Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
Southeast Regional Office
Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone**: 508-946-2700

Maura T. Healey, Governor | **Kim Driscoll**, Lieutenant Governor | **Rebecca Tepper**, Secretary | **Bonnie Heiple**, Commissioner

August 24, 2026

VIA ELECTRONIC MAIL
anthony@gnbrrmdistrict.org

Mr. Anthony Novelli, Executive Director
Greater New Bedford Regional Refuse Management District
300 Samuel Barnet Boulevard
New Bedford, Massachusetts 02745

RE: **ISSUANCE OF DRAFT PERMIT**
Application for: BWP SW 08 - AUTHORIZATION TO CONSTRUCT
NEW PHASE OF PERMITTED LANDFILL
PHASE 2 CELL 7
Application No. 25-SW08-0001-APP

AT: Crapo Hill Sanitary Landfill
300 Samuel Barnet Boulevard
Dartmouth, Massachusetts 02747
Facility No. 39197, Regulated Interest No. 172448

Dear Mr. Novelli:

The Massachusetts Department of Environmental Protection, ("MassDEP" or the "Department") Solid Waste Management Section has completed its technical review of the Landfill Phase Approval application referenced above (the "Application") and determined that the Application is technically complete. Accordingly, MassDEP hereby issues the attached **DRAFT** Permit to construct Phase 2 Cell 7 of the Crapo Hill Sanitary Landfill (the "Landfill").

Pursuant to the provisions of 310 CMR 19.032, the Applicant, as the proponent of the project, is now required to give Public Notice in accordance with the requirements contained at 310 CMR 19.032(3). Public Notice shall be served by publishing the Public Notice in the legal notice section of a newspaper of general circulation in the area affected by the proposed permit action and by promptly mailing the enclosed Public Notice to the Dartmouth Board of Health, the Board of Health of any city or town within ½ mile of the facility, and all abutters of the facility. MassDEP recommends that the Applicant publish

public notice in English and in applicable foreign languages (Spanish, Portuguese, and Cape Verdean Creole) and publish public notice in available foreign language newspapers circulated in these communities to residents.

Following the issuance/publication of the Public Notice of the **DRAFT** Permit, the Applicant is required to provide MassDEP with documentation that public notice was properly and sufficiently given. This should include submitting a dated newspaper clipping of the legal notice as published in a newspaper of general circulation in the locality of the proposed permit action and proof that notice was provided to the Board(s) of Health and abutters. Proof may be in the form of a copy of the public notice in the publication. In addition, you should submit a certified abutters list from the Dartmouth Assessors' office and copies of all certified mail return receipts.

The public comment period and MassDEP's Review Period shall commence when you have provided MassDEP with proof that the Public Notice requirement as set forth in 310 CMR 19.032(3) has been satisfied.

The regulations at 310 CMR 19.032(4) include a 30-day public comment period, however MassDEP and the District have agreed to extend it to 45-days to allow more time for public input. During the 45-day Public Comment Period, interested persons shall be entitled to review the DRAFT Permit and send comments to MassDEP regarding the proposal.

MassDEP will review all comments and render a decision regarding the proposed action. Predicated on such comments, MassDEP's final permit decision will include written responses to any major comments and may include modified language in order to address any such comments. In the event MassDEP is unable to sufficiently address the public comments based on the information contained in the record file regarding the proposal at the time of issuance of this DRAFT Permit, MassDEP will solicit additional information from the Applicant in order to sufficiently respond to the comments. In the event that MassDEP or the Applicant is unable to sufficiently address any such comments, MassDEP reserves the right to modify or rescind this DRAFT Permit in its final decision regarding the proposal.

Any correspondence regarding this matter should reference Application No. 25-SW27-0001-APP.

Please direct any questions regarding this decision to me at Jennifer.Wharff@mass.gov or to Alison Cochrane at Alison.Cochrane@mass.gov or write to the letterhead address.

Sincerely,

This final document copy is being provided to you electronically by the Department of Environmental Protection. A signed copy of this document is on file at the DEP office listed on the letterhead.

Jennifer Wharff, Acting Chief
Solid Waste Management Section
Bureau of Air and Waste

AC/EB/JW

Ec: Dartmouth Board of Health, cmichaud@town.dartmouth.ma.us

City of New Bedford Board of Health, stephanie.sloan@newbedford-ma.gov

Freetown Board of Health, ndumont@freetownma.gov

Brown & Caldwell, akirschner@brwncald.com

DEP – Boston – G. Cooper, J. Fischer

DEP – SERO – M. Dakers, J. Wharff, D. Marshall-Hewlitt, T. Cushing

PUBLIC NOTICE OF DRAFT LANDFILL CONSTRUCTION PERMIT

Crapo Hill Sanitary Landfill
Proposed Phase 2 Cell 7 Landfill Expansion
300 Samuel Barnett Boulevard
Dartmouth, Massachusetts 02714

Authorization to Construct
BWP SW 08: Landfills – Phase Approval

Notice is hereby given, pursuant to M.G.L., Chapter 111, Section 150A and Section 150A1/2, that the Massachusetts Department of Environmental Protection, ("MassDEP") has prepared a **DRAFT** Authorization to Construct ("ATC") for the development of a new landfill phase at the Crapo Hill Sanitary Landfill (the "Landfill") located at 300 Samuel Barnet Blvd., Dartmouth, MA 02747. The Landfill is located on a 152-acre parcel of land that is in the town of Dartmouth. The proponent is the Greater New Bedford Regional Refuse Management District (the "District") of 300 Samuel Barnet Boulevard, New Bedford, Massachusetts, 02745.

The District is proposing to develop Phase 2 Cell 7 of the existing solid waste management facility in accordance with their facility permit for 69.8 acres of sanitary landfill. The proposed construction of Phase 2 Cell 7 will add approximately 3.5 acres of waste disposal area and 750,000 cubic yards of total landfill volume. Phase 2 Cell 7 would provide approximately seven years of disposal capacity, extending the life of the Landfill through the year 2036.

The Landfill is permitted to accept and dispose of to a maximum of 574 tons per day of municipal solid waste ("MSW"). The maximum annual tonnage acceptance rate is 115,000 tons per year. The District is not proposing any additional tonnage capacity. The Landfill operates 6 days per week (Monday through Friday, 7:15 AM to 3:15 PM, and Saturday 8:00 AM to 11:00 AM, or to noon on a holiday week), 52 weeks per year.

The application and DRAFT Permit may be reviewed at (INSERT THE PUBLIC LOCATION(s) AND HOURS WHERE THE APPLICATION MAY BE REVIEWED). The application and DRAFT permit may be reviewed online at: https://eeaonline.eea.state.ma.us/EEA/PublicApp/ by entering "25-SW08-0001-APP" in the Record ID field and clicking the "Search" button at the bottom of the page. Click on one link at a time to access each separate document.

MassDEP will accept written comments regarding the proposed Phase 2 Cell 7 landfill expansion for a period of forty-five (45) days from the date of publication of this Notice (CHANGE THIS LANGUAGE IF WE COORDINATE COMMENT PERIOD STATE DATE). Public Comments can be submitted to MassDEP in one of three ways: **mailed** to Jennifer Wharff, Acting Chief, Solid Waste Management Section, Massachusetts Department of Environmental Protection, 20 Riverside Drive, Lakeville, MA 02347; **emailed** to

"sero.solidwaste@mass.gov";
or **submitted online** at https://eeaonline.eea.state.ma.us/EEA/PublicApp/.

重要 महत्वपूर्ण σημαντικός Important կարեւոր quan trọng مهم

Massachusetts Department of Environmental Protection | 100 Cambridge Street 9th Floor, Boston, MA 02114

Communication for Non-English-Speaking Parties

This document is important and should be translated immediately.

If you need this document translated, please contact MassDEP's Director of Environmental Justice at the telephone number listed below.

Español Spanish

Este documento es importante y debe ser traducido inmediatamente. Si necesita traducir este documento, póngase en contacto con el Director de Justicia Ambiental de MassDEP (MassDEP's Director of Environmental Justice) en el número de teléfono que figura más abajo.

Português Portuguese

Este documento é importante e deve ser traduzido imediatamente. Se você precisar traduzir este documento, entre em contato com o Diretor de Justiça Ambiental do MassDEP no número de telefone listado abaixo.

繁體中文 Chinese Traditional

本文檔很重要，需要即刻進行翻譯。
如需對本文檔進行翻譯，請透過如下列示電話號碼與 MassDEP 的環境司法總監聯絡。

简体中文 Chinese Simplified

这份文件非常重要，需要立即翻译。
如果您需要翻译这份文件，请通过下方电话与 MassDEP 环境司法主任联系。

Ayisyen Kreyòl Haitian Creole

Dokiman sa a enpòtan epi yo ta dwe tradui l imedyatman. Si w bezwen tradui dokiman sa a, tanpri kontakte Direktè. Jistis Anviwònmantal MassDEP a nan nimewo telefòn ki endike anba a.

Việt Vietnamese

Tài liệu này và quan trọng và phải được dịch ngay. Nếu quý vị cần bản dịch của tài liệu này, vui lòng liên hệ với Giám Đốc Phòng Công Lý Môi Trường của MassDEP theo số điện thoại được liệt kê bên dưới.

ប្រទេសកម្ពុជា Khmer/Cambodian

ឯកសារនេះមានសារៈសំខាន់
ហើយគប្បីតួរត្រូវបានបកប្រែភ្លាមៗ។
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MassDEPតាមរយៈលេខទូរស័ព្ទដែលបានរាយដូចខាងក្រោម។

Kriolu Kabuverdianu Cape Verdean

Es dokumentu sta important i tenki ser tradusidu immediatamenti. Se nho ta presisa ke es dokumentu sta tradisidu, por favor kontata O Diretor di Justisia di Environman di DEP ku es número di telifoni menxionadu di baixo.

Deneen Simpson 857-406-0738
TTY# MassRelay Service 1-800-439-2370

Русский Russian

Это чрезвычайно важный документ, и он должен быть немедленно переведен. Если вам нужен перевод этого документа, обратитесь к директору Департамента экологического правосудия MassDEP (MassDEP's Director of Environmental Justice) по телефону, указанному ниже.

العربية Arabic

هذه الوثيقة مهمة وتجب ترجمتها على الفور.
إذا كنت بحاجة إلى ترجمة هذه الوثيقة، فيرجى الاتصال بمدير العدالة البيئية في MassDEPأدناه على رقم الهاتف المذكور.

한국어 Korean

이 문서는 중대하므로 즉시 번역되어야 합니다.
본 문서 번역이 필요하신 경우, 매사추세츠 환경보호부의 "환경정의" 담당자 분께 문의하십시오. 전화번호는 아래와 같습니다.

հայերեն Armenian

Այս փաստաթուղթը կարևոր է, և պետք է անհապաղ թարգմանել այն:
Եթե Ձեզ անհրաժեշտ է թարգմանել այս փաստաթուղթը, դիմեք Մասաչուսեթսի շրջակա միջավայրի պահպանության նախարարության (MassDEP) Բնապահպանական հարցերով արդարադատության ղեկավարին (Director of Environmental Justice)՝ ստորև նշված հեռախոսահամարով

فارسی Farsi Persian

این نوشتار بسیار مهمی است و باید فوراً ترجمه شود.
اگر نیاز به ترجمه این نوشتار دارید لطفاً با مدیر عدالت محیط زیستی MassDEP در شماره تلفن ذکر شده زیر تماس بگیرید.

Français French

Ce document est important et doit être traduit immédiatement. Si vous avez besoin d'une traduction de ce document, veuillez contacter le directeur de la justice environnementale du MassDEP au numéro de téléphone indiqué ci-dessous.

Deutsch German

Dieses Dokument ist wichtig und muss sofort übersetzt werden. Wenn Sie eine Übersetzung dieses Dokuments benötigen, wenden Sie sich bitte an MassDEP's Director of Environmental Justice (Direktor für Umweltgerechtigkeit in Massachusetts) unter der unten angegebenen Telefonnummer.

Ελληνική Greek

Το έγγραφο αυτό είναι πολύ σημαντικό και πρέπει να μεταφραστεί αμέσως. Αν χρειάζεστε μετάφραση του εγγράφου αυτού, παρακαλώ επικοινωνήστε με τον Διευθυντή του Τμήματος Περιβαλλοντικής Δικαιοσύνης της Μασαχουσέτης στον αριθμό τηλεφώνου που αναγράφεται παρακάτω

Italiano Italian

Questo documento è importante e deve essere tradotto immediatamente. Se hai bisogno di tradurre questo documento, contatta il Direttore della Giustizia Ambientale di MassDEP al numero di telefono sotto indicato.

Język Polski Polish

Ten dokument jest ważny i powinien zostać niezwłocznie przetłumaczony. Jeśli potrzebne jest tłumaczenie tego dokumentu, należy skontaktować się z dyrektorem ds. sprawiedliwości środowiskowej MassDEP pod numerem telefonu podanym poniżej.

हिन्दी Hindi

ेतावेज महत्वपूर्ण है और इसका अनुवाद तुरंत किया जाना चाहिए।. ययह दसदि आपको इस दस्तावेज का अनुवाद कराने की जरूरत है, तो कृपया नीचे दिए गए टेलीफोन नंबर पर MassDEP के पर्यावरणीय न्याय निदेशक से संपर्क करें।

Deneen Simpson 857-406-0738
TTY# MassRelay Service 1-800-439-2370

Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs
Department of Environmental Protection
Southeast Regional Office
Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone**: 508-946-2700

Maura T. Healey Governor | **Kim Driscoll** Lieutenant Governor | **Rebecca Tepper** Secretary | **Bonnie Heiple** Commissioner

August 24, 2026

VIA ELECTRONIC MAIL
anthony@gnbrrmdistrict.org

Mr. Anthony Novelli, Executive Director
Greater New Bedford Regional Refuse Management District
300 Samuel Barnet Boulevard
New Bedford, Massachusetts 02745

RE: **DRAFT PERMIT – APPROVAL WITH CONDITIONS**
Application for: BWP SW 08 - AUTHORIZATION TO CONSTRUCT NEW PHASE OF PERMITTED LANDFILL
PHASE 2 CELL 7
Application No. 25-SW08-0001-APP
Authorization No. [to be inserted in final decision]

AT: Crapo Hill Sanitary Landfill
300 Samuel Barnet Boulevard
Dartmouth, Massachusetts 02747
Facility No. 39197, Regulated Interest No. 172448

Dear Mr. Novelli:

The Massachusetts Department of Environmental Protection, ("MassDEP" or the "Department") Solid Waste Management Section has completed its technical review of the Landfill Phase Approval application referenced above (the "Application") and determined that the Application is technically complete. Accordingly, MassDEP hereby issues this **DRAFT** Permit to construct Phase 2 Cell 7 of the Crapo Hill Sanitary Landfill (the "Landfill"), subject to conditions as specified herein.

The Greater New Bedford Regional Refuse Management District is proposing to construct Phase 2 Cell 7 ("Cell 7") of the Crapo Hill Sanitary Landfill. The proposed construction of Cell 7 will add approximately 3.5 acres of waste disposal area and 750,000 cubic yards of gross landfill volume, which represents at least seven years of additional capacity.

I. SUBMITTALS:

The Application was submitted on behalf of the Greater New Bedford Regional Refuse Management District ("District" or "Owner/Operator" or "Applicant") by Brown and Caldwell ("B&C").

The following submittals represent the complete application reviewed by MassDEP pursuant to 310 CMR 19.000 Solid Waste Management Regulations and MassDEP's Landfill Technical Guidance Manual, May 1997 (the "Manual"):

a. A completed BWP SW 08 application form for Authorization to Construct New Phase of Permitted Landfill, signed by Anthony Novelli of the Greater New Bedford Regional Refuse Management District and Alan R. Kirschner of B&C, Massachusetts registered Professional Engineer No. 32770.
b. A document titled "Design Report, Phase 2 – Cell 7", prepared by B&C, dated August 2025 (the "Design Report").
c. A document titled "Construction Quality Assurance Manual, Phase 2 – Cell 7", prepared by B&C, dated August 2025 (the "CQA Manual").
d. A Supplemental Operations and Maintenance Plan, Summary Specifications for the construction of Phase 2 – Cell 7, and selected previous facility approvals.
e. Facility Design Drawings titled "Authorization to Construct Phase 2 – Cell 7" prepared by B&C, dated August 2025, consisting of twenty (20) 22"x34" design drawings.
f. Supplemental information titled "Response to Determination of Administrative Incompleteness" prepared by B&C, dated November 14, 2025.
g. Supplemental information, prepared by B&C, dated November 20, 2025, consisting of revised Leachate Sewer Capacity Analysis and Pump Calculations and revised Storm Water Calculations, replacing Appendix A.2 and Appendix E, respectively, in the Design Report.
h. Supplemental information, submitted to MassDEP via email on January 12, 2026, consisting of a Site Plan approved by the Dartmouth Planning Board depicting a new property boundary for the landfill parcel.
i. Supplemental information, submitted to MassDEP via email on May 6, 2026, consisting of a response to MassDEP's February 17, 2026, technical comments.
j. Supplemental information, submitted to MassDEP via email on August 10 and 14, 2026, consisting of a response to MassDEP's June 18, 2026, technical comments.

The Application was submitted electronically via the Massachusetts Executive Office of Energy and Environmental Affairs ePlace Portal at: https://eplace.eea.mass.gov/CitizenAccess/Default.aspx on August 28, 2025.

The Application, supplemental information and Permit may be reviewed online at: https://eplace.eea.mass.gov/EEAPublicApp/ by entering "25-SW08-0001-APP" in the Record ID field and clicking the "Search" button at the bottom of the page. Click on one link at a time to access each separate document.

II. APPLICATION REVIEW AND DECISION PROCESS:

The Application was submitted and reviewed pursuant to the provisions of 310 CMR 19.029(1): *Applicable Permit Procedures* and 310 CMR 19.032: *Permit Procedure for a New Facility or Expansion Permit Application*. According to these review procedures, MassDEP shall prepare a DRAFT Approval (Decision) and cause Public Notice to be given. Accordingly, a DRAFT Approval is being issued under a cover letter that requires the Applicants to publish a Public Notice establishing a public comment period.

Pursuant to 310 CMR 4.04(2)(f), Extension of Schedule by Agreement, the Department and the Applicant agreed to extend the public comment period from 30-days to 45-days.

III. FACILITY STATUS:

The Crapo Hill landfill is operated by the Greater New Bedford Regional Refuse Management District (the "District") and provides for disposal of municipal solid waste for Dartmouth and New Bedford. The Landfill is located on a 152-acre parcel of land in the town of Dartmouth. Approximately 69.8 acres of the 152-acre parcel has been designated for development as a sanitary landfill in accordance with a Facility Permit issued on January 26, 1993. The existing Landfill has been operating since 1995 and encompasses 49.7 of the 69.8 acres designated for waste disposal.

The Landfill has been constructed and operated in phases. MassDEP has issued the following permits authorizing construction of the Landfill:

- A Facility Permit and Authorization to Construct ("ATC") Phase 1 on January 26, 1993;
- ATC Permit to construct Phase 2 Cells 1 & 2 on July 12, 2000;
- ATC Permit to Construct Phase 2 Cells 3 & 4 on December 15, 2006; and
- ATC Permit to Construct Phase 2 Cells 5 & 6 on October 23, 2014.

To date, Phase 1 and Phase 2 Cells 1, 2, 3, 4, 5 & 6 have been constructed.

MassDEP has issued the following permits authorizing operation of the Landfill:

- Authorization to Operate ("ATO") Permit for Phase 1 on December 28, 1994;
- ATO Permit for Phase 2 Cells 1 & 2 on April 22, 2002;
- ATO Permit for Phase 2 Cells 3 & 4 on June 18, 2013;
- ATO Permit for Phase 2 Cell 5 on March 8, 2016;
- ATO Permit for Phase 2 Cell 6 on February 12, 2019; and
- ATO Renewal Permit for Phase 2 Cell 6 on July 31, 2025.

The Landfill operates 6 days per week (Monday through Friday, 7:15 AM to 3:15 PM, and Saturday 8:00 AM to 11:00 AM, or to noon on a holiday week), 52 weeks per year. The Landfill accepts and disposes up to a maximum of 574 tons per day of municipal solid waste ("MSW"). The maximum annual tonnage acceptance rate is 115,000 tons.

IV. PHASE 2 – CELL 7 DESIGN:

The District is proposing to develop Phase 2 Cell 7 of the existing solid waste management facility in accordance with their facility permit for 69.8 acres of sanitary landfill. The proposed construction of Phase 2 Cell 7 will add approximately 3.5 acres of waste disposal area and 750,000 cubic yards of total landfill volume. Phase 2 Cell 7 would provide approximately seven years of disposal capacity extending the life of the Landfill by seven years (through the year 2036).

The groundwater protection system for Phase 2 Cell 7 will consist of a double composite liner with a primary and secondary leachate collection and removal system. The groundwater protection system, from bottom to top, will consist of the following:

- **a sub-grade layer**, prepared to provide a minimum four-foot separation between the base of the liner system and groundwater and sloped to ensure adequate leachate drainage.
- **a low permeability soil ("LSP") layer**, a minimum of twelve inches (12") thick with a hydraulic conductivity less than or equal to 1×10^{-7} cm/sec.
- **a secondary geosynthetic clay liner ("GCL") liner**, consisting of a layer of sodium bentonite clay encapsulated between two geotextiles, with a hydraulic conductivity less than or equal to 3×10^{-9} cm/sec.
- **a secondary geomembrane liner**, consisting of 60-mil thick textured high-density polyethylene ("HDPE") flexible membrane liner ("FML").
- **a secondary geocomposite drainage layer** (secondary leak detection system), consisting of HDPE drainage net heat-bonded between two layers of non-woven polypropylene geotextile.
- **a primary geosynthetic clay liner ("GCL")**, consisting of a layer of sodium bentonite clay encapsulated between two geotextiles. Primary GCL will be installed in all locations with slopes less than 4H:1V and, at a minimum, five vertical feet from the bottom of the base area.
- **a primary geomembrane liner**, consisting of 60-mil thick textured HDPE FML.
- **a protective drainage sand layer,** consisting of a minimum eighteen (18) inch thick layer of sand with a minimum hydraulic conductivity of 1×10^{-2} cm/sec.
- **a leachate removal system** consisting of pumps and piping to convey leachate from Cell 7 to the existing on-site leachate management facilities.

Leachate removal in the secondary collection system will be accomplished through the secondary geocomposite drainage layer that will be placed above the secondary geomembrane. The leachate in the drainage layer will flow into valleys leading to a collection sump at the low points in the cell. The leachate will be pumped through metering and sampling devices then directed to the primary leachate collection system for removal. The leachate from the primary leachate collection system will flow to the collection lines that will meet in

the areas of the sump and be removed from the cell and sent by pumps through force mains and into existing gravity sewer outside of the limit of waste disposal area.

Combined primary and secondary leachate from Cell 7 will be sent through a force main to gravity sewer at Manhole #4, adjacent to the Phase 2, Cell 4 sump. This leachate will be combined with the leachate coming from Cell 5 before entering the gravity sewer at Manhole #4. This leachate will be combined with the leachate coming from Cell 4 and gravity fed to the Main Pump Station before conveyed via the City of New Bedford sanitary sewer system for treatment at the City's wastewater treatment facility.

Currently, the Landfill consists of two major drainage areas. One drainage area, which consists of the area east of the gravel access road that transverses Phase I and Cells 1 and 2, the southern sideslope of Cell 5, and the eastern and southern side slopes of Cell 6, directs stormwater to a basin in the southeast corner of the Landfill known as the South Basin. The drainage area for the South Basin will remain unchanged.

The other drainage area, which consists of the area west of the gravel access road, the sideslopes of Cells 3 and 4, and the western side slope of Cell 5, directs stormwater to the basin (West Basin). The West Basin will be removed (relocated) to allow for the construction of Cell 7.

After Cell 7 is installed, the Landfill will consist of three drainage areas. Two new storm water management basins will be constructed to allow for the development of Cell 7. The second drainage area will consist of the area west of the gravel access road, the side slopes of Cells 3 and 4, and the upper half of the western side slope for Cell 7. This drainage area will be directed to the new Basin 1 in the northwest corner of the Landfill. The third drainage area will consist of the lower half of the western side slope for Cell 7. This stormwater will be directed to the new Basin 2 which will be located the southwest corner of the Landfill.

Stormwater will be controlled by utilizing temporary and permanent diversion berms, side-slope let-down channels, perimeter swales and the stormwater basins. Stormwater runoff that contacts intact intermediate cover material and final cover, will be considered suitable for conveyance to the stormwater basin. Stormwater runoff generated in areas of solid waste or daily cover or areas where intermediate cover has eroded allowing contact with waste will be considered potentially contaminated contact water and be required to be collected in the leachate collection system.

The existing facility has an active landfill gas extraction system, including vertical gas wells and horizontal gas collectors that are connected to two gas control devices: an open flare and a landfill gas-burning electric power generation facility. Landfill gas is combusted in an on-site landfill gas fired generating plant that utilizes the landfill gas to generate electric power. A flare serves as a back-up to the power generating plant. A perimeter gas control trench around Phase 1 and the leachate collection and removal system are also connected to the gas collection and control system.

Landfill soil gas monitoring probe GW-4B will be decommissioned to allow for the construction of Cell 7 and a new landfill soil gas monitoring probe will be installed northwest of the existing well (to be identified as GW-4BR).

During operation of Cell 7 horizontal collector pipes will be installed within the waste mass as it is disposed to facilitate the collection of landfill gas during operations prior to construction of a final cover system. Within Cell 7, perforated, horizontal collector pipes will be installed approximately 100 feet on center horizontally and approximately 30 feet on center vertically, adjusted as necessary due to field conditions at the time of construction and to promote condensate drainage. These horizontal pipes will be connected via lateral pipes approximately 200 feet on center to promote even vacuum distribution and gas flow and to circumvent any potential problems with differential pipe settlement. The horizontal collectors will not be relied upon for permanent gas management. Once final grades are achieved, vertical gas collection wells will be constructed in conjunction with the landfill final cover system in the area. Cell 7 will have four levels of horizontal gas collectors at approximately 30-foot, 60-foot, 90-foot, and 120-foot elevations. Where existing landfill cells are currently receiving waste at these elevations or will receives waste at these elevations in the future, the horizontal collector network will extend into these cells to supplement the existing horizontal collectors in these cells.

The groundwater monitoring network consists of twelve monitoring wells located around the Landfill. Quarterly groundwater sampling and monitoring will be performed in accordance with the Interim Environmental Monitoring Plan dated July 25, 2002, as amended. The monitoring schedule includes the following six couplets, each comprised of a shallow and a deep overburden well: downgradient wells MW-1A and MW-1B, MW-10AR and MW-10BR, MW-16A and MW-16B, MW-17A and MW-17B, cross-gradient wells MW-9A and MW-9B; and upgradient wells MW-7A and MW-7B. Two groundwater monitoring wells (MW-16A and MW-16B) will be decommissioned prior to construction of Cell 7 and new replacement groundwater monitoring wells will be installed (to be identified as MW-16AR and MW-16BR, respectively). All groundwater monitoring wells must be decommissioned in accordance with MassDEP's policy WSC - 310- 91 entitled *"Standard References for Monitoring Wells"*.

V. APPROVAL WITH CONDITIONS: [as it would appear in the final decision following the draft permit comment period]

MassDEP has determined that the Application is satisfactory and in accordance with the authority granted pursuant to Massachusetts General Laws, Chapter 111, Section 150A, hereby [to be inserted in final decision] the construction of Phase 2 – Cell 7 of the Crapo Hill Sanitary Landfill subject to the following conditions:

1. Permit Limitations: The issuance of this conditional approval is limited to the construction of the Phase 2 – Cell 7 lined landfill and does not relieve the Applicant from the responsibility

to comply with all other regulatory or permitting requirements. MassDEP reserves the right to require additional assessment or action, as deemed necessary to protect and maintain the environment free from objectionable nuisance conditions, dangers or threats to public health or the environment.

2. Notification: The District shall notify MassDEP at least **7 days prior** to construction of Phase 2 – Cell 7 and upon the completion of each layer of the liner so that periodic inspections can be scheduled. Notification shall be sent via email to Jennifer.Wharff@mass.gov, Acting Section Chief, Solid Waste Management Section and Alison.Cochrane@mass.gov.

   Along with the notification, the District must provide MassDEP with a copy of the final bid package including the final project specifications.

3. Regulatory Compliance: The District shall proceed with the Phase 2 – Cell 7 construction in compliance with MassDEP regulations and requirements, *MassDEP's Landfill Technical Guidance Manual, revised May 1997* ("the Manual"), or as specified by this permit. There shall be **no** deviation from the approved plan without prior written approval from MassDEP. MassDEP may require a permit modification application for significant design modifications.

4. Nuisance Conditions: During construction, dust, erosion, and noise shall be kept at a minimum, and, in the event that it is determined that a nuisance condition is being caused, abatement measures shall be immediately implemented. Pursuant to 310 CMR 7.00 and 19.000, MassDEP reserves the right to require additional equipment and/or measures to prevent or control nuisance conditions and/or conditions of air pollution.

5. Construction Quality Assurance: The District must ensure that all elements described in the Construction Quality Assurance Manual for the design specifications, materials sampling and testing, construction activities, inspections and construction documentation are incorporated into the Contract Documents or are otherwise adequately issued to the contractor performing the construction activities. Copies of all submittals related to the Application for Authorization to Construct, and permits issued should be maintained at the Landfill at all times.

6. Alternative Ground Water Protection System Design: In accordance with 310 CMR 19.111, landfill ground water protection systems designed using materials, technologies or methodologies other than those expressly provided for under 310 CMR 19.110: Ground Water Protection Systems, may be permitted by the Department provided the proponent affirmatively demonstrates to the Department's satisfaction that the alternative ground water protection system design meets the standards established under 310 CMR 19.105: Equivalency Review Standards and Procedures. There were **no** alternative materials, technologies or methodologies proposed or approved for the construction of Cell 7. There shall be **no** use of alternative materials, technologies or methodologies without prior written approval from MassDEP.

7. QA/QC Plan: The District shall ensure that all design specifications, materials sampling and testing, construction activities, inspections and construction documentation are incorporated into the contract documents issued to the contractor performing the construction activities. The final bid package including the final project specifications must be submitted to MassDEP prior to construction (See Condition No. 2).

8. Construction Documentation: The construction and installation of the Landfill's ground water protection system, as approved and described herein, shall comply with MassDEP's regulations and requirements. These requirements must include but shall not be limited to what is required in MassDEP's Landfill Technical Guidance Manual. The following specific requirements must be followed and documented within the Construction Document Report (See Condition No. 9):

    - Documentation that a minimum of four-foot (4') separation exists between the maximum high groundwater table and the bottom of the lowermost low permeability layer will be included as part of the "as-built" drawings.

    - Construction of the low permeability soil/clay layer shall be placed in two (2) six-inch (6") lifts. Construction of the low permeability soil layer shall be conducted such that the maximum dimensional stone size (in any direction) in the lower lift does not exceed three inches (3") diameter and does not exceed one inch (1") in diameter in top lift, in order to decrease the likelihood of developing a preferential flow pathway through the base liner. In addition, the interface between each lift shall be scarified in order to properly bond each lift.

    - Destructive seam tests for peel and shear strength on the HDPE membrane shall be conducted a minimum of every 500 feet of seam for the FML, but not less than three (3) times per day, including the beginning, middle and end of each working day.

9. Construction Certification: Upon completion of the construction process, the District shall submit a Construction Document Report documenting that Phase 2 - Cell 7 was constructed in accordance with the approved design plan. The report shall contain the elements detailed in MassDEP's Landfill Technical Guidance Manual, dated May 1997, and as amended, and be certified by the supervising professional engineer. The submission of the report shall be a component of the required "Authorization to Operate" application as required by 310 CMR 19.042. There shall be no operation of Phase 2 – Cell 7 prior to written approval from MassDEP. The ATO Application must include a facility Operations and Maintenance Plan. The existing O&M Plan should be revised, if/as necessary, to include descriptions of any new or revised facility operations and maintenance. The O&M Plan should indicate the current status of Landfill operations including a plan indicating Landfill areas at final grade at the time of submittal and a schedule for constructing final cover system in those areas.

10. The Landfill operation shall at all times meet the requirements of 310 CMR 16.00 and 19.000, and as appropriate, MassDEP's Landfill Technical Guidance Manual, dated May 1997, and as amended, unless specifically modified by this Permit. The District shall maintain the Landfill in accordance with 310 CMR 19.130 (1), such that the pollution of groundwater, surface water, and air quality is prevented. In addition, compliance with specific issues such as: vectors, dust, odors, litter, stormwater control, erosion, and the siltation of wetlands, and leachate management shall likewise be properly maintained so as not to cause a condition of environmental pollution. Should design features such as the stormwater drainage swales and retention basins prove to be ineffective, or the sideslopes experience failure, or should the leachate collection/storage system require additional capacity, the District shall employ whatever measures necessary (including cessation of operation) in order to rectify all problems.

11. Please be advised that this Authorization to Construct is limited to Phase 2 - Cell 7. There should be no development of any other area of the landfill without written approval from MassDEP.

12. The issuance of this Authorization to Construct is limited to MassDEP's solid waste regulations and does not relieve the District from the responsibility to comply with all other regulatory or permitting requirements. MassDEP reserves the right to require additional assessment or action, as deemed necessary to protect and maintain the environment free from objectionable nuisance conditions, dangers or threats to public health.

VI. RIGHT TO APPEAL:

[as it would appear in the final decision following the draft permit comment period]

Right to Appeal:

This approval has been issued pursuant to M.G.L. Chapter 111, Section 150A, and 310 CMR 19.032: Permit Procedure for an Application for a New Facility or Expansion Permit Application, of the "*Solid Waste Management Regulations*". Pursuant to 310 CMR 19.032(6)(d), any person aggrieved by the final permit decision may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. Chapter 111, Section 150A and M.G.L. Chapter 30A no later than thirty days of issuance of the final permit decision to the Applicant. The standing of a person to file an appeal and the procedures for filing such an appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the permit by a court of competent jurisdiction, the permit decision shall be effective in accordance with the terms of 310 CMR 19.032(6)(b).

Notice of Appeal:

Any aggrieved person intending to appeal a final permit decision to the Superior Court shall first provide notice of intention to commence such action. Said notices of intention shall include MassDEP Authorization Number [to be inserted in final decision] and shall identify

with particularity the issues and reason why it is believed the final permit decision was not proper. Such notice shall be provided to the Office of General Counsel of MassDEP and the Regional Director for the regional office which processed the permit application, if applicable at least five days prior to filing of an appeal. The appropriate addresses to send such notices are:

Office of General Counsel
Department of Environmental Protection
100 Cambridge St., Suite 900
Boston, MA 02114

Regional Director
Department of Environmental Protection
20 Riverside Drive
Lakeville, MA 02347

No allegation shall be made in any judicial appeal of a final permit decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in 310 CMR 19.000, provided that a matter may be raised upon showing that is material and that it was not reasonably practicable with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

Please direct any questions regarding this decision to me at Jennifer.Wharff@mass.gov or to Alison Cochrane at Alison.Cochrane@mass.gov or write to the letterhead address.

Sincerely,

DRAFT

Jennifer Wharff, Acting Section Chief
Solid Waste Management Section
Bureau of Air and Waste

AC/EB/JW

Ec: Dartmouth Board of Health, cmichaud@town.dartmouth.ma.us

City of New Bedford Board of Health, stephanie.sloan@newbedford-ma.gov

Freetown Board of Health, ndumont@freetownma.gov

Brown & Caldwell, akirschner@brwncald.com

DEP – Boston – G. Cooper, J. Fischer
DEP – SERO - M. Dakers, J. Wharff, D. Marshall-Hewlitt, T. Cushing