, because no one can know how much ground water will be available to Nordic after it installs its drains.

b) The Board determined that Nordic's use of groundwater will comply with the City Performance Standards identified in Chapter 102, Zoning, Article VIII, Supplementary District Regulations, Division 7, Significant Groundwater Well Permits, Section 102-1079, Performance Standards, subject to Nordic's compliance with the Conditions of Approval established by the Board as requirements of this Permit. The Board's Findings regarding the Section 102-1079 Performance Standards are described in Section 7 of these Findings, see below.

ISSUE #4 THAT IS THE SUBJECT OF THIS APPEAL

The Application failed to satisfy the Standards of Section 102-1079.

7. SPECIFIC FINDINGS OF THE BELFAST PLANNING BOARD ON THE SECTION 102-1079 PERFORMANCE STANDARDS FOR A SIGNIFICANT GROUNDWATER WELL PERMIT.

Chapter 102, Zoning, Article VIII, Supplementary District Regulations, Division 7, Significant Groundwater Well Permit, establishes specific Performance Standards that all applicants for a Significant Groundwater Well Permit must satisfy; reference Section 102-1079, Performance Standards. The Belfast Planning Board conducted a specific review of these standards at its meetings of October 28 and November 4, 2020, and found that Nordic satisfied all of the City requirements, subject to Nordic compliance with Conditions of Approval established by

the Board. The Board made the following specific Findings regarding the respective Performance Standards.

4. The quantity of water to be taken from a ground water source will not substantially lower the water table beyond the property lines, cause saltwater intrusion that would affect groundwater located on a property not owned by the applicant, cause unreasonable impacts to ground water flow patterns, or cause unreasonable ground subsidence beyond the property lines.

The Board reviewed Attachment 23, the Hydrogeologic Assessment prepared by Ransom Consulting which concluded that a system of 3 wells, drawing a combined maximum rate of 455 gallons per minutes (gpm) of groundwater, could be continually operated without unreasonable adverse impacts to the bedrock aquifer or groundwater flow patterns, surrounding private wells including from saltwater intrusion, or cause ground subsidence. Ransom Consulting's conclusion is based on the collection of data from site and neighborhood wells and surface water bodies, multiple pumping tests, and a computational model to simulate aquifer and water resource impacts under longer time intervals and varied conditions.

The main potential concern identified by the Planning Board is that Nordic's extraction of groundwater could have an adverse impact on the quality and/or quantity of groundwater on adjacent private wells. The Board addresses this issue in the Conditions of Approval it has adopted that require Nordic to implement a rigorous groundwater quality monitoring program, and to regularly report information from this program to City representatives and to area homeowners who are participating in Nordic's monitoring program. Further, the Board required Nordic to address impacts to the extent that they may arise with specific steps, including reducing the rate and amount of water withdrawal and requiring that Nordic make any property owner whose private well has been adversely impacted by Nordic's use of groundwater 'whole' by measures such as but not necessarily limited to connecting the property to public water, the installation of a water quality treatment system, or the drilling of a new well.

> The requirement is not that the applicant address the damage to nearby homeowners' wells caused by pumping its 3 groundwater wells. The above Section prohibits an unreasonable adverse impact on neighboring homeowners' wells. By Nordic's own admission, nearby wells will be lowered 10-15 feet by Nordic's pumping. Given the sensitivity of those wells to drought and how shallow they are, the 10-15 foot drawdown is a significant adverse impact. The significant adverse impact does not disappear because Nordic agrees to "address" the damage they cause.

The Board also considered the issue of saltwater intrusion of a private well. While the Nordic hydrogeologic assessment identified saltwater intrusion as a potential concern in a limited area near Route One, the Board noted that properties in this area are connected to public water, thus, there is limited concern with potential adverse impacts to a private well from saltwater intrusion.

> Nordic's own well tests showed saltwater intrusion into one of its wells. Nordic claims that the saltwater weas already there when they turned on their pump. How did it get there? That suggests that saltwater runs uphill onto the shore instead of, like most water, downhill into the ocean. Further Nordic claims it is ok to draw saltwater into its well because a) they can use that brackish water and b) Nearby residents are served by City water. This ignores the fact that it no more proper or legal to pollute a groundwater aquifer with salt water than it is to pollute an aquifer with trichloroethylene.

5. Any proposed use shall not cause unreasonable adverse diminution in water quality or quantity of the aquifer or surrounding surface/ground water. This includes any impacts to the upwelling of a natural spring, ground

water source, aquifer recharge area, or wetlands.

The Planning Board found that the Nordic Project will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater in the area or any public or private water source, provided that Nordic conducts project operations as proposed and complies with all conditions of approval established by the DEP and the City Planning Board. The Board specifically noted that the hydrogeologic assessment prepared for Nordic by Ransom Consulting dated April 18, 2019, identifies potential impacts associated with Nordic's use of on-site groundwater wells, and that Nordic has chosen to use an array of wells that minimize the likelihood of potential impacts on off-site private wells or the quantity of groundwater in the surrounding area. Further, the monitoring program that both the DEP and the City require Nordic to implement will provide an effective tool for either party to use to regulate Nordic's use of groundwater if adverse impacts are detected to the area's groundwater resources.

The Board's finding is that Nordic will not diminish the quality or quantity of the groundwater provided it meets the Conditions of Approval, in other words as long as it fixes the problems it will cause. The Section does not say Nordic can destroy it as long as they fix it. It says they have to show they will not destroy it. Nordic didn't do that.

DECISIONS OF BELFAST PLANNING BOARD

The City of Belfast Planning Board, at its meeting of December 22, 2020, took the following actions on Nordic's Significant Groundwater Wells Permit application:

a) The Board determined that the Nordic application satisfied all submission requirements for a Significant Groundwater Well(s) Permit, reference Section 102-1077, and that the application complied with all Performance Standards identified in Section 102-1079, subject to Nordic's compliance with Conditions of Approval for this Permit that were established by the Board.

For the reasons stated above, Upstream Watch asserts this conclusion is erroneous.