

## Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker Governor

Karyn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

July 28, 2016

Mr. Roger A. Correira 75 Wapping Road Kingston, MA 02364

PLYMPTON - WMA RE: Roger A. Correira

Permit No. 9P4-4-21-240.01

BRPWM01 WMA Permit Transfer and

Renewal

Transmittal No. X268373

Dear Mr. Correira:

Please find the attached documents:

- Findings of Fact in Support of the Final Permit Decision.
- Water Management Act Permit for withdrawals by Roger A. Correira in the South Coastal Basin.

The signature on this cover letter indicates formal issuance of the attached document. Please contact Jim McLaughlin at (508) 946-2805 or via email at james,m.mclaughlin@state,ma.us if you have any questions regarding this matter.

Sincerely,

Jonathan E. Hobill Regional Engineer

Bureau of Water Resources

im/encl.

CERTIFIED MAIL 7014 2120 0003 6904 2139

cc:

Duane LeVangie, DEP, Boston

ec:

Attorney David Delaney, Delaney & Muncey, P.C.

Plympton Conservation Agent Kingston Conservation Agent Julia Blatt, Mass Rivers Alliance

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

Contact Michelle Waters-Ekanem, Diversity Director/Civil Rights: 617-292-5751 TTY# MassRelay Service 1-800-439-2370.

http://www.mass.gov/eea/agencies/massdep/service/justice/

(Version 3.30.15)



#### 1 English:

This document is important and should be translated immediately. If you need this document translated, please contact MassDEP's Diversity Director at the telephone numbers listed below.



#### 2 Español (Spanish):

Este documento es importante y debe ser traducido inmediatamente. Si necesita este documento traducido, por favor póngase en contacto con el Director de Diversidad MassDEP a los números de teléfono que aparecen más abajo.



#### 3 Português (Portuguese):

Este documento é importante e deve ser traduzida imediatamente. Se você precisa deste documento traduzido, por favor, entre em contato com Diretor de Diversidade da MassDEP para os números de telefone listados abaixo.



#### 4(a) 中國(傳統)(Chinese (Traditional):

本文件非常重要,應立即翻譯。如果您需要翻譯這份文件,請用下面列出的電話號碼與 MassDEP的多樣性總監聯繫。



## 4(b) 中国(简体中文)(Chinese (Simplified):

本文件非常重要,应立即翻译。如果您需要翻译这份文件,请用下面列出的电话号码与 MassDEP的多样性总监联系。



## 5 Ayisyen (franse kreyòl) (Haitian) (French Creole):

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradui imedyatman. Si ou bezwen dokiman sa a tradui, tanpri kontakte Divèsite Direktè MassDEP a nan nimewo telefòn ki nan lis pi ba a.



### 6 Việt (Vietnamese):

Tài liệu này là rất quan trọng và cần được dịch ngay lập tức. Nếu bạn cần dịch tài liệu này, xin vui lòng liên hệ với Giám đốc MassDEP đa dạng tại các số điện thoại được liệt kê dưới đây.



#### 7 ប្រទេសកម្ពុជា (Kmer (Cambodian):

ឯកសារ៉េនះគឺមានសារៈសំខាន់និង់គួរត្រូវបានបកប្រែក្លាម។ ប្រសិនបើអ្នកគ្រូវបានបកប្រែ ឯកសារនេះសូមទំនាក់ទំនងឆ្នោតជានាយក MassDEP នៅលេខទូរស័ព្ទដែលបានរាយ ខាងក្រោម។



## 8 Kriolu Kabuverdianu (Cape Verdean):

Es documento é importante e deve ser traduzido imidiatamente. Se bo precisa des documento traduzido, por favor contacta Director de Diversidade na MassDEP's pa es numero indicode li d'boche.



#### 9 Русский язык (Russian):

Этот документ является важным и должно быть переведено сразу. Если вам нужен этот документ переведенный, пожалуйста, свяжитесь с директором разнообразия MassDEP по адресу телефонных номеров, указанных ниже.

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

Contact Michelle Waters-Ekanem, Diversity Director/Civil Rights: 617-292-5751 TTY# MassRelay Service 1-800-439-2370.

http://www.mass.gov/eea/agencies/massdep/service/justice/

(Version 3.30.15)



10 العربية) (Arabic): العربية) العربية) العربية المثرجمة، يرجى الاتصال مدير التنوع هذه الوثيقة المترجمة، يرجى الاتصال مدير التنوع هذه الوثيقة المهامة وينبغي أن تترجم على الفور. اذا كنت بحاجة الى هذه الوثيقة المترجمة، يرجى الاتصال مدير التنوع في DEMassP على أرقام الهواتف المدرجة ادناه.



11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야합니다. 당신이 번역이 문서가 필요하면 아래의 전화 번호로 MassDEP의 다양성 감독에 문의하시기 바랍니다.



12 հայերեն (Armenian)։

Այս փաստաթուղթը շատ կարեւոր է եւ պետք է թարգմանել անմիջապես. Եթե Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանվել դիմել MassDEP բազմազանությունը տնօրեն է հեռախոսահամարների թվարկված են ստորեւ.



فارسی 13) فارسی 13) فارسی 13) فارسی 13) فارسی 13 این سند مهم است و باید فورا ترجمه شده است. اگر شما نیاز به این سند ترجمه شده، لطفا با ما تماس تنوع مدیر MassDEP در شماره تلفن های ذکر شده در زیر.



14 Français (French):

Ce document est important et devrait être traduit immédiatement. Si vous avez besoin de ce document traduit, s'il vous plaît communiquer avec le directeur de la diversité MassDEP aux numéros de téléphone indiqués ci-dessous.



15 Deutsch (German):

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Wenn Sie dieses Dokument übersetzt benötigen, wenden Sie sich bitte Diversity Director MassDEP die in den unten aufgeführten Telefonnummern.



16 Ελληνική (Greek):

Το έγγραφο αυτό είναι σημαντικό και θα πρέπει να μεταφραστούν αμέσως. Αν χρειάζεστε αυτό το έγγραφο μεταφράζεται, παρακαλούμε επικοινωνήστε Diversity Director MassDEP κατά τους αριθμούς τηλεφώνου που αναγράφεται πιο κάτω.



17 Italiano (Italian):

Questo documento è importante e dovrebbe essere tradotto immediatamente. Se avete bisogno di questo documento tradotto, si prega di contattare la diversità Direttore di MassDEP ai numeri di telefono elencati di seguito.



18 Język Polski (Polish):

Dokument ten jest ważny i powinien być natychmiast przetłumaczone. Jeśli potrzebujesz tego dokumentu tłumaczone, prosimy o kontakt z Dyrektorem MassDEP w różnorodności na numery telefonów wymienionych poniżej.



19 **हिन्दी** (Hindi):

यह दस्तावेज महत्वपूर्ण है और तुरंत अनुवाद किया जाना चाहिए. आप अनुवाद इस दस्तावेज़ की जरूरत है, नीचे सुचीबद्ध फोन नंबरों पर MassDEP की विविधता निदेशक से संपर्क करें.



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> Martin Suuberg Commissioner

## Findings of Fact in Support of Permit Decision Water Management Act Permit #9P4-4-21-240.01 Roger A. Correira, Kingston

The Department of Environmental Protection makes the following *Findings of Fact* in support of the attached Water Management Act (WMA) Permit #9P4-4-21-240.01, and includes herewith its reasons for issuing the permit and for conditions of approval imposed, as required by M.G.L. c. 21G, § 11.

The issuance of this permit is in response to an application to transfer a water withdrawal permit (transmittal number X268373) by Crop Circle Cranberry to Roger A. Correira for the purpose of cranberry cultivation at an existing cranberry bog with the possibility of planting additional bogs. The site is located off Ring Road in Plympton on the Kingston town line. The site has an existing 12.7 acres of cranberry bog with the possibility of adding 5.3 acres in an area previously graded to construct bogs. Two permitted water withdrawal points servicing the bogs are located in Plympton, from impoundments on and fed by Barrows Brook.

The site had 10.5 acres of bog by 1991. A prior owner applied for a WMA permit in the early 1990's, but the permit was denied after the applicant's consultant provided calculations to show the water use would not exceed the WMA permitting threshold. The land owner developed two more acres of bogs during the 1990's, and cleared land for a five-acre expansion that was never planted. Crop Circle Cranberry purchased the site in approximately 2002. The Department issued a WMA permit to Crop Circle Cranberry on February 3, 2009.

The headwaters of Barrows Brook are located within two cranberry bog complexes in Kingston, upstream of the Ring Road site. Barrows Brook flows northwesterly through the site, then joins Jones River Brook, which is a tributary of the Jones River. According to literature reviewed by the Department in preparing the original permit, the Jones River tributaries are groundwater-fed and strongly influenced by the geologic setting of each sub-watershed. The flow per unit area of the surface drainage areas of the tributaries vary according to the differing geologies within each sub-watershed. The studies (listed at the end of the Findings of Fact) also found that the surface water divides do not necessarily correspond with the groundwater divides of the sub-watersheds.

A draft of this WMA permit was advertised in the Environmental Monitor on June 8, 2016, for a 30-day comment period. One written comment was received which expressed support for the permit issuance. Mr. Correira also holds WMA registration number 4-21-239.09 for cultivation of cranberry bogs at two other sites within the South Coastal Basin, one in Kingston and the other in Plympton.

## The Water Management Act Factors To Be Considered in Permitting

The Water Management Act (M.G.L. c. 21G, § 7) requires that MassDEP issue permits that balance a variety of factors including:

- Impact of the withdrawal on other sources of water;
- Time of year when the withdrawal will be made;
- Water available within the safe yield of the source;
- Reasonable protection of existing water uses, land values, investments and enterprises;
- Use to be made of the water withdrawn;
- 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, floodplains; and
- Reasonable economic development and job creation.

## Water Management Regulation Revisions

In 2010 the Executive Office of Energy and Environmental Affairs (EEA) convened the Sustainable Water Management Initiative (SWMI) for the purpose of incorporating the best available science into the management of the Commonwealth's water resources. SWMI was a multi-year process that included a wide range of stakeholders and support from the Departments of Environmental Protection, Fish and Game, and Conservation and Recreation. In November 2012 the *Massachusetts Sustainable Water Management Initiative Framework Summary* (<a href="http://www.mass.gov/eea/docs/eea/water/swmi-framework-nov-2012.pdf">http://www.mass.gov/eea/docs/eea/water/swmi-framework-nov-2012.pdf</a>) was released.

On November 7, 2014, the Department adopted revised Water Management Regulations at 310 CMR 36.00 that incorporate elements of the SWMI framework and the Water Conservation Standards adopted by the Massachusetts WRC. The regulations reflect a carefully developed balance to protect the health of Massachusetts' water bodies while meeting the needs of businesses and communities for water.

## Safe Yield in the South Coastal Basin

This permit is being issued under the safe yield methodology adopted by the Department on November 7, 2014, and described in the regulations at 310 CMR 36.13. As of the date of issuance of this permit, the safe yield for the South Coastal Basin is 70.1 million gallons per day (MGD), and total registered and permitted withdrawals are 47.4 MGD, leaving 21.8 MGD potentially available. The maximum withdrawals that will be authorized in this permit, and all other permits currently under review by the Department within the South Coastal Basin, will be within the safe yield and may be further conditioned as outlined in the regulations.

## Mitigation Requirements for Cranberry Growers

Water Management Act regulations specify mitigation planning requirements at 310 CMR 36.22(6). Direct mitigation, *i.e.*, activities that can be volumetrically quantified and compared to the permitted volume of water over baseline, is to be evaluated first. Direct mitigation activities outlined in the regulations include surface water releases, returning wastewater to groundwater, stormwater

remediation, and infiltration and inflow control programs. However, most of these are likely to be infeasible for cranberry growers and, in the case of surface water releases, counter to the best practices of the industry. Wherever possible, cranberry growers should be returning the water used on their bogs in-season to a tail-water recovery pond to address the water quality impacts associated with the use of fertilizers and pesticides, instead of releasing the water downstream. Cranberry cultivation does not result in wastewater that can be returned to the subsurface, and the Department does not expect them to undertake stormwater remediation and infiltration and inflow programs because they do not have access to or control over stormwater or sewage collection systems.

When direct mitigation is unavailable or insufficient to fulfill a permittee's mitigation requirement, indirect mitigation activities that will improve fluvial habitat must then be considered. Indirect mitigation activities outlined in the regulations include water quality improvements. Typically, cranberry growers have a Farm Plan, developed in conjunction with the Plymouth County Conservation District (PCCD), which serves as a plan of operations for the bogs. A standard feature of the farm planning process is an evaluation of the measures each individual cranberry grower has implemented, or should implement to the extent feasible, to address water quality impacts. The Department believes the adoption and implementation of the recommendations made in an approved Farm Plan during the term of the permit will, in most cases, fulfill a permittee's mitigation requirement.

## Permit Conditions

The Department has developed a set of permit conditions at 310 CMR 36.28 that are considered for inclusion in each permit. Not all of these permit conditions apply to every permitted water withdrawal. In addition, some permits have unique permit conditions to address site-specific issues.

## Findings of Fact for Roger A. Correira Permit Conditions

In the case of Roger A. Correira:

- permit conditions specific to public water suppliers do not apply;
- there are no vernal pools or wetlands requiring monitoring to assess withdrawal impacts;
- there are no cold water fisheries within the sub-basin;
- minimization requirements do not apply because the Roger A. Correira bogs are located in the
  part of the South Coastal Basin underlain by Plymouth-Carver Aquifer, where groundwater
  withdrawal levels cannot be readily determined;
- water conservation measures specific to cranberry production are required; and
- mitigation is required because this permit authorizes water withdrawals for cranberry production greater than the permittee's authorized withdrawal volume for 2005.

The following Findings of Fact are intended to describe the rationale, and to provide some additional detail, for each of the special conditions in the Roger A. Correira permit. The summary of permit conditions, as part of MassDEP'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.

<u>Special Condition 1, Authorized Annual Withdrawal Volume</u>, sets an annual average withdrawal volume of 0.103 million gallons per day (MGD) for a total of 37.6 million gallons per year (MGY) over

365 days for the cultivation of 18 acres of cranberry bog located off Ring Road in Plympton. This volume is based upon 7 acre-feet of water per acre of bog per year for the existing 12.7 acres of bog, and 5 acre-feet of water per acres of bog per year for the proposed 5.3 acres, as explained in Special Condition 3. This volume is in addition to the registered volume of 0.20 MGD (71.5 MGY) to cultivate 32.93 acres of bog at Roger A. Correira's bogs at two other sites within the South Coastal Basin.

The historical formula for calculating water needs for cranberry cultivation assumes an average water requirement that varies between 5 and 10 acre-feet of water per year for each acre of bog, or between 1.63 and 3.26 MGY for each acre of bog. This formula and the thresholds established for WMA registration and permitting for cranberry bogs, were developed based on studies done by both the U.S. Department of Agriculture, Soil Conservation Service (now NRCS) and representatives of the Massachusetts cranberry industry. This average volume requirement can be greatly reduced by instituting water conservation Best Management Practices (BMPs).

<u>Special Condition 2, Authorized Cranberry Acreage</u>, lists the applicant's permitted and registered acreage at the site.

<u>Special Condition 3, Water Conservation Requirements</u>, acknowledges that the applicant has implemented water conservation BMPs for all of its bogs, including:

- 1. annual flume and dike repair maintenance;
- 2. use of low-volume sprinkler heads;
- 3. on-site water supply/tailwater recovery system;
- 4. return of all unconsumed water back to the water supply/tailwater recovery system;
- 5. laser leveling of bog sections; and
- 6. sequential flooding of bog.

The permitted average daily volume of 0.103 MGD, or 37.6 MGY for the applicant's 12.7 acres of existing and 5.3 acres of proposed permitted bog is based on the data provided in the original permit application, as well as the data contained in the 1988 *Water Conservation and Utilization Study Southeastern Massachusetts*, by the U.S. Department of Agriculture, NRCS. A volume of 7 acre-feet of water per year for each acre of existing bog, and 5 acre-feet of water per year for each acre of proposed bog was used to calculate the permitted volume. The annual volumes were chosen by comparing the Ring Road Bog's construction characteristics to similar bog construction presented in the 1988 Study (Tables A-7R and A-5R in the Study, respectively).

Special Condition 4, Mitigation of Withdrawals over 2003-2005 Baseline is required because Roger A. Correira is increasing his baseline withdrawal of 0.20 mgd (registered water withdrawals as of 2005) by 0.103 mgd for water withdrawals to cultivate 18 acres of new bog. Roger A. Correira's Farm Plan includes specific best management practices that provide water quality benefits when they are implemented as part of the operation of the bogs. The Farm Plan is supplemented by an annual publication called the *Cranberry Chart Book* and prepared by the University of Massachusetts Cranberry Experiment Station.

Specific provisions of the Permittee's current Farm Plan that mitigate the impacts of the permitted water withdrawals include cultivation best management practices that provide water quality benefits by:

- 1. optimizing the use of fertilizer per The Best Management Practice Guide and UMass Cranberry Chart Book recommendations for nutrient management;
- 2. retaining excess nutrients through an on-site water supply/tailwater recovery system; and
- 3. reducing, whenever possible, nutrient and pesticide applications.

Implementation of the approved Farm Plan is required in Special Condition 4 of the permit to fulfill the permittee's mitigation requirement.

## General Conditions applicable to all WMA permits are included.

The Department utilized the following information during the review of the application: the Massachusetts Geographic Information System (GIS). The data layers used included: 1997 through 2015 aerial photography, water supply layers, wetlands-related layers, natural habitat layers, DFW Coldwater Fisheries layer, flood zones and USGS maps.

Crop Circle Cranberry conducted stream monitoring of Barrows Brook for a few years after the original permit was issued and reported those results to the Massachusetts Department of Fish and Game Riverways Program. The Riverways Program communicated to the Department that enough data was gathered and the monitoring ceased. Stream monitoring is not being required by this permit.

The following reports were reviewed during the original permit filing:

"Jones River Watershed Study Final Report," GZA GeoEnvironmental, Inc., April, 2003.

Johnson, David G., "Streamflow Distribution in the Jones River Basin," Civil Engineering Practice, Fall 1986, p. 131-140.

Persky, James H., "Yields and Water Quality of Stratified-Drift Aquifers in the Southeast Coastal Basin, Cohasset to Kingston, Massachusetts," U.S. Geological Survey, Water-Resources Investigations Report 91-4112, 1993.

"South Shore Coastal Watersheds 2001 Water Quality Assessment Report", Massachusetts Department of Environmental Protection, Division of Watershed Management, March 2006.

Please note annual reporting requirements, your renewal date, and any conditions that may apply. The regulations governing this statement can be found at 310 CMR 36.00-36.44. DEP's Timely Action and Fee Provision, 310 CMR 4.00, authorizes an annual compliance fee for Water Management Act registrations and permits. Please also note that this permit is for cranberry cultivation only; any change in use is subject to Department review and may require a permit application.

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## Commonwealth of Massachusetts Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker Governor

Karvn E. Polito Lieutenant Governor Matthew A. Beaton Secretary

> Martin Suuberg Commissioner

## WATER WITHDRAWAL PERMIT M.G.L. 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 below 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:

9P4-4-21-240.01

WATERSHED:

South Coastal

PERMITTEE:

Roger A. Correira

75 Wapping Road

Kingston, Massachusetts 02364

**EFFECTIVE DATE:** 

July 28, 2016

**EXPIRATION DATE:** 

August 31, 2030

USE:

Cranberry Cultivation

**DAYS OF OPERATION: 365** 

NUMBER OF WITHDRAWAL POINTS:

2 surface water

## Withdrawal Point Locations

	ID	Source	Latitude	Longitude	Location
	1	Barrows Brook Reservoir	41° 58' 38"	70° 47' 12"	Ring Road,
1	#1	41 30 30	70 47 12	Plympton	
		Dagamain #2	41° 58' 44"	70° 47' 20"	Ring Road,
	Reservoir #2	41 38 44	70 47 20	Plympton	

#### SPECIAL CONDITIONS

## 1. <u>Authorized Annual Withdrawal Volume</u>

This permit authorizes the withdrawal of water from sources in the South Coastal Basin. The permitted volume is expressed in millions of gallons, both as an average daily volume that may be withdrawn, and as a total volume that may be withdrawn annually from this source for the permit term. The withdrawal volume is based on 7 acre-ft of water per acre of bog per year for the 12.7 acres of existing bogs, and 5 acre-ft of water per acre of bog per year for the 5.3 acres of proposed bogs.

The volume reflected by this rate is in addition to the 0.20 MGD (71.5 MGY) previously authorized to Roger A. Correira under WMA Registration 4-21-239.09 for withdrawal from the South Coastal Watershed. The registered withdrawals are for cultivating cranberry bogs at locations different than the permitted location.

Withdrawals are authorized as follows:

	Authorized Permit Volume		Permit + Registration = Total Volumes		
Permit Period	Daily Average (MGD)	Total Annual (MGY)	Daily Average (MGD)	Total Annual (MGY)	
7/28/2016 to 8/31/2030	0.103	.37.6	0.103 + 0.20 = 0.303	37.6 + 71.5 = 109.1	

#### 2. Authorized Cranberry Acreage

This permit authorizes Roger A. Correira to withdraw water from the permitted withdrawal points listed above at Ring Road in Plympton, for the cultivation of 18 acres of cranberry bog.

Bog Name	Address	Municipality	Permitted Acreage	Registered Acreage	Total WMA Authorized Acreage
Ring Road Bog	Ring Road	Plympton	18.0	0	18.0
Correira Bog	Wapping Road	Kingston	0	23.93	23.93
Dennett's Pond Bog	Ring Road	Plympton	0	9.0	9.0
		TOTALS =	18.0	32.93	50.93

## 3. Water Conservation Requirements

Roger A. Correira shall continue to adhere to the Best Management Practices (BMP's) as defined on Page 5 in the Memorandum of Agreement for Implementation of Water Conservation BMP's at Cranberry Bogs signed by the Cape Cod Cranberry Growers' Association, the Commission for

Conservation of Soil, Water and Related Resources and the Department of Environmental Protection, effective September 8, 2004.

Roger A. Correira has implemented water conservation BMPs for this bog, including:

- 1. annual flume and dike repair maintenance;
- 2. use of low-volume sprinkler heads;
- 3. on-site water supply/tailwater recovery system;
- 4. return of all unconsumed water back to the water supply/tailwater recovery system;
- 5. laser leveling of bog sections;
- 6. sequential flooding of bog.

## 4. Mitigation of Withdrawals over 2003-2005 Baseline: Farm Plan/Chart Book

The Permittee is required to mitigate the impacts of these permitted withdrawals because they are an increase over the Permittee's baseline withdrawal of 0.20 mgd (registered water withdrawals to cultivate 32.93 acres of bog as of 2005).

The mitigation requirement is fulfilled through implementation of the Permittee's Farm Plan, dated 2008, which was developed in conjunction with the Plymouth County Conservation District (PCCD). The Permittee shall operate its bogs according to the Farm Plan. The Permittee shall review its Farm Plan with the PCCD, and update as needed, every 5 years or if major changes are made to the farm or its operating practices. The Farm Plan shall be updated prior to January 1, 2017, to reflect the change in ownership.

The Permittee shall review and implement, as applicable, guidance from the annual update of the Cranberry Chart Book, published and distributed by the University of Massachusetts Cranberry Experiment Station. The Chart Book is provided free of charge and is freely available on the UMass Cranberry Experiment Station's website. The Permittee shall register its contact information with the Experiment Station to receive the annual Chart Book editions.

Specific provisions of the Permittee's Farm Plan that mitigate the impacts of the permitted water withdrawals include cultivation best management practices that provide water quality benefits by:

- 1. optimizing the use of fertilizer per The Best Management Practice Guide and UMass Cranberry Chart Book recommendations for nutrient management;
- 2. retaining excess nutrients through an on-site water supply/tailwater recovery system; and
- 3. reducing, whenever possible, nutrient and pesticide applications.

## **GENERAL 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 and in compliance with 310 CMR 36.00.

1. <u>Duty to Comply</u> 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. <u>Operation and Maintenance</u> 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. <u>Entry and Inspections</u> The Permittee or the Permittee's agent shall allow personnel or authorized agents or employees of the Department to enter and examine any property over which Permittee has authority, title or control, 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 M.G.L. c. 21G, §§ 15-17, M.G.L. c. 150, § 111, or any other enabling authority.
- 5. <u>Transfer of Permits</u> 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 36.33.
- 6. <u>Duty to Report</u> The Permittee shall submit annually, on a form provided by the Department, a certified statement of the withdrawal. Such report is to be received by the Department by the date specified by the Department. Such report must be submitted as specified on the report form.
- 7. <u>Duty to Maintain Records</u> The Permittee shall be responsible for maintaining withdrawal and all other records as specified by this permit.
- 8. <u>Metering</u> Not applicable to cranberry permits. However, transferring cranberry withdrawals to another use requires the authorized volume be verified based on actual water use at the bog(s) to be transferred.
- 9. <u>Right to Amend, Suspend or Terminate</u> The Department may amend, suspend or terminate the permit in accordance with M.G.L. c. 21G and 310 CMR 36.29.

## APPEAL RIGHTS AND TIME LIMITS

This permit is a decision of the Department. Any person aggrieved by this decision may request an adjudicatory hearing as described herein and in accordance with the procedures described at 310 CMR 36.37. Any such request must be made in writing, by certified mail or hand delivered and received by the Department within twenty-one (21) days of the date of receipt of this permit. The hearing request, including proof of payment of the filing fee, must be mailed to:

Case Administrator
MassDEP Office of Appeals and Dispute Resolution
One Winter Street
Boston, MA 02108

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 community in which the withdrawal point 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 his permit.

#### FILING FEE AND ADDRESS

The Department's fee transmittal form, 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 municipality (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.

Issuance Date: July 28, 2016

Jonathan A. Hobill Regional Engineer

Bureau of Water Resources

By: \( \sum\_\sum\_\sum\_\sum\_\lambda. \text{NWill}

Massachusetts Department of Environmental Protection