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CAPE COD
COMMISSION

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DEVELOPMENT OF REGIONAL IMPACT DECISION

PROJECT: BOURNE INTEGRATED SOLID WASTE MANAGEMENT FACILITY – PHASE 6
(CCC FILE NO. 17024)

PROJECT TOWN OF BOURNE
APPLICANT: DEPARTMENT OF INTEGRATED SOLID WASTE MANAGEMENT
C/O DANIEL T. BARRETT, GENERAL MANAGER
201 MACARTHUR BOULEVARD, BOURNE, MA 02532

PROJECT LOCATION: 201 MACARTHUR BOULEVARD, BOURNE, MA 02532
(ASSESSORS MAP/ PARCEL NOS. 28/13, 32/5, 32/9)

TITLE REFERENCE: BCRD BOOK 1351 PAGE 456, BOOK 29639 PAGE 278,
BOOK 13637 PAGE 54

DATE: NOVEMBER 15, 2018

SUMMARY

The Cape Cod Commission (Commission) grants Development of Regional Impact approval, with conditions, for Phase 6 of the Bourne Integrated Solid Waste Management Facility pursuant to Sections 12 and 13 of the Cape Cod Commission Act (Act). This decision is rendered pursuant to a vote of the Cape Cod Commission on November 15, 2018.

FINDINGS

The Cape Cod Commission hereby finds and determines as follows:

GF1. The Bourne Integrated Solid Waste Management Facility (Facility) is located at 201 MacArthur Boulevard in Bourne and is operated by the Bourne Department of Integrated Solid Waste Management (Department) on three (3) contiguous parcels totaling approximately 112 acres owned by the town of Bourne (Project Site). Previously disturbed, developed, and utilized

areas of the Project Site (approximately 100 acres) have the benefit of a Site Assignment from the Bourne Board of Health (BOH) for the existing and proposed uses and development referenced herein.

GF2. The Facility serves as important solid waste infrastructure for the town of Bourne, the Cape Cod region, and southeastern Massachusetts. It is the last remaining operating municipal solid waste landfill on Cape Cod, and one of a handful remaining in the Commonwealth.

GF3. Operations at the Facility include: a double-lined landfill with leak detection, a landfill gas collection system and flare for thermal destruction of landfill gas, and a leachate load-out system for off-site management of landfill leachate; a residential recycling center that accepts materials from neighboring communities, including mattresses for recycling under a Massachusetts Department of Environmental Protection (DEP) program; a construction and demolition debris transfer station; a single-stream recyclables transfer station open to commercial haulers; a compost site including yard waste and brush; and, an area for asphalt, brick, and concrete recycling.

GF4. The town of Bourne (Town) now proposes to implement Phase 6 of the Facility which includes expanding the location of the existing lined landfill up to approximately 9.82 acres of previously disturbed site area, together with associated support infrastructure such as a double composite liner with leak detection, and expanded leachate and landfill gas collection (Project, or Phase 6).

GF5. The incoming waste mix to the Facility is predominantly municipal waste combustor ash (representing approximately 86% of the permitted annual capacity of 219,000 tons) under a long-term contract with Covanta SEMASS in Rochester, MA. The remaining yearly capacity is available for municipal solid waste (MSW) disposal for Bourne and Falmouth residents, and for difficult-to-manage waste streams. Any remaining capacity not used is held in reserve and carried over to successive years.

GF6. The existing daily tonnage and waste composition for the Facility will remain unchanged with Phase 6. Phase 6 is expected to extend the life of current landfill operations at the Project Site into the 2020s.

GF7. Phase 6 will be located on previously disturbed land at the southern end of the existing landfill, which has been site-assigned by the Bourne BOH and DEP for landfill use. Exiting roads will provide access to and throughout the Project Site. Construction and operation of Phase 6 will not change the way waste is currently managed at the site. In preparation for construction of Phase 6, former facilities and operations of the Bourne Department of Public Works (DPW), which were located where the additional lined landfill will be constructed, were relocated to a new DPW complex that was constructed off-site and is now in operation.

GF8. The Project qualifies as a Development of Regional Impact and requires Commission review under Section 2(d)(i) of Chapter A: *Enabling Regulations Governing Review of Developments of Regional Impact*, as revised April 2018 (Enabling Regulations) because the Project required preparation of an Environmental Impact Report (EIR) pursuant to the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§61-62I (MEPA).

GF9. Between 1998-2000, the Town pursued regulatory reviews and obtained the required permits and approvals to establish the Facility in what is generally its current state of use and development (for so-called Phases 2, 3, and 4 of the Facility), including a certificate of adequacy on an EIR under MEPA; Development of Regional Impact (DRI) approval from the Cape Cod Commission (Commission) (See Commission File No. #97031, DRI decision dated February 17, 2000, “original DRI decision”); and Authorization to Construct (ATC) and Authorization to Operate (ATO) permits from DEP.

GF10. Those EIR and DRI reviews contemplated and included conceptual planning (though not detailed design) for the development of Phases 5 and 6. Phase 6 is the last Phase in a progressive development plan first discussed in the original EIR filed in 1998.

GF11. Since that time, the Facility has been built out and operated in accordance with those permits and approvals, including in accordance with several modifications to those permits and approvals obtained by the Town for the Facility through the present. Such modifications included authorization for Phase 5. The Commission has issued Certificates of Compliance for the Facility up to and including Phase 5.

GF12. In November 2017, the Town submitted an Expanded Notice of Project Change (ENPC) under MEPA for Phase 6. The ENPC also included conceptual design for potential Phases 7 and 8 for which the Town is currently undertaking planning and due diligence. Should the Town opt to pursue it, Phase 6 is designed to support development of Phase 7. The Secretary of Energy and Environmental Affairs (EEA) issued a Certificate on the ENPC requiring the Town to prepare a Single Supplemental EIR (SSEIR) to include a detailed description of the Project, identify potential impacts associated with the Project, provide updated information on state regulatory reviews and approvals, and provide an updated conceptual plan for Phases 7 and 8. The Town submitted an SSEIR to the MEPA office in May 2018. The Secretary of EEA issued a Certificate on the SSEIR in June 2018 and determined that the SSEIR adequately and properly complies with MEPA.

GF13. Development associated with Phases 7 and 8 includes expanding the lined landfill and associated infrastructure, with the purpose to extend the anticipated life of operations at the Project Site until approximately 2034. Phases 7 and 8 would require further MEPA review and preparation of an EIR and would require further DRI review by the Commission.

GF13A. The Town has undertaken strategic planning in anticipation of potentially pursuing Phases 7 and 8:

In 2016, the Town purchased land adjacent to the Facility (now included within the approximately 112-acre Project Site) for further landfill expansion. Such land is mapped as Priority Habitat for the Eastern Box Turtle under the Massachusetts Endangered Species Act (MESA); accordingly, the Town has been coordinating with the MA Division of Fish and Wildlife Natural Heritage and Endangered Species Program (NHESP) on what permitting and mitigation actions might be necessary to authorize future development of that land under MESA;

Additionally, the Town has been granted a 2,500 square-foot easement on Canal View Road at Joint Base Cape Cod (JBCC) from the MA Department of Fish and Game (DFG). The purpose of the easement is to provide a potential future connection to the JBCC wastewater treatment plant to accept treated effluent from a potential leachate and/or industrial wastewater treatment works at the Facility. As the easement area was located within land subject to protection under Article 97 of the Massachusetts Constitution, the Town granted the DFG conservation restrictions on land owned by the Town totaling 77 acres in order to secure approval by the Legislature for the disposition of such Article 97 land.

GF14. The Town filed an application for DRI review of Phase 6 on October 1, 2018 with associated Attachments 1 through 6. A DRI Subcommittee held a public hearing in the town of Bourne on October 29, 2018, where the Subcommittee voted to recommend to the Commission that it adopt the draft written decision for the Project, and that the Commission approve the Project subject to the conditions in said decision. The Subcommittee voted to continue the public hearing on the Project to the full Commission meeting on November 15, 2018.

GF15. Section 7(c)(viii) of the Commission's Enabling Regulations contains the standards for DRI approval, which include finding consistency with the Cape Cod Regional Policy Plan (RPP), with District of Critical Planning Concern (DCPC) implementing regulations (as applicable), with municipal development bylaws or ordinances, and with applicable Local Comprehensive Plans (LCP). The Commission must also find that the probable benefit from the proposed development is greater than the probable detriment.

GF15A. There are no DCPC implementing regulations applicable to the Project.

GF15B. The Town of Bourne's Local Comprehensive Plan was certified by the Commission in 2007, but according to the Commission's Local Comprehensive Plan Regulations, such certification is not current. The Project is consistent with Section 19 (*Solid Waste Management*) of said plan, however, which outlines the Town's efforts to "...continue to maximize recycling and composting of solid waste...and to dispose of the waste that cannot be recycled in an economical and environmentally sound manner."

GF15C. The Town has received documentation that the work associated with Phase 6 is exempt from NHESP review under the Massachusetts Endangered Species Act (MESA), and has received ATC approval from DEP. No further state or local reviews or approvals are required for Phase 6.

GF15D. Probable benefits of the Project are that it:

1. Provides for predictable waste disposal and management not only for Cape Cod but the larger Massachusetts region;
2. Provides an in-state option for managing solid waste that decreases potential costs and logistical challenges from exporting waste to other states;
3. Supports local municipalities' waste management needs; and
4. Provides disposal capacity in the event of an emergency (i.e. storm debris).

REGIONAL POLICY PLAN FINDINGS

The Project is consistent with the relevant issue areas, and corresponding goals and standards, from the applicable 2009 RPP, as amended August 2012, as those are referenced and discussed in more detail below.

LAND USE

LUF1. A landfill has operated at this location since the late 1960s. The Project is consistent and compatible with land use and development on and neighboring the Site. The proposed use and development are consistent with the Town's comprehensive approach to land use planning and regulation. The Department has permitted, managed and executed operations and construction of the Facility since 1998, including multiple phases of landfilling, which have received ATC and ATO approvals from DEP and been reviewed and approved by the Commission.

LUF2. The Project will not change the way waste is currently managed at the Facility. The operation and location of current development at the Project Site has been site-assigned by the Bourne BOH and approved by DEP, which considers a broad range of potential impacts on water resources, wildlife, public health and safety, transportation, and air quality. DEP issued an ATC permit for the construction of Phase 6 to the Department on July 16, 2018.

LUF3. Phase 6 will be located on previously disturbed land, will overlay part of Phases 3 and 4, and will contain a double composite liner with leak detection. The landfill liner will include a new primary composite liner with leachate collection system and a secondary composite liner with leak detection. By overlaying landfill material adjacent to and on top of preceding landfill Phases, and with the construction of a double composite liner system with leak detection, the Project uses land efficiently and protects sensitive resources.

ECONOMIC DEVELOPMENT

EDF1. Since 1998 the Facility has operated as an Enterprise Fund where the Department derives revenue from its various operations at the Site (largely the landfill operation), which Fund pays for all operations, debt service, insurance, and closure and post-closure accounts. In addition, the Department pays for the curbside collection and management of MSW and single-stream recyclables generated by Bourne residents. The Department also pays a Host Community Fee to the Bourne General Fund of \$3.60 per ton for each ton it manages at the site. In total, the Department Enterprise Fund provides approximately \$2,000,000 per year in value to the residents of Bourne.

EDF2. Local, state, and Commission regulations for waste management look to source reduction, reuse, and recycling and composting to divert certain waste streams from landfills, preserving existing landfill capacity for waste which cannot be recycled, composted, or combusted. The number of and capacity at landfills in Massachusetts is decreasing. There will be a reduction in the number of operational landfills in Massachusetts by 2021, which provide capacity for wastes including but not limited to household and commercial waste, municipal waste combustor ash, storm/disaster debris, contaminated soils, and dredge spoils. In Massachusetts, landfill capacity is expected to decrease by at least 300,000 tons per year with the anticipated closures of landfills in Southbridge by the end of 2018 and Carver in 2021.

Landfill capacity in Connecticut and Rhode Island is also decreasing and is not expected to provide a closer waste export option. Future options for waste management in Massachusetts will include increased export of Massachusetts trash to other states. There are currently no new MSW disposal facilities proposed and under review by DEP (there is also currently a moratorium on municipal waste combustor facilities in the Commonwealth). Because of the associated legal and permitting requirements, and practical and policy considerations, in pursuing such a new MSW disposal facility in the Commonwealth, it is unlikely that such a facility would be proposed or developed in the Commonwealth in the near future.

EDF3. The Facility provides for the disposal of municipal waste combustor ash from SEMASS. SEMASS must show it has several years of disposal capacity for ash generated at that facility as part of the company's operating plan. A landfill in Carver which also provides for the disposal of SEMASS combustor ash is scheduled to close in 2021.

EDF4. The Project will provide capital facilities and infrastructure in response to existing regional demand, meets community and regional needs, and expands community access to services.

WATER RESOURCES

WRF1. For prior phases of the Facility, the Town has conducted hydrogeological investigations and modeling, including particle tracking, for areas down-gradient of the Facility in coordination with DEP and the Commission. All private well owners in the path of the particle tracking were provided connections to the Bourne Water District. The Bourne BOH passed a bylaw prohibiting the installation of any private wells or public water supply wells in the area downgradient of the Facility. The Town has also installed a network of groundwater monitoring wells upgradient and downgradient of the Facility to collect water quality data.

WRF2. The Phase 6 landfill liner, which is a double composite liner with leak detection, has been designed to provide greater than four (4) feet of vertical separation between the lowest point of the liner system and the maximum observed groundwater elevations, which were determined using an existing network of groundwater monitoring wells installed throughout the Site, including a US Geological Survey (USGS) well installed in the 1970s.

WRF3. The stormwater management system includes two (2) infiltration basins, a series of drainage channels and water quality swales, and a network of catch basins and pipe conveyances. The system is unique and responsive to the current, operational status of the Facility. The system provides water quality treatment, total suspended solids (TSS) removal, and infiltration of stormwater. All Site stormwater is contained and managed on-site. Maintenance protocols for the stormwater management system are included in the Facility Operations and Maintenance Plan.

TRANSPORTATION

TF1. As required in the original DRI decision, the Town provided a monetary payment to mitigate peak hour trips on MacArthur Boulevard and through the Bourne Rotary, expanded the curbside recycling program to reduce vehicle trips to the Site, constructed deceleration and acceleration lanes at the entrance into the Facility, and has since made other improvements to the site entrance and site circulation. Phase 6 represents a continuation of existing operations at the Facility, where existing roads will provide adequate access to and around the Site and will not result in a change or degradation in traffic or trip generation patterns, or in access to the Site.

WASTE MANAGEMENT

WM1. The Facility manages solid waste using an integrated solid waste management system that includes waste reduction, recycling, and composting and meets a regional need for the processing and disposal of wastes on Cape Cod. The Facility currently manages: municipal solid waste and municipal waste combustor ash; commercial waste; a residential recycling center that accepts materials from neighboring communities, including mattresses for recycling under a DEP grant program; a construction and demolition debris transfer station; a single-stream recyclables transfer station open to commercial haulers; composting; asphalt, brick, and concrete recycling; and can accept contaminated soils, dredge spoils, storm/disaster debris, and Difficult to Manage waste. The Facility is the only solid waste disposal facility on Cape Cod.

COMMUNITY CHARACTER

CCF1. As required in the original DRI decision, the Town committed to maintain the existing 230-foot wide vegetated area along MacArthur Boulevard to screen the Facility from the roadway. The Town also supplemented this vegetated area with evergreen and deciduous trees. Supporting infrastructure for the landfill, Facility offices, and recycling and composting transfer facilities are not visible from a regional roadway (MacArthur Boulevard, Route 28).

CONCLUSION

Based on the Findings above, the Commission hereby concludes, determines, and finds further that:

1. Subject to and upon satisfaction of the conditions identified in this decision, the Project is consistent with the 2009 RPP (as amended).
2. The Project is consistent with Bourne's Local Comprehensive Plan, as applicable.
3. The Project is consistent with municipal development bylaws.
4. There are no DCPC implementing regulations applicable to the Project.
5. The probable benefit of the Project is greater than its probable detriment.

The Commission hereby grants DRI approval to the town of Bourne for Phase 6 of its Integrated Solid Waste Management Facility, subject to the following conditions:

CONDITIONS

C1. When final, this decision shall be valid and in effect and local development permits may be issued pursuant hereto for a period of seven (7) years from the date of this written decision. No development work, as the term "development" is defined or referred to in the Cape Cod Commission Act, and as approved herein, shall be undertaken until this decision is final. This decision shall be final when the appeal period set out in Section 17 of the Cape Cod Commission Act has elapsed without appeal (or if such an appeal has been filed, when the appeal has been finally settled, dismissed, adjudicated, or otherwise disposed of in favor of the Applicant), and a copy of this decision has been recorded with the Barnstable County Registry of Deeds.

C2. Phase 6 shall be undertaken, operated, and maintained consistent with the plans and other information contained in the following documents, approved, referenced, and incorporated herein:

- Town of Bourne, MA Department of Integrated Solid Waste Management Single Supplemental Environmental Impact Report, dated May 9, 2018, prepared by the Town of Bourne Department of Integrated Solid Waste Management;
- Town of Bourne Integrated Solid Waste Management Facility DRI application, dated October 1, 2018.

C3. Changes to the Project shall require that the Applicant seek a modification to this decision in accordance with the "Modification" section of the Commission's Enabling Regulations Governing Review of Developments of Regional Impact.

C4. Upon issuance of a DEP Authorization to Operate Phase 6, the Applicant shall apply for and obtain a Certificate of Compliance for the Project from the Commission. Issuance of the Certificate of Compliance is contingent on Commission staff's review and confirmation that the Project has been undertaken in accordance with this decision. As part of its review, Commission staff may make, and the Applicant hereby authorizes, site inspections upon reasonable notice to the Applicant, as such visits are needed.

C5. In the event the Town does not propose to pursue further phases and expansion of landfilling development and operations at the Site beyond Phase 6, the Town shall then prepare and submit to Commission staff for review and approval a revised stormwater management plan for the Facility that reflects such eventuality and provides water quality treatment for parking and recycling areas on the Site. In such event and upon Commission staff's review and approval, the Town shall implement and maintain such plan as so approved.

SIGNATURE PAGE FOLLOWS

SIGNATURE PAGE

Executed this 15 day of November 2018.

Harold W Mitchell
Signature

Harold W Mitchell chair CC Commission
Print Name and Title

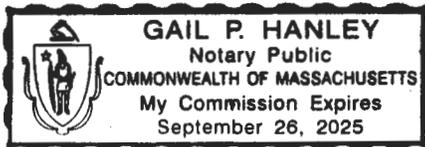
COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss

November 15, 2018

Before me, the undersigned notary public, personally appeared Harold W. Mitchell,

in his/her capacity as Chairman of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he/she signed such document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was [] photographic identification with signature issued by a federal or state governmental agency, [] oath or affirmation of a credible witness, or [] personal knowledge of the undersigned.



Gail P. Hanley
Notary Public
My Commission Expires: 9-26-25