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GOVERNOR

STATE OF MAINE  
DEPARTMENT OF AGRICULTURE, CONSERVATION AND FORESTRY  
LAND USE PLANNING COMMISSION  
22 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0022

WALTER E. WHITCOMB  
COMMISSIONER

# PERMIT

AMENDMENT C TO  
DEVELOPMENT PERMIT DP 4689  
*Corrected August 28, 2014*

*Minor changes have been made to Findings #1, #2, #7, #12, #13, #14, #15, #16, #17, #18,A, #18B, #19, #21, #22, #23, #25,C; to Conclusions #1 and #2; and to Figure 1. Corrections and clarifications made address: the date of completed application; the previously authorized water withdrawal volume; previously authorized monitoring plan; the annual reporting; the number of monitoring wells being eliminated; the changes in the frequency of monitoring for retained sites; comments from Maine Geologic Survey; and correction of several typographical errors.*

The staff of the Maine Land Use Planning Commission (hereafter, the Commission), after reviewing the application and supporting documents submitted by Nestle Waters North America Inc. for Amendment C to Development Permit DP 4689, finds the following facts:

1. Applicant: Nestle Waters North America Inc.  
123 Preservation Way  
Poland Spring, ME 04274  
Attn: Mark Dubois  
  
Agent: Drumlin Environmental, LLC  
PO Box 392  
Portland, ME 04112  
Attn: Richard Fortin
2. Date of Completed Application: July 22, 2014
3. Location of Proposal: Pierce Pond Twp, Somerset County  
Taxation Lots #6 and #6.1 and Part of Lot #2 on Plan 01
4. Zoning: (D-GN) General Development Subdistrict  
(M-GN) General Management Subdistrict  
(P-SL2) Shoreland Protection Subdistrict  
(P-FW) Fish and Wildlife Protection Subdistrict  
(P-WL) Wetland Protection Subdistrict
5. Lot Size: 536 Acres (owned)
6. Existing Structures: Two Single-Family Dwellings (20 ft. by 40 ft., each)  
Load-out Building (30 ft. by 50 ft.)  
Two Borehole Protection Buildings (each 14 ft. by 24 ft.)  
Sand Storage Facility (32 ft. by 44 ft.)  
With Attached Mechanical Room (12 ft. by 12 ft.)
7. Potentially Affected Waterbody: Cold Brook

Cold Brook is rated as a Class A water under Maine's Water Classification Program (Title 38 M.R.S.A., Article 4-A).

#### Background Information and Administrative History

8. The applicant's property was developed prior to the inception of the Commission with a fish hatchery complex on Cold Brook. Associated with the fish hatchery complex are two single-family dwellings, concrete hatching pools, and several detached accessory structures.
9. Development Permit DP 4689, issued to the applicant in June of 2004, authorized construction of a load-out building (pumping station) to serve two commercial production wells for spring water bottling as well as construction of two borehole protection buildings to cover the production wells. Development Permit DP 4689 also authorized construction of a 3,000 foot long and 24 foot wide paved access road, and underground installation of two, 10-inch diameter water pipes from the boreholes to the load-out building.
10. Amendment A to Development Permit DP 4689, issued to the applicant in July of 2007, authorized revisions to two of the conditions of Development Permit DP 4689. The revisions removed the requirements for continuing the traffic management committee to monitor the impacts associated with truck traffic to and from the pumping station.
11. Amendment B to Development Permit DP 4689, issued to the applicant in August of 2007, authorized reconstruction of one of the two 20 foot by 40 foot existing single-family dwellings and construction of a 32 foot by 44 foot sand storage building with attached 12 foot by 12 foot mechanical room, both located entirely within the (D-GN) General Development Subdistrict. Amendment B also authorized installation of three new subsurface wastewater disposal systems: one for the reconstructed dwelling, one for the existing dwelling, and one at the existing load-out building, so that bathroom facilities could be provided there.

#### Water Withdrawal and Monitoring Plan

12. Under Development Permit DP 4689, the applicant proposed to withdraw a maximum of 80 million gallons of water per year. The maximum withdrawal rate of 222 gallons/minute (gpm) from both boreholes combined was identified by the pump tests, and the long-term pumping rate was to be refined through continued monitoring of the Cold Brook system to establish the level at which the pumping must be limited to maintain the spring quality of the resource.
13. The applicant has submitted water withdrawal totals for the two boreholes for the years 2005 through 2013. Each year, the total water withdrawal has been significantly lower than the proposed maximum of 80 million gallons per year. No water has been withdrawn from either borehole for transportation off site since September of 2009. A monthly summary of the water withdrawal has also been submitted as Table 1 of Drumlin Environmental, LLC memorandum dated July 16, 2014.
14. The monitoring plan that was designed by the applicant and approved by the Commission under Development Permit DP 4689 allowed the applicant: to maintain spring flow to meet the USFDA's Federal Standards of Identity for spring water; monitor Cold Brook and wetlands for changes; and gain further understanding of the spring activity along Cold Brook. This plan included a series of monitoring sites: stream measurements on Cold Brook, spring point manometers, temperature monitors along Cold Brook, Black Brook, and the Dead River, biocriteria monitoring sites, deep and shallow piezometers, and wetland vegetation

monitoring plots. Development Permit DP 4689 required the applicant to report the results of the monitoring to the Commission annually.

15. The applicant has submitted the required annual monitoring reports for 2005 to 2013. These reports presented data collected from the established monitoring program that included groundwater levels, spring point and catchment water levels, surface water levels, stream temperatures and flow, borehole production, precipitation, and wetland and biological monitoring. The applicant states that the nine years of reports have shown no adverse impact to ground water, surface water levels, wetlands or other natural resources at the Spruce Spring sites from water withdrawal operations. In the 2013 Annual Monitoring Report submitted to the Commission on March 27, 2014, the agent and consultant, Drumlin Environmental, LLC, recommended that the applicant modify their existing monitoring plan based on the extensive data that has been collected at the site since 2005 and on safety considerations for personnel conducting monitoring activities during the winter and spring months.

Proposal: Changes to the Monitoring plan

16. The applicant seeks amendment approval to modify their hydrogeologic and biological monitoring plan based on the extensive data collected to gauge the potential effects associated with water withdrawal operations. The applicant has not proposed to make any changes in the maximum water withdrawal rate or volume of water withdrawn, or any other structural changes at the site. The applicant has proposed to continue to submit an annual report summarizing the results of the monitoring plan.
17. The changes to the monitoring plan are proposed in order to eliminate monitoring locations that are no longer necessary because they qualify as one of the following: “redundant” (similar to other sites), “remote” (too far from the springs and boreholes), or “unsafe”; or because the collected data demonstrates that the monitoring is only needed when at certain times of the year or when the water withdrawal exceeds 16 million gallons per year (MGY). A summary of the proposed revised monitoring plan is attached to this permit as Table 1C, as amended in response to review comments by the Maine Department of Inland Fisheries and Wildlife (MDIFW) and Maine Geologic Survey (MGS). The locations of a subset of all surface and groundwater monitoring points to be removed and retained are attached to this permit as Figure 1.
18. Specifically, the applicant has proposed to eliminate:
  - A. Seven (7) remote monitoring wells (note: LB-1-20 will be retained, but only monitored as needed, as recommended by the Maine Geologic Survey), three (3) remote piezometers, and two (2) remote spring points that show little to no influence from pumping;
  - B. Three (3) redundant monitoring wells, and three (3) redundant staff gauges the show results similar to other monitoring points that will be retained; and
  - C. Three (3) stream temperature tidbits that pose a safety hazard to personnel during cold temperatures and high stream flows.

All eliminated monitoring wells, well points, and piezometers would be closed out in accordance with the Maine Department of Environmental Protection “Guidance for Well and Boring Abandonments” dated January 7, 2009.

19. The applicant has also proposed to modify the frequency of monitoring for the retained monitoring wells, staff gauges, piezometers, catchments, and spring points, as follows:

- A. Monthly when annual spring water withdrawal for bottling use is expected to exceed 16 MGY; and
  - B. March, June, July, August, September and December when annual spring water withdrawal for bottling use is not expected to exceed 16 million gallons per year.
20. The applicant has proposed to continue biocriteria monitoring with rock bags only when annual withdrawal volumes exceed 20% (16 MGY) of the permitted volume in response to review comments by MDIFW.
21. The applicant has proposed also to continue wetland water level monitoring at the same frequency as the retained monitoring sites in Finding #19 in response to review comments by MDIFW. They have proposed to eliminate the annual wetland vegetative plot monitoring and instead will report changes that are beyond the historical water level range for the wetland to the Commission and MDIFW and then work with MDIFW to determine what additional wetland monitoring may be necessary.
22. Finally, the applicant has proposed to switch to the Bingham NOAA station for collection of Precipitation data because the Long Falls Dam NOAA station #171870 has been closed.

### Review Criteria

23. Pursuant to Section 685-B.4 of the Commission's statutes, in approving applications submitted to it pursuant to this section, the Commission may impose such reasonable terms and conditions as the Commission may deem appropriate. The Commission shall approve no application, unless adequate provision has been made for fitting the proposal harmoniously into the existing natural environment in order to ensure there will be no undue adverse effect on existing uses, scenic character and natural and historic resources in the area likely to be affected by the proposal.

In making a determination under this paragraph regarding development to facilitate withdrawal of groundwater, the Commission shall consider the effects of the proposed withdrawal on waters of the State, as defined by Title 38, section 361-A, subsection 7; water-related natural resources; and existing uses, including, but not limited to, public or private wells, within the anticipated zone of contribution to the withdrawal. In making findings under this paragraph, the Commission shall consider both the direct effects of the proposed withdrawal and its effects in combination with existing water withdrawals.

24. Pursuant to Section 10.22,A,3,c(3) of the Commission's Land Use Districts and Standards, filling and grading, dredging, and alteration of the water table or water level for other than mineral extraction is an allowed use requiring a permit in a (M-GN) General Management Subdistrict and subject to the applicable requirements set forth in Sub-Chapter III.

### Review Comments

25. The Maine Geologic Survey (MGS) reviewed the application and met with the applicant, offering the following comments and recommendations:
- A. Much of the rationale behind the proposed reduction in monitoring stems from a need to streamline the process because of redundant data, safety consideration(s) during periods of icing and high flows, and because of reduced water withdrawals at the facility.
  - B. During the exploratory process of siting the actual extraction boreholes, monitoring wells were installed for purposes of subsurface exploration and for pump testing purposes. Over time, the usefulness of continuing to monitor many of these wells has diminished.

- C. We are not opposed to the elimination (complete removal) of LB-1-20 on technical grounds as it has been clearly demonstrated that pumping of the boreholes does not impact water levels in the game management/refuge area to the north. On the other hand, there *may* be justification to retain this well and not necessarily monitor it. Please note that we agree with the concept of suspending monitoring of this well. If Nestle still wishes to remove this well despite this recommendation, we would not be opposed.
- D. Based upon the submitted materials and discussions at our meeting on Friday, June 13, 2014 at the LUPC office in Augusta, the Maine Geological Survey otherwise concurs with the proposals as stated by the applicant and their consultant to reduce monitoring under the conditions stated.

All review comments and recommendations made by the MGS have been addressed by the applicant.

26. The Maine Department of Inland Fisheries and Wildlife (MDIFW) reviewed the application and met with the applicant, offering the following comments and recommendations:
- A. The data demonstrated the applicant's claim in regards to monitoring data redundancy for all of the wells proposed for removal.
  - B. The sites proposed for retention appear to be sufficient in number and location to adequately assess groundwater and surficial hydrology in the future. The data presented is sufficient to show the applicant's assertion and MDIFW concurs with the suggested proposal to remove the wells from future monitoring.
  - C. Stream temperature measurement monitoring, in relation to water withdrawals, are most critical to biological situations during warmer periods when respiration and metabolism can be negatively affected. Relatively, the same can be inferred for low stream flow conditions. Over the recent monitoring period, no adverse effects to stream life have resulted according to the applicant. Since there is now a set of reference data in regards to stream flow and stream water temperature, MDIFW concurs with the suggestions to eliminate the sites proposed by the applicant, but to continue monitoring those sites that are to be retained.
  - D. MDIFW agrees that automated stream temperature measurements (tidbits) at DR1, DR2, and Black Brook for Spruce Spring be discontinued due to redundancy and safety reasons. The applicant should continue to monitor stream levels, flow and temperature, via both manual and automated methods, at sites CBSG-1 and CBSG-6 at Spruce Spring.
  - E. A reference data set for wetland water levels and vegetation composition exists. MDIFW Fisheries suggests that water level monitoring continue at wetland sites for both springs. Due to the absorbent nature of hydric soils, wetland water levels vary naturally. Changes in species composition in native plot vegetation will be observed when extremes of historical water level variation occur, but will remain relatively constant if water levels remain within natural inundation variations. Monitoring can be as simple as a stake placed in the wetland with high and low reference elevations marked on it. The stake can be observed on the current schedule and values recorded if and when water levels move outside of the historic range. No additional wetland vegetation monitoring is necessary unless the natural variation in water levels is outside of the observed reference range.
  - F. MDIFW recommends continuing rock bag monitoring at all 3 sites when water withdrawal volumes exceed 20% of permitted allowance because the composition of these organisms is very sensitive to changes in habitat quality.

All review comments and recommendations made by the MDIFW have been addressed by the applicant.

27. The facts are otherwise as represented in Development Permit DP 4689, Amendments A and B to Development Permit DP 4689, Amendment Request C, and supporting documents.

Based upon the above Findings, the staff concludes that:

1. The proposal meets the provisions of Section 685-B.4(A) of the Commission's statutes for fitting the proposal harmoniously into the existing natural environment in order to assure there will be no undue adverse effect on existing uses, scenic character, and natural and historic resources in the area likely to be affected by the proposal.

Specifically, the applicant's original monitoring plan was designed to allow them to: maintain spring flow to meet the USFDA's Federal Standards of Identity for spring water; monitor Cold Brook and wetlands for changes; and gain further understanding of the spring activity along Cold Brook. Nine years of reports, reviewed by the Commission, MGS, and MDIFW, have demonstrated no adverse effect to ground water, surface water levels, wetlands or other natural resources at the Spruce Spring sites from water withdrawal operations and given the applicant a better understanding of the spring activity along Cold Brook. Monitoring points to be eliminated are shown as being too far from the boreholes to be influenced or producing data similar to other retained points. The applicant will continue to monitoring groundwater, surface water levels, wetlands and other natural resources; will retain sufficient monitoring points and monitoring frequency in order to evaluate the impacts to these resources; and will continue to submit an annual report to the Commission. The applicant does not propose to make any changes in the maximum water withdrawal rate or volume of water withdrawn annually.

3. The proposal meets the applicable requirements of Sub-Chapter III of the Commission's Land Use Districts and Standards.
4. If carried out in compliance with the Conditions below, the proposal will meet the Criteria for Approval, section 685-B(4) of the Commission's Statutes, 12 M.R.S.A.

**Therefore, the staff approves the application of Nestle Waters North America Inc. with the following conditions:**

1. Construction activities authorized in this permit must be substantially started within 2 years of the effective date of this permit and substantially completed within 5 years of the effective date of this permit. If such construction activities are not started and completed within this time limitation, this permit shall lapse and no activities shall then occur unless and until a new permit has been granted by the Commission.
2. The permittee shall conduct the hydrogeologic and biological monitoring plan as proposed, and as amended in response to review comments by the Maine Department of Inland Fisheries and Wildlife and Maine Geologic Survey. The monitoring points and frequency must be those shown as "retain" on Figure 1 and listed in Table 1-C, as amended, of the permit.
3. All eliminated monitoring wells, well points, and piezometers must be closed out in accordance with the Maine Department of Environmental Protection "Guidance for Well and Boring Abandonments" dated January 7, 2009.
4. All conditions of Development Permit DP 4689 and subsequent amendments shall remain in affect except as modified by this amendment.

This permit is approved upon the proposal as set forth in the application and supporting documents, except as modified in the above stated conditions, and remains valid only if the permittee complies with

all of these conditions. Any variation from the application or the conditions of approval is subject to prior Commission review and approval. Any variation undertaken without Commission approval constitutes a violation of Land Use Regulation Commission law. In addition, any person aggrieved by this decision of the staff may, within 30 days, request that the Commission review the decision.

DONE AND DATED AT ASHLAND, MAINE, THIS 21<sup>st</sup> DAY OF AUGUST, 2014.

by: Billie J. Macfeem  
for Nicholas D. Livesay

**TABLE 1C  
REVISED MONITORING PLAN  
SPRUCE SPRING SITE  
PIERCE POND TOWNSHIP, MAINE**

| LOCATION  | Data Collection  |
|---|------------------|
| <b><i>Boreholes - Daily Levels and Flow</i></b>   |                  |
| BH-1  | During Operation |
| BH-2  | During Operation |
| <b><i>Monitoring Well Levels</i></b>              |                  |
| LB-1-1  | See Notes 1 & 2  |
| LB-1-2  | See Notes 1 & 2  |
| LB-1-3  | See Notes 1 & 2  |
| LB-1-4  | See Notes 1 & 2  |
| LB-1-16   | See Notes 1 & 2  |
| LB-1-17   | See Notes 1 & 2  |
| LB-1-18   | See Notes 1 & 2  |
| LB-1-20   | See Note 4       |
| LB-1-21   | See Notes 1 & 2  |
| LB-1-23   | See Notes 1 & 2  |
| <b><i>Stream Flow, Temperature and Levels</i></b> |                  |
| CBSG-1 Flow & Temperature (manual)                | See Notes 1 & 2  |
| CBSG-6 Flow & Temperature (manual)                | See Notes 1 & 2  |
| Staff Gauge @ CBSG-1                              | See Notes 1 & 2  |
| Staff Gauge @ CBSG-4                              | See Notes 1 & 2  |
| Staff Gauge @ CBSG-6                              | See Notes 1 & 2  |
| <b><i>Precipitation</i></b>                       |                  |
| NOAA Station - Bingham                            | Annually         |

| LOCATION  | Data Collection                        |
|---|--|
| <b><i>Piezometer Water Levels, Catchment Levels<br/>Spring Point Flows and Levels</i></b> |  |
| Piezometer PZ-4D  | See Notes 1 & 2                        |
| Catchment 5   | See Notes 1 & 2                        |
| Catchment 6   | See Notes 1 & 2                        |
| Catchment 9   | See Notes 1 & 2                        |
| Catchment 10  | See Notes 1 & 2                        |
| Spring Point SP-6   | See Notes 1 & 2                        |
| Spring Point SP-7   | See Notes 1 & 2                        |
| <b><i>Stream Temperature Tidbits</i></b>  |  |
| CBSG-1  | 4 hr Auto July 1 to September 30       |
| CBSG-6  | 4 hr Auto July 1 to September 30       |
| <b><i>Monitoring of Macroinvertebrates</i></b>  |  |
| Rock Bag @ S770 (CBSG-1)  | Once Between 7/1 and 9/30 - See Note 3 |
| Rock Bag @ S771 (CBSG-6)  | Once Between 7/1 and 9/30 - See Note 3 |
| Rock Bag @ S772   | Once Between 7/1 and 9/30 - See Note 3 |
| <b><i>Wetland Level</i></b>   |  |
| JA-MW-1   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-2   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-3   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-4   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-5   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-6   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-7   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-8   | Water Level - See Notes 1, 2 & 5       |
| JA-MW-9   | Water Level - See Notes 1, 2 & 5       |

Notes:

- 1) Monthly when annual spring water withdrawal for bottling use is expected to exceed 16 MGY.
- 2) March, June, July, August, September and December when annual spring water withdrawal for bottling use is not expected to exceed 16 MGY.
- 3) Rock bag monitoring to be done when the annual withdrawal volumes exceed 16 MGY.
- 4) LB-1-20 to be retained and monitored for well water level, if needed.
- 5) Notify LUPC and MDIFW when water levels in wetland plots occur outside their historic range.



