



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Central Regional Office, 627 Main Street, Worcester, MA 01608

DEVAL L. PATRICK
Governor

TIMOTHY P. MURRAY
Lieutenant Governor

IAN A. BOWLES
Secretary

LAURIE BURT
Commissioner

September 19, 2007

Blackstone National Golf Club
227 Putnam Hill Road
Sutton, MA 01590

Attention: Michael Gordon

RE: City/Town: **Sutton**
Permit Name: Blackstone National Golf Club
WMA Permit Application: 9P4-2-12-290.02
Action: Permit
MassDEP Transmittal #: W100700

Dear Mr. Gordon:

Please find attached the following:

- Findings of Fact in Support of the Final Permit Decision; and,
- Final Water Management Act Permit #9P4-2-12-290.02 for Blackstone National Golf Club, Sutton, Massachusetts.

Please note that the signature on this cover letter indicates formal issuance of the attached document. If you have any questions concerning this letter, please contact Barbara Kickham at 508-767-2724 or e-mail at Barbara.Kickham@state.ma.us.

Sincerely,

Marielle Stone
Section Chief
Drinking Water Program

Cc: Duane LeVangie, WMA Manager, MassDEP-Boston
Don Provencher, Provencher Engineering, 6 Wasserman's Heights, Merrimack, NH 03054
Sutton Board of Health

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Communication for Non-English Speaking Parties (310 CMR 1.03(5)(a))

English

This document is important and should be translated immediately.

Spanish

Este documento es importante y se debe traducir inmediatamente.

Portuguese

Este original é importante e deve ser traduzido imediatamente.

Italian

Questo documento è importante e dovrebbe essere tradotto immediatamente.

Greek

Αυτό το έγγραφο είναι σημαντικό και πρέπει να μεταφραστεί αμέσως.

French

Ce document est important et devrait être traduit immédiatement.

Chinese (traditional)

這個文件重要和應該立刻被翻譯。
这个文件重要和应该立刻被翻译。



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**Findings of Fact in Support of the Final Permit Decision
Water Management Act Permit 9P4-2-12-290.02**

The Massachusetts Department of Environmental Protection (“MassDEP” or the “Department”) has completed its review of the Blackstone National Golf Club (“BNGC”) Water Management Permit application for authorization to withdraw water from the Blackstone River Basin. In response to BNGC’s application for a permit to withdraw water from the Blackstone River Basin, and after reviewing the information that BNGC has provided, the Department hereby approves the Water Management Act Permit #9P4-2-12-290.02 (“the Permit”) in accordance with the Massachusetts Water Management Act (“the Act”). MassDEP makes the following Findings of Fact in support of the attached Permit, and includes herewith its reasons for approving the Permit and for conditions of approval imposed, as required by MGL c 21G, s 11 and 310 CMR 36.00.

Blackstone National Golf Club Water Withdrawal History

The BNGC is an 18-hole golf course located in Sutton, Massachusetts. The golf course began operating without a Water Management Act permit in 2000 and subsequently entered into an Administrative Consent Order (ACP CE-04-F002) with MassDEP in 2004 for violations of the Water Management Act and the Drinking Water Regulations. The golf club withdrew in excess of the Water Management Act threshold for several years and operated an unapproved public water supply. Submittal of a Water Management Act permit application was a requirement of the Administrative Consent Order.

Water use reported between 2001 and 2006 ranged between 16 and 23 million gallons and averaged 19.5 million gallons per year. This average use does not include the “grow-in” period of 1997 to 1999, when water use is typically greater than the long-term average demand. The attached permit authorizes BNGC to withdraw 0.1 MGD for 270 days for the purpose of irrigation for a total of 27 million gallons per year.

The golf course irrigation water is derived from 5 bedrock wells that pump at a maximum combined rate of 145 gpm. The bedrock wells are located throughout the site, are manifold together underground and pump groundwater to a lined irrigation pond. Water from the pond is then pumped through the distribution system to irrigate the grass. Nutrients, herbicides/pesticides, and/or wetting agents are added as needed to the irrigation stream before it enters the distribution system. A separate bedrock well services the club house restaurant. This public water supply well (BCH-1) is located in the driving range and is approved to pump 1,988 gallons per day.

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057.

<http://www.mass.gov/dep> • Phone (508) 792-7650 • Fax (508) 792-7621 • TDD # (508) 767-2788

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The Water Management Act

The Act requires that MassDEP issue permits that balance a variety of factors including:

- Reasonable protection of existing water uses, land values, investments and enterprises;
- Reasonable conservation consistent with efficient water use;
- Reasonable protection of public drinking water supplies, water quality, wastewater treatment capacity, waste assimilation capacity, groundwater recharge areas, navigation, hydropower resources, water-based recreation, wetland habitat, fish and wildlife, agriculture, flood plains; and
- Reasonable economic development and job creation.

As required by MGL c 21G, s 11 and 310 CMR 36.00, the Department makes the following Findings of Fact in support of the Permit, and includes herewith its reasons for approving the Permit and for imposing the conditions of approval.

Findings of Fact for Special Permit Conditions

In issuing permits, the Department looks primarily at site-specific impacts and other issues specific to the system, such as impacts to nearby streams, wetlands, or other water users, justification of long-term demand projections and the capacity of permitted withdrawal points. The conditions are intended to ensure the efficient use of water and to mitigate the potential impact of withdrawals.

Special Conditions 1, Maximum Authorized Annual Average Withdrawal Volume, reflects the permitted withdrawal volume of 0.1 MGD through February 28, 2009 for a total of 27 million gallons per year. The Permit authorizes water withdrawal over a continuous period not to exceed 270 days. BNGC has demonstrated that 270 days is adequate to meet irrigation demands since the start of the record keeping in 2001. The public water supply well is authorized to operate year round.

Special Condition 2, Maximum Authorized Daily Withdrawal From Each Withdrawal Point, reflects the volume of groundwater withdrawal expressed as a combined maximum daily rate for the five bedrock irrigation wells. Based on a 12-day pumping test, the maximum daily pumping volume is 0.21 MGD. The public water supply well is authorized to withdraw 1,988 gallons per day for the restaurant.

Special Condition 3, Water Conservation and Integrated Pest Management Plans, submitted by BNGC are attached as a condition of this permit with no modifications.

Special Condition 4, Long-Term Water Level Monitoring, data will be collected on a weekly basis from four piezometers, one bedrock monitoring well and two staff gages. The data will be submitted to MassDEP in tabular format with the annual statistical report for 2008.

The summary of permit conditions above as part of the Department's findings of fact is not intended to, and should not be construed as, modifying any of the Permit conditions. In the event of any ambiguity between the summary and the actual permit conditions, the Permit language shall be controlling.



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WATER WITHDRAWAL PERMIT
MGL c 21G

This Permit is issued pursuant to the Massachusetts Water Management Act for the sole purpose of authorizing the withdrawal of a volume of water as stated herein and subject to the following special and general conditions. This Permit conveys no right in or to any property beyond the right to withdraw the volume of water for which it is issued.

PERMIT NUMBER: 9P4-2-12-290.02

RIVER BASIN: Blackstone

PERMITTEE: Blackstone National Golf Club
 227 Putnam Hill Road
 Sutton, MA 01590

ISSUANCE DATE: September 19, 2007

EXPIRATION DATE: February 28, 2009

NUMBER OF WITHDRAWAL POINTS: 6
 Groundwater: 6

USE: Irrigation (5), potable (1)

DAYS OF OPERATION: 270 - Irrigation; 365 - Potable

LOCATION(S):

Table 1: Withdrawal Point Identification

Well Name	Latitude	Longitude
IW #1	42° 07' 07"	71° 45' 54"
IW #2	42° 07' 13"	71° 45' 55"
IW #3	42° 07' 16"	71° 46' 00"
IW #4	42° 07' 19"	71° 45' 52"
IW #5	42° 07' 15"	71° 45' 45"
BCH-1 (PWS ID 2290016-1G)	42° 07' 11"	71° 46' 08"

This information is available in alternate format. Call Donald M. Gomes, ADA Coordinator at 617-556-1057.

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SPECIAL CONDITIONS

1. Maximum Authorized Annual Average Withdrawal Volume

This Permit authorizes Blackstone National Golf Club (BNGC) to withdraw water from the Blackstone River Basin at the rate described below. The permitted volume is expressed both as an annual average daily withdrawal rate (million gallons per day or MGD), and as a total annual withdrawal volume (million gallons per year or MGY) for each five-year period of the Permit term.

The Department of Environmental Protection (the “Department” or “MassDEP”) will use the water withdrawal volume from all authorized withdrawal points to assess compliance with the permitted withdrawal volume.

Table 2: Maximum Authorized Withdrawal Volumes

5-Year Periods		Total Water Withdrawal Volumes			
		Permit		Permit + Registration	
		Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)
Period One Years 2-5	3/1/1990 to 2/28/1994	No permit	No permit	No registration	No registration
Period Two Years 6-10	3/1/1994 to 2/28/1999	No permit	No permit	No registration	No registration
Period Three Years 11-15	3/1/1999 to 2/29/2004	No permit	No permit	No registration	No registration
Period Four Years 16-20	3/1/2004 to 2/28/2009	0.1	27	0.1	27

2. Maximum Authorized Daily Withdrawals From Each Withdrawal Point

Withdrawals from individual withdrawal points are not to exceed the approved maximum daily volumes listed below without specific advance written approval from the Department. The authorized maximum daily volume is the approved rate of each source. In no event shall the combined withdrawals from the individual withdrawal points exceed the withdrawal volumes authorized above in Special Condition 1.

Table 3: Maximum Daily Withdrawal Volumes

Well Name	Maximum Daily Rate
IW #1, IW-2, IW-3, IW-4, IW-5	• 0.21 MGD
BCH #1	1,988 gallons/day

- The maximum daily withdrawal volume is the combined rate of the 5 irrigation wells. The wells are manifold together underground and water pumped from the wells is discharged to the lined irrigation pond. The total withdrawal is metered in the pump house before it is discharged through the irrigation system.

3. Water Conservation and Integrated Pest Management Plans

The MassDEP has accepted BNGC's Water Conservation and Implementation Plan (attached) as a permit condition. The irrigation system is computer automated to incorporate weather conditions such as rainfall, humidity, and evapotranspiration, as well as, weather forecasted for the following day. Soil type, amount of shade and slope of the ground are also incorporated into the irrigation program. Hand watering is conducted on a day-to-day basis dependent on plant needs. Wetting agents are used to reduce watering requirements. BNGC maintains irrigation records, employee education and leak detection programs.

The Integrated Pest Management (IPM) Plan (attached) requires management of pesticides and nutrients to minimize potential impacts to groundwater and surface water and to maximize the advantages of their use. The IPM plan uses less toxic, less mobile and less persistent pesticides to reduce costs and exposure to potentially adverse environmental effects.

BNGC stated in a letter date July 16, 2007 (attached) that herbicides and pesticides listed on the Groundwater Protection List as prohibited from use in Zone II's (or Interim Wellhead Protection Areas; IWPA's) will not be used on the golf course with the exception of chlorothalonil. Chlorothalonil will not be used within the 443 foot IWPA of the public drinking water well, BCH-1.

4. Long Term Water Level Monitoring

MassDEP has accepted the proposed water level monitoring plan (attached) with some revisions. The BNGC has proposed weekly collection of water level data from piezometers P-3, P-4, and P-5 from June 1 to September 30, 2008. In addition to these three piezometers, MassDEP requires BNGC to collect water level data from P-2; bedrock monitoring well, BMW-1; and the staff gages, SG-1 and SG-2. The water level data may be submitted in tabular form rather than graphical form, as requested. MassDEP will reevaluate the water level monitoring requirement after one year of water level data has been submitted. Submit the water level monitoring data for 2008 to MassDEP with the annual statistical report.

GENERAL PERMIT CONDITIONS (applicable to all permittees)

No withdrawal in excess of 100,000 gallons per day over the registered volume (if any) shall be made following the expiration of this permit, unless before that date the Department has received a renewal permit application pursuant to 310 CMR 36.00.

1. **Duty to Comply** The permittee shall comply at all times with the terms and conditions of this permit, the Act and all applicable State and Federal statutes and regulations.
2. **Operation and Maintenance** The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to withdraw water so as not to impair the purposes and interests of the Act.
3. **Entry and Inspections** The permittee or the permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property for the purpose of determining compliance with this permit, the Act or the regulations published pursuant thereto, upon presentation of proper identification and an oral statement of purpose.
4. **Water Emergency** Withdrawal volumes authorized by this permit are subject to restriction in any water emergency declared by the Department pursuant to MGL c 21G ss 15-17, MGL c 150 ss 111, or any other enabling authority.
5. **Transfer of Permits** This permit shall not be transferred in whole or in part unless and until the Department approves such transfer in writing, pursuant to a transfer application on forms provided by the Department requesting such approval and received by the Department at least thirty (30) days before the effective date of the proposed transfer. No transfer application shall be deemed filed unless it is accompanied by the applicable transfer fee established by 310 CMR 36.37.
6. **Duty to Report** The permittee shall complete and submit annually, on a form provided by the Department, all of the information required by said form including, without limitation, a certified statement of the withdrawal. Such report shall be received by the Department by the date specified on the form each year. Such report must be mailed or hand delivered to:

Department of Environmental Protection
Drinking Water Program
Water Management Program
One Winter Street, 5th Floor
Boston, MA 02108

7. **Duty to Maintain Records** The permittee shall maintain withdrawal records and other information in sufficient detail to demonstrate compliance with this permit.
8. **Metering** All withdrawal points included within the permit shall be metered within one year of the date of issuance of the permit. Meters shall be maintained and replaced as necessary to ensure the accuracy of the withdrawal records.

APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing under the provisions of MGL c 30A. Any such request must be made in writing, by certified mail and received by the Department within twenty-one (21) days of the date of receipt of this permit. No request for an appeal of this permit shall be validly filed unless a copy of the request is sent by certified mail or delivered by hand to the local water resources management official in the city or town in which the withdrawal point(s) is located; and for any person appealing this decision, who is not the applicant, unless such person notifies the permit applicant of the appeal in writing by certified mail or by hand within five (5) days of mailing the appeal to the Department.

CONTENTS OF HEARING REQUEST

310 CMR 1.01(6)(b) requires the request to include a clear and concise statement of the facts which are the grounds for the request and the relief sought. In addition, the request must include a statement of the reasons why the decision of the Department is not consistent with applicable rules and regulations, and for any person appealing this decision who is not the applicant, a clear and concise statement of how that person is aggrieved by the issuance of this permit.

FILING FEE AND ADDRESS

The hearing request, together with a valid check, payable to the Commonwealth of Massachusetts in the amount of \$100 must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request shall be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

EXEMPTIONS

The filing fee is not required if the appellant is a city or town (or municipal agency), county, district of the Commonwealth of Massachusetts, or a municipal housing authority.

WAIVER

The Department may waive the adjudicatory hearing filing fee for any person who demonstrates to the satisfaction of the Department that the fee will create an undue financial hardship. A person, seeking a waiver must file, together with the hearing request, an affidavit setting forth the facts, which support the claim of undue hardship.