See Description section below

FACILITY/PROGRAM NUMBER(S)

See Description section below

Angelo A. Marcuccio

AUTHORIZED STGNATURE



PERMIT

Under the Environmental Conservation Law (ECL)

EFFECTIVE DATE

June 25, 2009

Modified November 26, 2012*

EXPIRATION DATE(S)

June 24, 2019

		_	8		
TYPE OF PERMIT (Check All Appropriate Boxes)					
	☐ NEW ☐ RENEWA	MODIFICATION	☑ PERMIT TO CONSTRUCT	☑ PERMIT TO O	PERATE
ARTI WAT ARTI WAT ARTI LONG ARTI SCEN X 6NYG	CLE 15, TITLE 5: TECTION OF WATER CLE 15, TITLE 15: ER SUPPLY CLE 15, TITLE 15: ER TRANSPORT CLE 15, TITLE 15: G ISLAND WELLS CLE 15, TITLE 27: WILD, IIC & RECREATIONAL RIVERS CRR 608: ER QUALITY CERTIFICATION	X ARTICLE 19 ARTICLE 29 MINED LAN X ARTICLE 29 FRESHWAT ARTICLE 29 TIDAL WET X ARTICLE 21	TION CONTROL 3, TITLE 27: ND RECLAMATION 4: FER WETLANDS 5:	ART FLO	TICLE 27, TITLE 9; 6NYCRR 373: ZARDOUS WASTE MGMT. TICLE 34: COASTAL DSION MANAGEMENT TICLE 36: DODPLAIN MANAGEMENT TICLES 1, 3, 17, 19, 27, 37; YCRR 380: RADIATION CONTROL TICLE 27, TITLE 3, 6NYCRR 364: DSTE TRANSPORTER TICLE 11-0535, 6NYCRR 182 DANGERED/THREATENED SPECIES ENSE
PERMIT ISSUED	bany, Department of Gen	eral Services			TELEPHONE NUMBER (518) 432-1144
ADDRESS OF P			3		(010) 402 1141
CONTACT PERS	SON FOR PERMITTED WORK J. D'Antonio, Commission		General Services	***************************************	TELEPHONE NUMBER
	DRESS OF PROJECT/FACILITY	er, Department or	derierai dervices		1402 1144
	d Solid Waste Manageme	nt Facility, 525 Ra	pp Road, Albany, NY 1	2205 (51)	8) 869-3651
	PROJECT/FACILITY e of Rapp Road, north side	of I-90 (NYS Thru	way)		
COUNTY	CITY		WATERCOURSE/WETLAND N	10.	NYTM COORDINATES
Albany	Albai	IY	n/a		E: 603.9 N: 4740.3
Permit Type/Permit Number: Part 360 Solid Waste Management: DEC #4-0101-00171/00011 (Primary permit tracking number) (Including Household Hazardous Waste Collection & Storage in accordance with requirements of Part 373-4) Article 24 Freshwater Wetlands: DEC# 4-0101-00171/00015 Article 15 Section 401 Water Quality Certification: DEC# 4-0101-00171/00016 Air Title V (to be issued as a separate individual permit): DEC# 4-0101-00171/00013 Article 11-0535, 6 NYCRR 182, Endangered/Threatened Species License Project Description:					
Renewal of permit to operate existing landfill operations with an approved design capacity of 3,134,000 cubic yards. Modification of permit to authorize construction and operation of expanded landfill over approximately 23 acres of existing landfill, and a lateral, northeasterly expansion of approximately 15 acres of land, of which 7 acres are disturbed/developed and 8 acres are undeveloped city-owned lands. The "Eastern Expansion" will bring the total design capacity of the landfill to approximately 6,059,000 cubic yards. * Modification of Special Conditions 26(b), 27 and 34 (deadline dates for required submissions, and funding for habitat restoration).					
By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable					
regulations, the General Conditions specified (see page 2) and any Special Conditions included as part of this permit.					
DEPUTY REGION	NAL PERMIT ADMINISTRATOR:	ADDRESS NYS DE	C, Region 4 Headquarters		

1130 North Westcott Road, Schenectady, NY 12306

Page 1 of 25



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

GENERAL CONDITIONS

1. Facility Inspection by the Department

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3). The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department. A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications for Permit Renewals or Modifications

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

The permittee must submit a renewal application at least:

- a) 180 days before expiration of permits for State Pollutant Discharge Elimination System (SPDES), Hazardous Waste Management Facilities (HWMF), major Air Pollution Control (APC) and Solid Waste Management Facilities (SWMF); and
- b) 30 days before expiration of all other permit types.

Submission of applications for permit renewal or modification are to be submitted to:

NYSDEC Regional Permit Administrator, Region 4 1130 North Westcott Road, Schenectady, NY 12306 (for Albany, Columbia, Eastern Greene, Rensselaer, Montgomery, Schenectady & Schoharie Counties) NYSDEC Deputy Regional Permit Administrator, Region 4
Stamford Field Office, Rte. 10, Stamford, NY 12167
(for Western Greene, Delaware, Otsego, & Schoharie Counties)

4. Permit Modifications. Suspensions and Revocations by the Department

The Department reserves the right to modify, suspend or revoke this permit in accordance with 6 NYCRR Part 621. The grounds for modification, suspension or revocation include:

materially false or inaccurate statements in the permit application or supporting papers;

- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- non-compliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

Page 2 of 25



ADDITIONAL GENERAL CONDITIONS For ARTICLES 15 (TITLE 5), 24, 25, 34 and 6NYCRR PART 608

- 1. If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
- 2. The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.
- Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, U.S. Coast Guard, New York State Office of General Services or local government which may be required.
- 4. All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.
- Any material dredged in the conduct of the work herein permitted shall be removed evenly, without leaving large refuse piles, ridges across the bed of a waterway or floodplain or deep holes that may have a tendency to cause damage to navigable channels or to the banks of a waterway.
- 6. There shall be no unreasonable interference with navigation by the work herein authorized.
- 7. If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
- If granted under 6NYCRR Part 608, the NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.
- 9. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or his agent as part of the permit application, except when such plans differ from the Special Conditions of this permit; in which case, the Special Conditions take precedence over the plans and application materials. Such approved plans are referenced in Special Condition number 1 of this permit.

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 3 of 25



Approved Project Documents

- 1. All work related to this permit shall be conducted in strict conformance with this permit and the documents identified in this permit condition. The conditions in this permit supersede any inconsistent provisions in the documents incorporated by reference.
 - a) Part 360 Permit application including plans and specifications prepared by Clough, Harbour & Associates, July 2007, with subsequent updates; and as amended with Addendum No. 1, dated April, 2008; Addendum No. 2, dated June, 2008; Addendum No. 3 dated July 15, 2008; Plans updated February 2008, and Plan Drawing G-21 (Phase 1 Top of Liner/Landscape/Stormwater Control Plan), dated April 2009; Plan Drawing G-22 (Phase 2 Top of Liner/Landscape/ Stormwater Control Plan), dated April 2009; and Aquifer Variance Report, dated April 2009;
 - b) The Contingency Plan prepared by Clough, Harbour & Associates, April 3, 2008;
 - c) Operations & Maintenance Manual prepared by Clough, Harbour & Associates, April 3, 2008;
 - d) Household Hazardous Waste Storage Facility Application for Permit Modification, dated March 19, 2004;
 - e) Albany Rapp Road Landfill Ecosystem Mitigation, Restoration & Enhancement Plan, "Habitat Restoration Plan," (report and plans) prepared by Applied Ecological Services, Inc., dated June 2009;
 - f) Integrated Pest and Invasive Species Management Plan prepared by Applied Ecological Services, Inc., dated June 2009;
 - g) Storm Water Pollution Prevention Plan for Stormwater Discharges Associated with Industrial Activity, Rapp Road Solid Waste Management Facility, prepared by Clough Harbour and Associates, May 2009 and June 2009;
 - Stormwater Pollution Prevention Plan, Rapp Road Solid Waste Management Facility Eastern Expansion, prepared by Clough Harbour and Associates, May 2009 and June 2009;
 - Stormwater Pollution Prevention Plan, Rapp Road Solid Waste Management Facility Restoration Plan, prepared by Clough Harbour and Associates, May 2009 and June 2009;
 - j) SPDES Multi-sector or General Stormwater Permit;
 - K) Temporary Revocable Permits issued by the Department and the Albany Pine Bush Preserve Commission for any work that will take place on state lands and dedicated Albany Pine Bush Preserve Lands;
 - 1) Air Title V Permit Modification issued 6/25/09 and permit;

DEC PERMIT NUMBER 4-0101-00171/00011	-	
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 4 OF 25



- m) The following sections of the Rapp Road Landfill Eastern Expansion Fourth Supplemental Draft Environmental Impact Statement (SDEIS), City of Albany, New York, Dated April 2009, including all tables, figures and photographs relevant to each referenced section;
 - 3.0 Environmental Setting, Impacts & Mitigation Subsection 3.1 Topography, Geology, Soils;
 - 3.1.2 Potential Impacts & Mitigation; pages 3-10 through 3-11
 - 3.2 Water Resources
 - 3.3.2.1 Groundwater; pages 3-30 to 3-32
 - 3.2.2.2 Surface Waters; pages 3-32 to 3-35

Proposed Mitigation Condition Watershed Analysis; pages 3-35 to 3-36 Stormwater Management Practices/Treatment Train; pages 3-36 to 3-39

- 3.3 Ecology Potential Impacts & Mitigation; pages 3-61 through 3-69
- Visual Resources pages 3-76 through 3-83
 The Eastern Expansion project shall conform to the following:
 Viewshed depicted on the plan identified as Alternative 3 Viewshed Map
 (Figure 3.6-1);
 The view locations depicted on the plans identified as Views From the Albany
 Pine Bush Preserve (Figure 3.6-2);
 The key views for Alternative #3 as depicted in the following Key View
 figures: 3.6-9; 3.6-10; 3.6-18; 3.6-19; 3.6-28; 3.6-29; 3.6-37; 3.6-38; 3.6-46;
 3.6-47; 3.6-55; 3.6-55; 3.6-59; 3.6-62; 3.6-653.6-68; 3.6-71; 3.6-72; 3.6-73;
 3.6.74; 3.6-75.
- 3.7 Traffic; Section 3.7.1 Existing Conditions, page 3-84 3.7.2 Potential Impacts & Mitigation: pages 3-84 through 3-85
- 3.8 Air Quality & Odor Control, page 3-86
 3.8.2.1 Air Quality Evaluation, page 3-91
 Landfill Gas Collection and Control System Mitigation pages 3-100 through 3-101
 - 3.8.2.2 Odor Evaluation
 Odor Control Mitigation; pages 3-104 through 3-105
 - 3.8.2.3 Greenhouse Gases
 Reducing GHG Emissions & Offsets; pages 3-109 through 3-110

DEC PERMIT NUMBER		
4-0101-00171/00011 FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 5 OF 25
		FAGE 5 OF 25



- 3.9 Noise 3.9.2 Potential Impacts & Mitigation; pages 3-119 through 3-144
- 3.10 Cultural Resources; pages 3-145 through 3-153
 3.10.1.3 Alternative 3 Eastern Expansion, page 3-151
 3.10.1.4 Alternative 3 Private Parcels, page 3-152
 3.10.2 Potential Impacts and Mitigation, page 3-153
 Figure 3.10.1 (Cultural Resources Site Avoidance)
- 4.0 Unavoidable Adverse Impacts
 - 4.6 Visual Impacts, page 4-3
 - 4.7 Traffic, page 4-3
 - 4.8 Air Quality & Odor Control page 4-4
 - 4.9 Noise, pages 4-5 through 4-7
 - 4.10 Cultural Resources, page 4-7
- 8.0 Use & Conservation of Energy; pages 8-1 through 8-3 See also Greenhouse gases discussion, referenced in section 3.8.2.3 (pages 3-105 to 3-109)

The permittee shall acquire and use the most fuel efficient vehicles available for each vehicle type for use in landfill operations as such vehicles are replaced. This schedule for replacement shall be incorporated into the proposed energy usage BMP plan below.

The permittee shall develop an Energy Usage Best Management Practices Plan for reducing energy consumption, and submit such plan to the Department, Attention: Region 4, Regional Permit Administrator, within 90 days of the effective date of this permit for review and approval and implementation at the landfill facility.

Appendices

- C. Solid Waste Data Source Separation of Recyclables; pages 1-4
- D. Restoration Plan Studies and Examples Final Monitoring Program; pages 100 109
- F. Stormwater Treatment Train; pages 1 10
- G. Ecology Data Wetland Boundary Verification; pages 1-16
- H. Visual Impact Analysis; pages 1 92 (Alternative number 3) Key Views as per Visual Resources section 3.6 referenced above
- I. Air Quality & Odor Study; pages 1-31
- J. Cultural Resources Report; pages 1 11 (Alternative 3)

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 6 OF 25



- n) Document titled: "FINAL Solid Waste Management Plan Modification for the Capital Region Solid Waste Management Partnership Planning Unit. Prepared For: City of Albany, Department of General Services, 1 Connors Boulevard, Albany, New York; CHA Project #: 17757; May, 2009; Prepared by: CHA, III Winners Circle, Albany, NY 12205"
- Office (SHPO) Office of Parks, Recreation and Historic Preservation (OPRHP) with regard to avoidance and protection of the pre-contact site located on lands owned by the City of Albany (the permittee) at the facility. These plans/documents are identified and referenced as:
 - Avoidance Plan of the Pine Bush Precontact Site (USN 00140. 004748), Albany Landfill Expansion Restorative-Grading, City of Albany, Village of Colonie, and Town of Guilderland, Albany County, New York; May 2009, prepared by Hartgen Archeological Services, Inc.
 - 2. Full size engineering drawing showing the protected area around Site AOOI40.004748, Sheet Number ES.3, dated 4 May 2009, prepared by Applied Ecological Services, Inc.
 - 3. Letter from Amy Wilson, Hartgen Archeological Services, Inc., dated 18 May 2009.

Facility Construction - Hours of Operation

- 2. During the construction phase of the of the new landfill cell the construction work, and the delivery of construction materials shall be limited to the following days and hours:
 - a) Monday through Friday, 6:00 a.m. to 6:00 p.m.
 - b) Saturdays: 7:00 a.m. to 4:00 p.m.
 - c) No construction activities on Sundays and Holidays

Habitat Restoration Activities - Hours of Operation

3. All habitat restoration activities involving the use of heavy equipment shall be subject to the days and hours of operation in Special Condition number 4a and 4b below. The use of any other hand operated power equipment such as chainsaws shall be governed by Temporary Revocable Permit(s) issued by the NYSDEC and/or the Albany Pine Bush Preserve Commission. In no case shall any equipment utilized for habitat restoration be operated outside the hours identified in Special Condition number 2 above, and such equipment shall not cause any exceedence of 62 dB(A), 1 hour Leq at the property line boundaries of the habitat restoration areas.

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 7 OF 25



Facility Operation - Hours of Operation

- 4. a) Except as noted below, the permittee shall receive waste, apply cover and conduct landfill related activities only between the hours of 7:00 a.m. and 4:30 p.m., Monday through Friday.
 - b) Except as noted below, the permittee shall not receive waste, apply cover material or conduct landfill related activities on Saturdays, Sundays or the following holidays: New Years Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day.
 - c) The following are exceptions to the limited days and hours of waste receipt, application of cover material and heavy equipment operation as stated in Special Condition 4a and 4b above:
 - 1. The permittee may receive waste at the facility on no more than 5 Saturdays per year from 7:00 a.m. to 4:30 p.m. during the City of Albany's Spring Cleanup Days for those wastes generated only from within the City of Albany.
 - 2. The permittee may receive waste at the facility during the holidays listed in special condition 4 (b) only when such holidays fall on a Monday through Friday, and only under the following conditions:
 - i) The landfill shall receive waste only between the hours of 8:00 a.m. and 12:00 p.m.;
 - ii) The landfill shall receive only City of Albany generated residential solid waste transported in City of Albany packer trucks;
 - iii) The contents of no more than 16 full packer trucks may be disposed of during the hours of waste receipt on that holiday;
 - iv) Solid wastes received during a holiday shall be dumped and piled for temporary storage within the landfill containment system at a location which is the farthest point from existing residences along Rapp Road and Fox Run Estates;
 - v) The solid waste pile shall be immediately covered with Posi-Shell;
 - vi) Bulldozer and equipment operations shall be limited to the minimum necessary to only cover the solid waste pile; and
 - vii) No shredding, spreading or compacting operations shall be conducted.

DEC PERMIT NUMBER		
4-0101-00171/00011	8	
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 8 OF 25



Facility Operating Requirements

- 5. The following wastes shall not be disposed of at this facility:
 - a. hazardous waste that is required to be managed at a facility subject to regulation under 6 NYCRR Part 373 or 374;
 - radioactive materials, NARM waste or low-level radioactive waste as defined in 6 NYCRR Parts 380, 382 and 383;
 - any drum or any container which has held hazardous waste and is not empty according to 6 NYCRR 371.1(h);
 - d. regulated medical waste as defined by 6 NYCRR Part 360-17.2(h); except that regulated medical waste that has been treated or decontaminated by an authorized facility may be disposed provided it is not otherwise a hazardous waste and is accompanied by a certificate, in a form prescribed by the Commissioner of Health which evidences such treatment;
 - e. liquid or slurry wastes;
 - f. sludges that contain any free liquids or are less than 20 percent solids;
 - g. yard waste and lawn clearing debris (leaves, grass, brush/branches and stump/tree sections);
 - h. lead-acid batteries:
 - i. tires (including portions of tires); except if chipped tires are used as part of the leachate collection system, as approved by the Department;
 - j. source separated recyclable materials, as determined by the commissioner of the Department of General Services pursuant to Article II of Chapter 313 of the Albany City code:
 - electronics wastes, including computer monitors and televisions, when visible in mixed solid waste;
 - 1. explosives; and
 - m. septage.

DEC PERMIT NUMBER		
4-0101-00171/00011	•	
FACILITY ID NUMBER	PROGRAM NUMBER	DACE 0.05.05
		PAGE 9 OF 25



- 6. a) The permittee shall not accept more than 1,050 tons per day of solid waste based on a thirty day rolling average of landfill operating days. Beneficial Use Determination (BUD) material received at the landfill is excluded from this limit.
 - b) The permittee shall not use more than 262 tons per day of materials as alternative daily cover or intermediate cover. Alternative cover material amounts will not count against the solid waste acceptance limit, except that any amount of alternative cover material used above the 262 tons per day annual average will count towards the solid waste acceptance limit, and is subject to all applicable assessments.
 - c) Nothing in this permit condition shall limit the Department's authority to require additional mitigating cover materials as a means of odor control when the Department deems necessary.
 - d) The Spring Cleanup Days and holiday operation days as defined and identified in Special Condition number 4 of this permit shall not be included in calculating the thirty-day rolling average of landfill operating days.
 - e) Vehicles delivering waste or cover material to this facility must be covered to prevent spillage of contents.
- a) The permittee shall submit all landfill reports required by 6 NYCRR Part 360 and this permit in duplicate to the attention of: Regional Solid Waste Engineer, Region 4, New York State Department of Environmental Conservation, 1130 North Westcott Road, Schenectady, New York 12306.

b) Annual Reports

- The annual report required by 6 NYCRR Part 360 shall include closure, post-closure care
 and, if required, corrective measures cost estimate adjustments or revisions. The annual
 report shall specify the amount of funds in the Solid Waste Management Reserve Fund and
 in any other financial assurance mechanisms established by the permittee and the amounts
 that were deposited, removed and established during that calendar year.
- 2. The permittee shall provide the information required by 6 NYCRR 360-2.17(t) as requested on forms prescribed by or acceptable to the Department. As indicated on such forms, the permittee shall report the type and amount of waste received from each solid waste management facility and county within the permittee's service area.
- 3. The permittee shall submit an annual report to the NYSDEC Region 4, Regional Solid Waste Engineer and to the NYSDEC Director of Solid & Hazardous Materials, 625 Broadway, Albany, NY 12233, which describes the progress that has been made in meeting the long range solid waste management goals outlined in Special Conditions numbers 26 and 27.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 10 OF 25



- 8. All structures, including the leachate collection and removal system, groundwater and gas monitoring wells, access roads, drainage structures, sedimentation basins, etc., shall be maintained in proper working order. In the event any structure becomes damaged or malfunctions and will not properly function, the permittee shall notify the Department verbally within 48-hours after discovery and follow-up in writing within 7 days, and shall promptly replace or repair the structure. If the permittee immediately repairs the damaged structure within 24-hours of discovering the damage or malfunction, the permittee shall not be required to notify the Department verbally or in writing. All monitoring wells (groundwater and gas) shall be fitted with locking caps and locked at all times other than during times of sampling or maintenance.
- 9. The permittee shall discharge landfill leachate only to the Albany County Sewer District sanitary sewer, unless otherwise approved by the Department in writing, and shall maintain an on-site leachate storage capacity of a minimum of five days on average for both primary and secondary leachate flows.
- 10. The permittee shall notify the Department no later than 10 calendar days prior to its conducting quarterly groundwater and/or leachate sample collection activities.
- 11. The permittee shall comply with the odor control program contained in section 12 of the Operation & Maintenance Manual contained in the 6 NYCRR Part 360 permit application as referenced in Special Condition number 1.
- 12. The permittee shall maintain a 24-hour telephone complaint network to allow facility users/neighbors to register comments/complaints related to the operation of the facility. A log of complaints shall be maintained and this log shall record the following information at a minimum: Caller's name (asked for, but not required), date, time, location where the problem is detected, nature and duration of the problem, the number of the telephone line which received the call, name and title of the person receiving the call, and actions taken in response to comment/complaints.
- 13. The permittee shall control odors from the landfill facility so they don't constitute an off-site nuisance or hazards to health, safety or property. This provision shall not limit the Department's summary abatement powers.
- 14. The permittee's maximum allowable waste disposal limit shall, upon written notice from the Department of non-compliance with 6 NYCRR 360-1.14(m) Odor Control, be reduced as determined by the Department. The Department may order the reduction of waste receipt based on verification by two DEC staff engineers or technicians from the Region 4 Environmental Quality Divisions of off-site odors on four separate occasions within any three-day period. For the purposes of this condition, the Department may order the reduction of waste accepted in increments of 200 tons per day until the odors are abated. The Department will notify the permittee in writing when the permittee may resume accepting 1,050 tons per day, upon verification that off-site odors have been abated. Nothing contained herein shall limit the Department's summary abatement powers.

1
PAGE 11 OF 25



- 15. The permittee shall operate the Household Hazardous Waste Storage Facility (HHWSF) in accordance with the March 19, 2004 revised Application for Permit Modification, prepared by Clough, Harbour and Associates, and the April 9, 2004 revised HHW Storage Facility Inspection Sheet, unless otherwise approved by the Department in writing.
- 16. The permittee shall inspect on a weekly basis, the properties which abut the landfill and which are either owned by the Department, or are dedicated to the Albany Pine Bush Preserve, or in private ownership, to ensure compliance with 6NYCRR360-1.14(j) [Confinement of Solid Waste]. These weekly inspections shall cover a 200 foot zone beyond the landfill facility perimeter. In addition to the weekly inspections, the permittee make 2 additional inspections per year once in April and once in October and cover the land area up to 600 feet beyond the landfill facility perimeter. Any sensitive areas within these zones (e.g. lupine and nectar patches, endangered or threatened species brood sites) as identified in the Habitat Restoration Plan and project documents, or by the Department, shall require prior approval by the Department in order to implement inspection and cleanup procedures. A record of these inspections and cleanup actions shall be included in the solid waste annual report.
- 17. a) Once the landfill has received sufficient solid waste to achieve its approved "final design closure contours," as per the approved plans identified in Special Condition 1 of this permit, the permittee shall cease acceptance of all solid waste at the landfill and shall commence closure.
 - b) The permittee, or any entity on behalf of the City of Albany or any assignee or transferee, are prohibited from submitting an application for authorization for any lateral or vertical expansion of this landfill.
- 18. The permittee shall not use any rodenticides at, in or around the landfill disposal cell area, or in or around any facilities/buildings located at the landfill facility. (as per CHA May 8, 2009 letter to A. Marcuccio, NYSDEC)
- 19. Methane Gas Flares:
 - a) Within 30 days of the effective date of this permit, the permittee shall provide the Department, Attention: Region 4, Regional Permit Administrator, a schedule for installation and operation of new continuously operated flares as referenced in the May 8, 2009 letter from Christopher Einstein, Clough Harbour Associates to Angelo Marcuccio, NYSDEC and construction/design plans, for review and approval.
 - b) The permittee shall verify that no birds are perched on the flare unit prior to manually relighting it after the flare unit has been down for service or for any other reason.
 - c) The permittee shall implement any additional measures to retrofit the flare units that the Department deems necessary in the future to be protective of bird species.
 - d) The permittee shall submit plans for any flare replacement or avian protection measures to the Department Attn. Region 4, Supervisor of Natural Resources for review and approval prior to implementation.
- 20. The permittee shall shut off landfill gas to the gas recovery facility and flare the gas whenever off-site landfill odors attributable to gas recovery facility cannot be controlled or abated. This provision shall not limit the Commissioner's summary abatement powers.

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 12 OF 25



Stormwater Management

- 21. a) The permittee shall submit to the department a written request for approval to disturb greater than 5 acres of soil associated with the restoration project, no later than 30 days prior to commencement of construction on each phase. Each request shall include the erosion and sediment control plan and proposed sampling location(s) for water quality monitoring that will be required as part of the authorization to exceed the 5 acre threshold. No work shall commence prior to receipt of written approval from the department. The request shall be submitted to: NYSDEC, Regional Water Engineer, Region 4, 1130 N. Westcott Rd., Schenectady, NY 12306.
 - b) As per Special Conditions 1 (g). (h), (i), (j), all such work shall be carried out in strict conformance with the stormwater plans and specifications for Multi-sector General SPDES Stormwater Permits, as per Special Condition 1(l).
- 22. The permittee shall not commence Phase II of the Landfill Expansion until the stream relocation and improvement project is completed and in service in accordance with the Habitat Restoration Plan, to the satisfaction of the Department.

Recycling for Solid Waste Generated in New York State

- 23. a) For solid waste generated within New York State, the permittee shall only accept at the landfill solid waste generated from a municipality that has either completed a comprehensive recycling analysis (CRA) or is included in another municipality's CRA satisfying the requirements of 6NYCRR Part 360-1.9(f) and which has been approved by the Department. The municipality shall have also implemented the recyclables recovery program determined to be feasible by this analysis.
 - b) For solid waste generated within New York State, the permittee shall only accept at the Landfill solid waste that was generated within a municipality that either has implemented a mandatory source separation law or ordinance or is included in another municipality's mandatory source separation law or ordinance consistent with New York State General Municipal Law Section 120-aa, as determined by the Department.

Capital Region Solid Waste Management Partnership

24. The permittee shall conduct semi-annual meetings of the Capital Region Solid Waste Management Partnership to discuss each member's recycling programs and progress in meeting tasks listed in Table 4, Revised Implementation Schedule contained in the May 2009 Final Solid Waste Management Plan Modification prepared for the City of Albany, Department of General Services by Clough Harbour & Associates ("semi-annual meetings"). Within 30 days of each meeting, the permittee shall submit a report to the NYSDEC Region 4, Regional Solid Waste Engineer and to the NYSDEC Director of Solid & Hazardous Materials, 625 Broadway, Albany, NY 12233, addressing: a summary of the meeting discussion; specific progress in meeting the tasks; needed modifications and/or updates to the tasks' schedule, and any tasks not met in a timely manner and a plan and an expeditious schedule to achieve all unmet tasks.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 13 OF 25
		17102 10 01 20



25. The permittee shall include a condition in all its annual landfill disposal tip fee inter-municipal agreements requiring that a representative of each municipality attend the semi-annual meetings.

Long Range Solid Waste Management

- 26. Solid Waste Management Planning
 - a) The permittee shall undertake all actions necessary to ensure full implementation of the existing Local Solid Waste Management Plan (LSWMP), including Department approved modifications thereto, as described in the FINAL Solid Waste Management Plan Modification for the Capital Region Solid Waste Management Partnership Planning Unit, May 2009, Table 4 (SWMP Modification Revised Implementation Schedule). The necessary actions to implement the LSWMP include, but are not limited to the following:
 - 1. Identify education and enforcement activities to increase reduction and recycling, particularly in the commercial sector;
 - 2. Fund and staff a City of Albany Recycling Coordinator and a Planning Unit Recycling Coordinator;
 - 3. Convene meetings of the source separated organic waste recycling task force and implement its recommendations, if reasonable and feasible, as approved by the Department of Environmental Conservation;
 - Require commercial haulers using the landfill to provide recycling collection services for all of their customers for recyclables designated pursuant to Article II of Chapter 313 of the Albany City code; and
 - 5. Analyze the participation rate for the City of Albany and of planning unit members and specific areas for improvement.
 - b) The permittee shall undertake all actions necessary to ensure that a new Long-term Local Solid Waste Management Plan (LSWMP) is in effect for the Planning Unit no later than November 30, 2013 as described in the existing LSWMP. The Planning Unit members are described in LSWMP.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 14 OF 25



27. By no later than 3 years from the date that the DEC provides the City with formal approval of a new Long Term Solid Waste Management Plan the permittee shall submit to the Region 4, Regional Permit Administrator; the Regional Solid Waste Engineer and the NYSDEC Director of Solid & Hazardous Materials, 625 Broadway, Albany, NY 12233, for review, a request for proposal ("RFP") for engineering designs and/or contracts for the selected long term solid waste management option and any permit applications and environmental assessment forms that may be required.

Solid Waste Variances

- 28. This permit incorporates the following Department approved 6 NYCRR Part 360 variances:
 - a) Variance from 6 NYCRR Part 360-2.17 (d). The permittee may use Posi-Shell spray-on material as intermediate cover in lieu of the minimum 12 inches of compacted cover material, provided that the Posi-Shell continues to adequately control vectors, fires, odors, blowing litter and scavenging until the final cover is constructed.
 - b) Variance from 6 NYCRR Part 360-2-12(c) (1). The permittee may expand the existing landfill over a principal aquifer.
 - c) Variance from 360-2.13(i). The permittee may operate the Albany Rapp Road Landfill Eastern Expansion over the existing lined cells of the landfill without an additional leachate barrier. To ensure adequate operation and maintenance of the leachate collection and removal system, the permittee shall do the following:
 - The permittee shall notify the Department, in writing, within twenty-four hours of a secondary leachate collection system in any double lined cell initially exceeding 40 gallons per acre per day ("GPAD") and provide a description of efforts to investigate and correct the cause of the elevated flows.

- continued -

DEC PERMIT NUMBER 4-0101-00171/00011	5	
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 15 OF 25



- 2. The permittee shall notify the NYSDEC Region 4, Regional Solid Waste Engineer in writing within three (3) calendar days of any occurrence which prevents the liner system and/or leachate collection and removal system (LCRS) in any cell from operating as required by 6 NYCRR Part 360. This notification shall include a description of the occurrence and of the measures being taken to remedy it. Additional notifications of the status of the occurrence and remedy shall be submitted to the Department in writing every ten (10) calendar days until the remedy is completed to the satisfaction of the Department or the notifications the frequency of notifications are modified by the Department. An occurrence shall include;
 - the leakage rate measured in the secondary leachate collection and removal system (LCRS) of any double lined cell exceeding 20 gallons per acre per day (based on a 30-calendar day rolling average);
 - damage to or failure of any leachate pump, leachate piping, leachate meter or other appurtenance which prevents the removal of leachate from the primary LCRS or secondary LCRS of any cell or the accurate measurement of such leachate;
 - iii) damage to the primary or secondary LCRS of any cell which prevents the removal of leachate from that cell; and
 - iv) failure of the secondary LCRS to be maintained in a free-flowing condition which prevents excessive leachate head accumulation on the lower liner;
- 3. The permittee shall maintain sufficient spare pumps and other parts on-site to ensure expeditious replacement of faulty pumps and parts.
- 4. The permittee shall clean the primary LCRS for all cells on a semi-annual basis or more frequently if needed, to maintain unobstructed and free draining conditions, to prevent clogging of the system to ensure its optimal performance. The permittee shall provide the Department, Attention: Region 4, Regional Solid Waste Engineer, written notification at least 15 days prior to the scheduled cleaning. Should conditions at the landfill require the work to done on an emergency basis, the permittee shall notify the Department no later than the next business day after having completed the work.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 16 OF 25



Facility Financial Assurance

- 29. Financial Assurance for Closure, Post-Closure Care and Corrective Measures
 - a) Continuity of Coverage.

 The permittee shall provide and maintain financial assurance in accordance with the applicable requirements of 6 NYCRR 360-2.19. The permittee shall provide continuous coverage for closure and post-closure care of the permitted landfill, which includes the Greater Albany Landfill, the Interim Landfill, the Wedge, the P-4 Expansion and the Eastern Expansion, until released from this requirement by the department after demonstrating compliance with the closure and post-closure care requirements of 6 NYCRR 360-2.15. The permittee shall also maintain financial assurance for corrective measures in accordance with 6 NYCRR 360-2.19(d) if required to undertake corrective measures pursuant to 6 NYCRR 360-2.20.
 - The permittee shall submit to the Region 4, Regional Solid Waste Engineer Department for its review and approval, revised closure and post-closure care cost estimates for the entire permitted landfill within 30 calendar days of the effective date of this permit. During the active life of the landfill, the permittee shall annually adjust or revise the closure cost estimates. During the active life of the landfill and during the post-closure care period, the permittee shall annually adjust or revise the post-closure care cost estimates. The permittee shall submit the updated cost estimates in its annual report to the Department. The cost estimates shall include a 20% contingency factor to account for potential cost overruns due to unforeseen circumstances.
 - c) Mechanisms.

 The permittee has established a Solid Waste Management Reserve Fund pursuant to General Municipal Law. The permittee shall also establish additional financial assurance mechanisms. The financial assurance mechanisms used by the permittee shall provide funding sufficient to cover all remaining closure and post-closure care costs of the landfill. Such mechanisms shall be irrevocably assigned to the Department. The permittee shall report on the amount of funds in the Solid Waste Management Reserve Fund and in any other established financial assurance mechanisms within 30 calendar days of the effective date of this permit and annually thereafter in its annual report to the Department.
 - d) Maintenance of Post-Closure Coverage. Financial assurance for post-closure care shall be maintained for a minimum period of thirty (30) years following final closure of the landfill. Such financial assurance shall continue to be maintained to cover a minimum period of thirty (30) years throughout the post-closure care period until the permittee demonstrates to the Department's satisfaction that the post-closure care period can be ended.

DEC PERMIT NUMBER	*	4
4-0101-00171/00011		t company and the company and
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 17 OF 25



Albany Pine Bush/Freshwater Wetlands/Habitat Restoration

- 30. The permittee shall complete all habitat restoration work in accordance with the "Habitat Restoration Plan" identified in Special Condition 1 (e).
- 31. By each December 1 the permittee shall provide the Department with a report documenting compliance with the approved final restoration plan. The report shall be submitted to the attention of the Region 4, Supervisor of Natural Resources at 1130 N. Westcott Rd., Schenectady, NY 12306.
- 32. a) In addition to the Restoration Plan, compliance with the Plan shall also be evaluated based upon the criteria contained in the letter from Neil A. Gifford, Conservation Director of the Albany Pine Bush Preserve Commission to Christopher Einstein of Clough Harbour Associates, dated March 24, 2009, which includes creating suitable Karner blue butterfly habitat on the upland portions of the restoration lands.
 - b) Each January 30 the permittee shall provide to the Department, Attention: Region 4 Supervisor of Natural Resources, for review and written approval, a work plan for the restoration plan implementation activities for the coming year.
 - c) The permittee shall form an Interagency Habitat Management Team (team) consisting of a minimum membership of one representative from NYSDEC Region 4 Bureau of Wildlife and the Albany Pine Bush Preserve Commission. The team shall provide advice to the permittee in the development of the coming year's workplan, and any revisions to the Habitat Restoration Plan. Any changes to the approved restoration plan shall require prior review and written approval by the Department and a Temporary Revocable Permit (TRP) approval from the Albany Pine Bush Preserve Commission for non-DEC lands in the Pine Bush Preserve and a TRP from the Department any DEC lands to be impacted.
- 33. Habitat restoration activities are subject to the same operational restrictions found in Special Conditions 3 and 4 above. All other habitat restoration activities shall be governed by any Temporary Revocable Permits that may be issued by the Department or the Albany Pine Bush Preserve Commission.

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 18 OF 25



- 34. a) The Permittee shall set aside a Habitat Restoration Plan implementation and maintenance fee in the amount of ten (\$10.00) dollars per ton of solid waste accepted at the facility ("Habitat Restoration Plan Fees").
 - b) Within thirty (30) calendar days of the effective date of this permit, the permittee shall establish either a dedicated City of Albany account or a dedicated trust account with a designated trustee whose trust operations are regulated and examined by a federal or State agency for the Habitat Restoration Plan Fees ("Habitat Restoration Plan Account").
 - c) The permittee shall deposit the Habitat Restoration Plan Fees into the Habitat Restoration Plan Account in quarterly installments every year by the following dates: January 15, April 15, July 15, October 15.
 - d) The Permittee may, upon written notification to the Department, bond the remaining costs to complete the Habitat Restoration Plan in lieu of compliance with subparagraphs 34 (a)-(c) if in accordance with the following requirements:
 - (1) Permittee shall secure a bond to fund the Habitat Restoration Plan Account of at least \$4.5 million and deposit the bond proceeds by no later than December 31, 2015;
 - (2) Permittee shall secure a bond in the Habitat Restoration Plan Account of at least \$5 million and deposit the bond proceeds by no later than December 31, 2018;
 - (3) Permittee shall immediately deposit all funds from bond proceeds in the Habitat Restoration Plan Account; and
 - (4) Permittee shall immediately comply with subparagraphs 34(a) through (c) if it fails to timely secure a bond required in subparagraphs 34(d) and shall continue to fund the Habitat Restoration Plan Account under the provisions of subparagraphs 34(a) through (c) until the account is fully funded to complete the Habitat Restoration Plan as solely determined by the Department.
 - e) Upon written justification to the Department that the costs to fund the Habitat Restoration have decreased to an amount less than anticipated in subparagraphs 34(d)(1) and 34(d)(2), the Department may approve of Permittee depositing less funds in the Habitat Restoration Plan Account. Any decreased costs and any decreased funding approved by the Department shall be in writing and will require the Permittee to set aside an amount equal to the revised funds plus an additional twenty percent (20%) contingency. Permittee shall not be able to make such a request until at least January 1, 2015 and January 1, 2018 respectively.
 - continued on next page -

DEC PERMIT NUMBER		
4-0101-00171/00011		DACE 10 OF 35
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 19 OF 25
20 200 contraction (20 20 20 20 20 20 20 20 20 20 20 20 20		



34. (continued)

- Permittee is responsible for complying with the Habitat Restoration Plan notwithstanding: the cessation of the operations of the landfill prior to reaching its permitted capacity for any reason; any shortfall in the Habitat Restoration Plan Account; or any additional costs not anticipated by the Permittee in completing the Habitat Restoration Plan.
- 35. The Habitat Restoration Plan Fees shall only be used by the permittee and its agents for the implementation and maintenance of the Department-approved Habitat Restoration Plan requirements. Such fees shall be managed as per the special conditions found in this permit including, but not limited to, Special Condition 34.
- 36. The permittee shall provide the Department, Attention: Region 4 Supervisor of Natural Resources, with a Habitat Restoration Plan Quarterly Report within ten (10) days after the end of each calendar quarter that sets forth the Habitat Restoration Plan Fees collected for that quarter, the nature and amount of any expenditures for that quarter, and the balance of the Habitat Restoration Plan Account ("Habitat Restoration Plan Account Quarterly Report").
- Within 18 months of the effective date of the permit, the permittee shall provide the Department, Attention: Region 4, Supervisor of Natural Resources, for review and approval, the survey maps, real property descriptions, and title abstracts for lands not encumbered by past or current landfill operations nor lands included in this permit of the following tax parcels: 41.00-1-6; 41.00-1-7; 41.00-1-8; 41.00-1-9; 41.00-2.118; 41.00-2.120; 41.00-2.121; 41.00-2.122; 41.00-2.112; 41.10-1.2.1 (Fox Run Estates, Colonie); and 41.00-2.123 (175 Karner Road), as well as a draft Environmental Conservation Law Article 49 conservation easement for these parcels. Within one year of the effective date of the permit, these lands identified shall have a Department approved Conservation Easement, including recreational rights, under Article 49 of ECL, conveyed to the Albany Pine Bush Preserve Commission. The conveyance shall also include the baseline documentation necessary for monitoring and enforcement of the easement.
 - b) Within 180 days of the effective date of the permit, the permittee shall provide to the Department, Attn. Region 4 Supervisor of Natural Resources survey maps, real property description(s), and title abstract(s) for lands to be conveyed within one year, in fee title (Parcel 1) and easement (Parcel 2) to the People of the State of New York. The specific land parcels must be specifically approved by the Department and are required to allow for the amendment and relocation of an existing Public Trail Easement, identified in Book 2681, page 1124 (UA Albany 16.38), to lands of equal or greater Albany Pine Bush ecological and recreational value. These parcels will consist of: 1) Parcel 1 which shall be approximately 2.4+/- acres in size to be acquired by the permittee and shall be currently owned by a private landowner in the Albany Pine Bush Project Review Area as well as not currently dedicated as Albany Pine Bush Preserve, 2) Parcel 2 which shall be a relocated Public Trail Easement that shall be congruent in establishing the same land parcel connections as occur with the existing Public Trail Easement. These lands shall be subject to all required Department approvals.

DEC PERMIT NUMBER		
4-0101-00171/00011 FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 20 OF 25



37. Continued -

- Within 18 months of the effective date of the permit, the permittee shall provide survey map(s), real property description(s), and title abstract(s) for land(s) to be acquired by the permittee for conveyance to the People of the State of New York within three years of the effective date of the permit. These land(s) shall, have equal or greater Albany Pine Bush ecological value as the landfill expansion footprint land, be privately owned, not be currently dedicated to the Albany Pine Bush Preserve, must be located within the Albany Pine Bush Project Review Area, must be approximately 10.6 +/- acres, and must be approved by the Department.
- 38. a) The permittee shall set aside for the first three years following the effective date of this permit, a fee in the amount of one dollar and fifty cents (\$1.50) per ton of solid waste accepted at the landfill for the Albany Pine Bush Preserve Commission. Thereafter, the permittee shall set aside, a fee in the amount of two dollars (\$2.00) per ton of solid waste accepted at the landfill for the Albany Pine Bush Preserve Commission. The permittee shall make payment of the fees to the Albany Pine Bush Preserve Commission in quarterly installments every year by the following dates: January 30, April 30, July 30, October 30.
 - b) The permittee shall include a status report on the Albany Pine Bush Preserve Commission Fees in the Habitat Restoration Plan Account Quarterly Report.

Endangered/Threatened Species License (Article 11-0535, 6 NYCRR 182)

- 39. The permittee is required and authorized to implement the Habitat Restoration Plan as referenced in Special Condition 1 (e), yearly work plans approved by Department and the conditions of this permit. The permittee is authorized an incidental take of individuals of the species Karner blue butterfly (*Lycaeides melissa samuelis*) and frosted elfin butterfly (*Callophrys irus*) during implementation of the Habitat Restoration Plan.
- 40. Prior to the commencement of any work related to the Habitat Restoration Plan, the permittee shall flag, or identify with fencing or other visible means, the lupine patch within the Albany Pine Bush Preserve closest to the habitat restoration activities as shown on aerial photograph labeled Blue Lupine Populations Map, Albany Landfill Eastern Expansion, prepared by CHA, which is part of Attachment 1 of the letter addressed to Robyn Niver or the US Fish & Wildlife Service, from Christopher Einstein of Clough Harbour Associates, dated March 20, 2009. These lands are further identified as being located south of Freshwater Mitigation Wetland P-4 and easterly of Freshwater Wetland mitigation pond A-33. The permittee shall protect this lupine patch from any disturbance.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 21 OF 25
		PAGE 21 OF 25



- 41. The permittee shall not mow lupine until all Karner blue butterfly activity has ceased for the year and the lupine has senesced. Mowing shall be done after first frost (mid-October). In situations where this is not possible, mowing may occur before October but not before August 15 subject to review and approval by the Department. The permittee shall submit such request for review and approval to the attention of the Supervisor of Natural Resources, Region 4, no less than 2 weeks prior to the mowing.
- 42. The blades of mowers and brushhog equipment shall be set at least 6-8 inches above ground level.
- 43. The moving of occupied Karner blue butterfly areas shall not be done more than once a year (except according to special condition number 41 of this permit).
- 44. The use of fences shall be limited to the periphery of a habitat site except for herbivore exclosures or other barriers related to research studies. Fencing activities shall be done during non-flight periods and workers installing fences shall avoid damaging lupine plants as much as possible.
- 45. Tree removal activities shall not take place until after the second Karner blue butterfly flight period has ended (August 15). Removal shall be conducted to avoid damage to lupine as much as possible. Consistent with the approved Habitat Restoration Plan, trees/shrubs shall be left on at least 10% of the site to provide shade wherever possible, except when removing clonal species such as black locust or aspen, or heavy seeders such as white pine. When less than 10% of trees and shrubs are left at the site, preferred tree species (pitch pine, scrub oak) shall be planted at the site. Personnel shall be educated as to where lupine is located, and trees are to be dropped/felled in the opposite direction of the lupine. Should a tree accidentally fall on lupine, the tree is to be cut into sections for removal instead of being dragged.
- 46. The girdling or hand-pulling of individual shrubs/trees that do not uproot lupine plants may occur at any time of year.
- 47. The collection of lupine seeds shall occur as much as possible from non-occupied Karner blue butterfly stands. The collection of seeds shall be limited to collection from no more than 50% of lupine plants at an occupied site. The collection of seeds shall be phased among sites, when possible, to avoid potential long term degradation. All collectors shall be instructed to use care in stepping around lupine plants. Plant material shall be checked for Karner blue butterfly eggs or larvae and frosted elfin larvae; if found they shall be left on site on appropriately fresh lupine pods. The seeds of nectar species may be collected from occupied sites with care taken not to trample lupine or the grass stems next to plants where eggs may be laid.
- 48. The permittee shall only conduct prescribed burning on no more than one third of a site in any one year and adjacent burn units shall not be burned in consecutive years, unless otherwise approved by the Department in writing. Burning shall only occur as necessary. The burn plan shall be coordinated with the NYS Department of Environmental Conservation (NYSDEC), the US Fish & Wildlife (FWS) Service and the Albany Pine Bush Preserve Commission by no later than March 1, annually.

DEC PERMIT NUMBER		8
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 22 OF 25



- 49. The permittee shall only apply herbicides after lupine has senesced for the year. *Garlon 4* and *Roundup* shall not be used in close proximity to wetlands or water bodies. Instead, *Garlon 3a* or *Rodeo* is recommended. Herbicides shall be applied by pesticide-certified and experienced personnel trained to identify lupine and Karner blue butterfly. All applicators shall be instructed to take care in avoiding and stepping on lupine and/or accidentally spraying lupine.
- 50. Should pesticide spraying be necessary within or near Karner blue butterfly sites, the compounds to be used, dates of spraying, and areas to be treated shall require prior approval of the Department and the US Fish & Wildlife Service. The permittee shall submit pesticide application plans to the Department to the attention of Natural Resources Supervisor, Region 4, no less than 30 days prior to the proposed implementation, for Department review and approval. In occupied habitat, herbicides shall be applied using wick or spot application with hand-operated equipment.
- 51. If the permittee uses broad-scale ground application of herbicides adjacent to occupied habitat, the permittee shall take steps to avoid drift into occupied habitat if the spraying occurs within the time period from when lupine has sprouted to when it senescences at that location, or after the second flight of Karner blue butterflies has ended, whichever is later.
- 52. The permittee is authorized to monitor Karner blue butterfly and frosted elfin populations throughout the greater Albany landfill and areas proposed for restoration as part of the approved Habitat Restoration Plan, as conditioned below:
 - a) Walk-through surveys, distance sampling, and presence and absence surveys are authorized. Surveyors shall avoid trampling lupine.
 - b) Netting, only if needed (netting shall be kept to a minimum), of Karner blue butterflies and frosted elfin shall be conducted by individuals trained by the Department or the Albany Pine Bush Preserve Commission according to accepted methods; using only soft aerial bag nets and keeping handling to a minimum.
 - c) Copies of proposed mark, release and recapture studies or other research studies shall be provided to the Department and the US Fish & Wildlife Service for review and approval at least 30 days prior to conducting the work. The study proposal shall include the following information: brief description of the study explaining the purpose, objective, and sampling design; applicant; researchers involved (including names of all individuals working on the project); start date; duration of the study; estimated level of take of Karner blue butterflies associated with the project; and measures taken to reduce injury and death of Karner blue butterflies. This project may proceed upon receipt of a letter from the US Fish & Wildlife Service. Trampling shall be avoided as much as possible.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 23 OF 25



- 53. Any Karner blue butterflies killed or mortally damaged during surveys or found dead at any site are to be turned over to the New York State Museum Invertebrate Collection. Information regarding the collection location, collector, and date collected shall be included with any specimens. The New York State Department of Environmental Conservation, Endangered Species Unit, 625 Broadway, Albany, NY 12233-4754, and the Supervisor of Natural Resources, Region 4, shall be notified of any mortality from surveys.
- 54. The permittee must carry (or have otherwise readily available) a copy of this permit at all times when conducting the authorized activities. The Article 11 permit is limited to the above activities and identified species.
- 55. The Article 11 permit does not constitute permission to conduct these activities on other public or private lands; such permission must be obtained separately from the appropriate landowner or land manager before beginning these authorized activities.
- 56. The acceptance of the Article 11 permit serves as evidence that the permittee and its authorized agents understand and agree to abide by the terms of this permit.
- 57. By May 1 of each year, the permittee shall, during the term of the Article 11 permit, submit to the Department (Attention: Supervisor of Natural Resources, Region 4, 1130 N. Westcott Rd, Schenectady, NY 12306) an annual report on compact disk (CD) or jump/flash/thumb drive and in print form, summarizing the authorized activities of the previous calendar year. Each report shall include, at a minimum, the following information:
 - a) location of Karner blue butterfly/frosted elfin sites affected. Locations can be noted using figures, and maps;
 - b) activities conducted at each site;
 - c) the results of habitat surveys (if completed that year);
 - d) the results of any Karner blue butterfly/frosted elfin surveys;
 - e) summary of management success at applicable sites;
 - f) the number and sex of any dead Karner blue butterfly/frosted elfin individuals found;
 - g) numbers of Karner blue butterfly/frosted elfin sent to the NYS Museum and when;
 - h) list of agents of the city acting under this permit.

DEC PERMIT NUMBER 4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 24 OF 25





- 58. Removal of any solid waste or debris as required by the Habitat Restoration Plan shall be conducted during the dormant egg period of the Karner blue butterfly after August 15, and lupine shall be avoided as much as possible.
- 59. For purposes of monitoring compliance and administration of the terms and conditions of this permit, the primary contact office of the NYSDEC is:

Regional Supervisor of Natural Resources, Region 4 New York State Department of Environmental Conservation Region 4 Headquarters 1130 N. Westcott Rd. Schenectady, NY 12306

Telephone: (518) 357-2355 Fax: (518) 357-2460

Copies of required reports regarding endangered species shall be submitted to:

New York State Department of Environmental Conservation Attention: Endangered Species Unit 625 Broadway Albany, NY 12233-4754

Telephone: (518) 402-8864 Fax: (518) 402-8925

60. All submittals to the Department required by this permit shall be directed to the attention of the specific person/title as per the condition and an electronic copy sent to the Region 4, Regional Permit Administrator at r4dep@gw.dec.state.ny.us or via mail on a USB flash drive.

DEC PERMIT NUMBER		
4-0101-00171/00011		
FACILITY ID NUMBER	PROGRAM NUMBER	PAGE 25 OF 25