# State Environmental Quality Review Act

#### FINDINGS STATEMENT

# FACTS AND CONCLUSIONS RELIED UPON TO SUPPORT DECISION TO APPROVE ALBANY LANDFILL EASTERN EXPANSION PROJECT PROJECT NO. 4-0101-00171/00011

Rapp Road Landfill City of Albany, Albany County

Prepared by
New York State Department of Environmental Conservation
Division of Environmental Permits
Region 4

June 24, 2009

Name of Action: City of Albany Rapp Road Landfill - Eastern Expansion

Location: Northwest side of Rapp Road, north of NYS Thruway (I-90), City of Albany, Albany County

Description of Action: On August 30, 2007, the City of Albany, "City" submitted an application to the Department to modify its current 6 NYCRR Part 360 landfill permit by expanding its landfill onto City-owned lands to the east of the existing landfill, "Eastern Expansion". The landfill was first constructed and opened in the 1970's and was approximately 45 to 50 acres in size. The landfill was first permitted under 6 NYCRR Part 360 in 1990 when an expansion of approximately 25 acres was proposed. It was subsequently expanded by permit on January 31, 1997 for an additional 8.7 acres, and on February 29, 2000 for a 23 acre expansion. The total footprint of the existing landfill is approximately 104 acres. The proposed expansion, referred to as the "Eastern Expansion," provides the City additional land filling capability for the solid waste generated by City residents and businesses, and the communities and other entities that make up the Capital Region Solid Waste Management Partnership (CRSWMP).

The Eastern Expansion will include the construction of a two new expansion cells (Phase I and Phase II), with landfill liner systems, leachate collection and removal system; and a landfill gas control system. The Eastern Expansion involves: the overfill of approximately 23 acres of the existing landfill; a lateral expansion of approximately 15 acres for a new landfill space that includes 7 acres within the existing landfill operations area (disturbed/developed lands) and 8

acres within undeveloped City-owned property directly to the northeast. The City proposes to relocate existing landfill infrastructure including offices, the recycling building, and other accessory uses to several privately-owned parcels totaling approximately 3.5 acres located directly east of the landfill entrance road. The Eastern Expansion would add capacity of approximately 2 million tons and extend the life of the current landfill at the permitted disposal rate of 1,050 tons per day for approximately 6.5 years.

The Eastern Expansion will require the direct filling of 5.35 acres of wetland, loss of regulated wetland adjacent area and due to grading temporary impacts to 3.55 acres of wetlands and impacts to adjacent area. The City has developed an Ecosystem Mitigation, Restoration & Enhancement Plan, "Habitat Restoration Plan" which will restore 254.80 acres of the landfill facility, and lands surrounding it, to Pine Bush habitat, in part, as mitigation for the loss of federal and state wetlands.

The Habitat Restoration Plan will create 21.26 acres of new wetland, restore 53.10 acres of wetlands and dune barrens and enhance 180.44 acres of existing wetlands/pine barren and forest for a total of 254.80 acres. Approximately 3,169.75 linear feet of new stream channel will be created to mitigate for filling of 1,490 linear feet of stream channel and grading of 1,290 linear feet of channel.

The Eastern Expansion requires a modification/renewal of the City's existing Solid Waste Management permit (DEC# 4-0101-00171/00011); a modification/renewal to the facility's Air Title V permit (DEC# 4-0101-00171/00013); a new Freshwater Wetlands permit (DEC# 4-0101-00171/00015); a new Section 401 Water Quality Certification (DEC# 4-0101-00171/00016); an Article 11 (Threatened/Endangered Species License); coverage under the SPDES Multi-Sector General Permit Stormwater Discharges Associated with Industrial Activity, and a Temporary Revocable Permit For The Use Of State Lands to allow Habitat Restoration Plan activities and minor, temporary construction activities on state land.

The Department issued a positive declaration of significance pursuant to SEQRA for the proposed Eastern Expansion. A Fourth Supplemental Draft EIS was prepared by the City to evaluate the potentially significant impacts which might occur due to the proposed action. On October 17, 2008, the Department accepted the SDEIS for public review and comment and deemed the City's application complete. A legislative hearing was conducted on December 3, 2008 and comments were received on the application through December 15, 2008. Those comments are included in the record of this matter.

Agency Jurisdiction: 6 NYCRR Part 360 (Solid Waste Management); 6 NYCRR SPDES Stormwater permit, 6 NYCRR Part 663; Freshwater Wetlands; 6 NYCRR Title V Air Part 200-201; 6 NYCRR 401 Water Quality Certification; Environmental Conservation Law ("ECL") Article 11 (Threatened/Endangered Species License); Public Use Trail Easement Amendment; Temporary Revocable Permit For The Use Of State Lands.

Summary of the Department's Findings: The Department is approving the issuance of all permits and authorizations for the Eastern Expansion. The Eastern Expansion will add approximately 6.5 years of added waste disposal capacity to the existing landfill by laterally expanding it and by overfilling portions of the existing landfill.

# The Department's approval:

- 1) permits the City to construct and operate the Eastern Expansion in accordance with all applicable regulatory and impact mitigation requirements under Part 360 Solid Waste Management (disposal, recycling, intermediate/long range solid waste management, financial assurance), Title V Air Facility, Stormwater Discharge SPDES (construction and post construction), Article 24 ECL Freshwater Wetlands and 401 Water Quality Certification, SEQR.;
- 2) requires the City to fully implement a Albany Pine Bush ecosystem Habitat Restoration Plan governed by both the above requirements as applicable and Article 11 ECL Endangered/Threatened Species;
- 3) requires the City to set aside separate fees described below for habitat restoration plan implementation and maintenance and the Albany Pine Bush Preserve Commission; and
- 4) requires the City to acquire land parcels for inclusion in the Albany Pine Bush Preserve and relocate a state Public Trail Easement.

The Department's Findings and permit approvals are based on the following considerations:

The Department has conducted the weighing/balancing test analysis and has determined that Eastern Expansion which will cause the loss of 5.35 acres of Class II wetlands plus regulated adjacent area meets the 6NYCRR663 weighing standards for issuance based upon the pressing economic and social need for continuing disposal capacity in the Capital Region and its municipalities, lack of alternatives to the impending end of capacity of the current landfill and 6.5 year lead time provided by the expansion to bridge to a longer range alternative as well as the extensive mitigation resulting in 19.82 acres of wetlands and no net loss of wetland as well as 254.8 acres (includes the 19.82 acres) of Albany Pine Bush ecosystem habitat restoration of uplands (including habitat for federal and state endangered Karner blue butterfly and state threatened frosted elfin), wetlands and streams. As well as 13+/- acre PineBush land acquisition.

The Eastern Expansion permit requires the City to fully construct and implement a Department approved Habitat Restoration Plan, and its schedule, which will restore, enhance and reconnect 254.80 acres of land in the ecologically unique Albany Pine Bush. The types of ecotypes affected and restoration outcomes are summarized below:

# Community Type:

Degraded Wetlands:

Ditches/Wet Old Fields: 0.06 acre filled, 1.89 acres graded (temporary

impacts)

Disturbed Forested Wetland: 5.35 acres filled, 3.55 acres graded (temporary impact)

Restored Wetlands:

Pine Barrens Vernal Pond: 1.12 acres (created)

Sedge Meadow – 0.63 acre (created)

Forested Wetland (Red Maple Hardwood Swamp):

11.34 acres (created); 2 acres (restored); 27.59 acres (enhanced)

Forested Riparian Wetlands (Red Maple Hardwood Swamp):

6.04 acres (created) 0.82 acres (restored)

Biofilter Wetland: 0.69 acres (created); 0.73 acres (restored)

Streams

Ditched (from upland): 690 linear feet (graded for wetland restoration)

Ditched Stream: 1,490 linear feet filled; 600 linear feet (temporary impacts for

grading)

Restored Stream: 3,169.75 linear feet (created)

Restored and Enhanced Uplands

Dry Prairie/Sand Flat Dune and Dune Barrens: 49.55 acres restored

Pitch Pine-Scrub Oak Barrens: 121.93 acres enhanced

Pitch Pine-Oak Forest Buffer Enhancement 30.92 acres enhanced

Native Nursery 1.44 acres created

Total of impacts:

Total Permanent Impacts to wetlands: 5.35 acres
Total Temporary Impacts to wetlands: 3.55 acres

Total Permanent impacts to ditched stream 1,490 linear feet

Total Temporary impacts to ditched stream 1,290 linear feet

Total Mitigation (Landfill and Restoration Area)

Created

Pine Barrens Vernal Pond 1.12 acres

Sedge Meadow 0.63 acres

Forested Wetland (Red Maple Hardwood Swamp) 11.34 acres

Forested Riparian Wetland (Red Hardwood Maple Swamp) 6.04 acres

Biofilter Wetland 0.69 acres
Native Nursery 1.44 acres

Total created: 21.26 acres

Restored

Forested Wetland (Red Maple Hardwood Swamp) 2.00 acres

Forested Riparian Wetland (Red Maple Hardwood Swamp) 0.82 acres

Biofilter Wetland 0.73 acres

Dry Prairie/Sand Flat Dunes and Dune Barrens 49.55 acres

Total restored:

53.10 acres

Enhanced

Forested Wetland (Red Maple Hardwood Swamp)

27.59 acres

Pitch Pine – Scrub Oak Barrens
Pitch Pine – Oak Forest Buffer Enhancement

121.93 acres 30.92 acres

Total enhanced:

180.44 acres

Total Created/Restored/Enhanced

254.80 acres

**Restored Steam Channel** 

Streams

3,169.75 linear feet

- The landfill expansion will not cause any permanent encroachment upon adjacent Albany lands dedicated to the Preserve or state lands. The boundary will be marked and inspected to assure that during construction the boundary is controlled and any landfill construction activities will not affect these areas. There is the potential that in some limited areas where construction will be on the boundary some minor and temporary impacts may occur to assure controls are in place and the landfill surface grades blend properly into the non gradable Preserve and state land areas. For the habitat restoration plan implementation for the landfill surface as well as the adjacent Preserve and state lands there will be construction activities to grade for dune, prairie, stream and wetland features and plant Pine Bush species.
- The landfill and Habitat Restoration Plan construction and operation will prevent or control to within regulatory standards and to the maximum extent practicable impacts such as stormwater, birds (control program), nuisance dust, noise (Part 360 suburban standards of 62 dB(a) one hour Leg at property line and <6 dB(a) increase over ambient plus hours of operation limited to 7 AM-4:30 PM Monday -Friday and for approximately ½ year landfill construction hours to 6 AM - 6 PM Monday - Friday and 7 AM - 4 AM Saturdays, visual (screening plus elevation change limited to a 10 foot increase) and air quality including odors to residential areas and Albany Pine Bush Preserve users. In particular the City is required to control odors from the landfill facility so they don't constitute an off-site nuisance or hazards to health, safety or property and to 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. Additionally, Department verification of off-site odors on four separate occasions within any three-day period allows the Department to order the reduction of waste accepted in increments of 200 tons per day until the odors are abated.
- The City is required to set aside a fee in the amount of \$10.00 per ton of solid waste accepted at the landfill that will provide for dedicated funding for the implementation of the Habitat Restoration Plan and maintenance.
- The fee under the current permit is \$0.75 per ton of waste accepted at the landfill. The City is now required to set aside an enhanced fee of \$1.50 per ton of solid waste accepted at the landfill for the Albany Pine Bush Preserve Commission to support Pine Bush

Preserve management and educational programs for the first three years of landfill operation. This fee will then increase to \$2.00 per ton for the remaining life of the landfill. The \$0.50 per ton fee difference between the \$1.50 per ton fee and \$2.00 per ton fee during the first 3 years of landfill operation will be used to fund: 1) the acquisition of 2.4+/- acres to mitigate for Eastern Expansion taking of a state public trail easement with the easement also amended and the trail easement relocated and 2) the acquisition of 10.6+/- acres to mitigate for the Eastern Expansion taking of the undeveloped 8 acres within the landfill facility boundaries which is Albany Pine Bush open space that had been previously identified by the Commission for full protection and inclusion in the Preserve.

- The Eastern Expansion will provide the Capital Region Solid Waste Management Partnership (CRSWMP) communities uninterrupted solid waste management and the necessary and critical lead time of 6.5 years to plan for and implement a long term solid waste management plan.
- The Eastern Expansion permit refocuses the City's solid waste management policies toward an increased emphasis on recycling and waste reduction.
- The Eastern Expansion permit prohibits the City, or others, from submitting an application for authorization for any further expansion of the Rapp Road Landfill.
- After an EIS and extensive public review process including a legislative public hearing it
  has been determined that under the provisions of 6NYCRR 621.8 (b) no substantive or
  significant issues have been raised warranting an adjudicatory public hearing and all
  statutory and regulatory criteria and standards for approval and permit issuance have been
  met.
- The impacts of the Eastern Expansion have been fully examined and after weighing and balancing relevant environmental impacts with social, economic and other considerations that define the need for this project from among the reasonable alternatives, this action is one that based upon this balance avoids or minimizes adverse environmental impacts to the maximum extent practicable; and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating, as conditions to the decision, those mitigative measures that were identified as practicable.

# FACTS AND CONCLUSIONS IN THE EIS AND SUPPORTING DOCUMENTS RELIED UPON TO SUPPORT THE ISSUANCE OF THE EASTERN EXPANSION PERMIT

#### Background

The Department originally issued 6 NYCRR Part 360 Solid Waste Management Permits for a Permit to Construct issued March 2, 1990, and a Permit to Operate issued October 29, 1991. The original landfill application was issued a positive declaration of significance and an

Environmental Impact Statement (EIS) was prepared. This permit was granted pursuant to a Decision of the Commissioner of the Department of Environmental Conservation on February 2, 1990 following a Public Hearing on the project.

A subsequent modification of the permit for the Albany Interim Landfill (AIL) involved a 23-acre lateral expansion of the (AIL) and a "piggyback" of an area between the Greater Albany Landfill (GAL) and the AIL (P-4 Project). The modification created an additional volume for approximately 2.1 million cubic yards of waste in an area previously altered by land filling activities (piggyback) and an area immediately adjacent to the AIL in the vicinity of the current administration building.

The permit to operate was subsequently renewed for a five year period on October 27, 1995.

On January 31, 1997, the Department approved an expansion to the landfill into the wedge area between the Interim Landfill and Greater Albany Landfill, based on a Second Supplemental Draft and Final EIS, SEQR Findings, Part 360 application and two variances (equivalent intermediate soil cover material and expansion over a principal aquifer approvals).

In February 29, 2000 after an application review and public process the Department approved the currently operating P-4 expansion project at this landfill.

The landfill is used by the City of Albany, and the Capital Region Solid Waste Management Partnership (CRSWMP) and other local communities. This partnership was formerly known as the Albany New York Solid Waste Energy Recovery System "ANSWERS".

#### Solid Waste Regulations

The Department finds that the Eastern Expansion engineering plans meet the requirements of 6 NYCRR Part 360 siting, design, construction, operation, closure, and post-closure activities requirements.

#### Variances

The City of Albany applied for three variances from 6 NYCRR Part 360 standards and the Department finds that all three variance requests meet the 6 NYCRR 360-1.7(c) standards for approval for the following reasons.

#### (1) Intermediate Cover Material Variance

Regulations at 6 NYCRR 360-2.17(d) requires that a minimum of twelve inches of compacted soil cover material must be applied and maintained on all landfill surfaces where no additional solid waste has been or will be deposited within thirty days. The City has requested the use of 2 to 3 coatings of Posi-Shell© for intermediate cover in lieu of the twelve inches of soil. Posi-Shell©, composed of cement kiln dust and a mineral binder, is non-flammable and has inert

characteristics which sets up and forms a mortar-like coating when properly applied. Lime within the Posi-Shell© also acts as an odor suppressant.

A single coating of Posi-Shell© is approximately one-quarter inch thick and has been found to be functionally equivalent to 12 inches of soil as a daily cover material. Posi-shell© has been successfully used as daily cover material under separate variance for the Rapp Road landfill for the past eight years and at the Town of Colonie landfill for intermediate cover.

The City has demonstrated that Posi-Shell© will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources and its use is consistent with the performance standards required under 6 NYCRR 360-2.17(d).

# (2) Overfill Liner System

Regulations at 6 NYCRR 360-2.13(f) require that all landfill areas receiving waste are lined with a double composite liner. The City has requested a variance from these requirements for the section of the Eastern Expansion that is located over the landfill's existing double composite liner. A variance was previously granted the City for the P-4 expansion area of the landfill which was constructed over the landfill's existing double composite liner. The City has demonstrated that placing overfill on an area of the landfill that already contains a double composite liner will have no significant adverse impact on the public health, safety or welfare, the environment or natural resources and its use is consistent with the performance standards required under 6 NYCRR 360-2.13(f).

# (3) Aquifer Siting Restrictions

Regulations at 6 NYCRR 360-2.12(c)(1)(ii) [effective on October 9, 1993] prohibit the siting of landfills over principal aquifers and the expansion of a landfill located over a principal aquifer may not operate beyond December 31, 1995. The Eastern Expansion, like the existing landfill, will be located over the Pine Bush Aquifer, a principal aquifer.

The March 2, 1990 landfill permit was subject to the operational, closure and post-closure requirements of the 1988 6NYCRR Part 360 regulations and the construction requirements of the 1985 revisions. There were no principal aquifer siting restrictions in the 1986 Part 360 regulations. The landfill was designed at the request of the Department to exceed the 1985 regulations and meet the 1988 construction requirements including incorporating a double composite liner system and leak detection. Additionally, potential impacts to the Pine Bush Aquifer and groundwater were considered during the 1990 permit review process. Any potential impacts were found not to be significant.

The Department approved permits for the continued operation of the landfill on November 1, 1991; October 27, 1995; and February 29, 2000. A permit renewal application was also received on April 28, 2005.

On August 28, 1998, the Department received a renewal application for the March 2, 1990 permit to extend the life of the landfill. The Department determined that the renewal application wasn't subject to the principal aquifer siting restrictions in 6 NYCRR 360-2.12(c)(1)(ii) and determined that no variance was required for operation beyond December 31, 1995. A detailed review of groundwater quality results from 1986 through the fourth quarter of 1993 was included in the SDEIS for the 1995 permit renewal that demonstrated that the existing landfill at that time hadn't adversely contributed to groundwater quality impacts.

The Eastern Expansion will be constructed with a double composite liner and leachate collection system similar to the previous permit approvals. The landfill's monitoring well data has been reviewed by Department staffs and staffs have concluded that the double composite liner system has proven to be an effective barrier to groundwater contamination. The Eastern Expansion double composite liner will be just as effective. The Eastern Expansion leachate collection system will be piped into the existing leachate pipe system, which then discharges to the Albany County Sewer District.

Department also considered the fact that the Pine Bush Aquifer has limited utility as a potential source of groundwater due to its low yield. The Latham Water District abandoned its wells on Morris Road in the Pine Bush Aquifer in the 1960s due to low yield and poor water quality. Furthermore, the use of the Pine Bush Aquifer for a public water supply would negatively affect the indigenous pine bush vegetation by lowering the water table to unacceptable depths.

The City has demonstrated that the existing double composite liner and leachate collection system for the overfill portion of the Eastern Expansion and the lateral expansion with a new double composite liner and leachate collection system will meet the criteria for a 6 NYCRR360 variance, protect water quality, and have no significant adverse impact on the Pine Bush Aquifer.

# Stormwater Pollution Prevention and Surface and Groundwater Quality

The stormwater discharges associated with the landfill are regulated and authorized under the New York State SPDES Mult-Sector General Permit for Stormwater Associated with Industrial Activity (GP-0-06-002) (Permit Number NYR 00D198) ("SPDES Stormwater Permit.") The Multi Sector Permit authorizes stormwater associated with the construction of new cells provided that the activity is addressed under the Stormwater Pollution Prevention Plan ("SWPPP") that is prepared in accordance with the New York State Standards & Specifications for Erosion & Sediment Control and the New York State Stormwater Management Design Manual. The permit requires that stormwater runoff from all disturbed areas that is not handled as leachate must be captured and treated by a post-construction stormwater management control(s) that are designed, constructed and maintained in accordance with the NYS Stormwater Management Design Manual. The Eastern Expansion permit does allow for alternative post construction controls provided that the owner/operator demonstrates equivalence to the design standards.

In accordance with the SPDES Stormwater Permit requirements three SWPPPs have been developed by the City to address the management of stormwater runoff during the construction

of the Eastern Expansion. In order to meet the requirements for management of runoff the SWPPs include hydrologic and pollutant loading analyses. These reports conclude that during construction and operation of the Eastern Expansion there will be a decreased volume of stormwater runoff resulting in an overall reduction in pollutant loading to waters of the United States. This reduction is intended to demonstrate equivalence to the design standards and satisfies the overall goals of the SPDES Stormwater Permit. The plan includes erosion and sediment controls and provisions for routine inspection by a qualified inspector to ensure that the construction activities do not result in impacts to the waters of the United States.

The SWPPPs also address the long term management of stormwater runoff associated with the expanded landfill after closure. In order to meet the requirements for post construction management, the Multi-Sector SWPPP includes hydrologic and pollutant loading analyses that compares the runoff volumes and pollutant loadings for the landfill when closed per the 6 NYCRR Part 360 permit to that of the expanded landfill with the habitat restoration. The SWPPP analysis shows that the rate of runoff and pollutant loadings decreases for the expanded/restored landfill. These reductions are intended to demonstrate equivalence with the technical standards and satisfy the overall goals of the SPDES permit. The restoration plan outlines five phases needed to complete the habitat restoration plan. The SWPPP includes provisions for routine inspection by a qualified inspector to ensure that the soils disturbance associated with the restoration activities will not result in impacts to the waters of the US. During periods when greater than 5 acres of soils will be exposed, compliance sampling will be performed to demonstrate that the work is protective of water quality standards.

The Department, based on these facts and circumstances, finds that stormwater generated during the construction of the Eastern Landfill and post-construction will meet all regulatory requirements as well as state water quality standards and therefore will not cause significant adverse impacts to groundwater or downstream surface waters.

#### Traffic

The existing landfill staff work three shifts during normal operating hours (M-F 7:00 AM to 3:30 PM). The staffing levels will not change for the Eastern Expansion. The landfill now handles about 125 to 150 vehicles per day based on the City's landfill traffic records. Daily traffic volumes depend on the tonnage of solid waste entering the facility. The current disposal limit of 1,050 tons per day limit (based on a monthly average) will not change under the Eastern Expansion. Traffic patterns will also not change as a result of the Eastern Expansion. Traffic into and from the landfill will continue to be associated with the existing transfer station, convenience station and offices.

A traffic study was conducted during the permit review process for the Albany Interim Landfill (AIL) and reviewed during the P-4 expansion project. An updated study was deemed to not be necessary for the P-4 expansion and Eastern Expansion because with no increase in disposal daily tonnage limits the truck and employee traffic remains the same as during the AIL project. Further, all operational truck traffic must travel to the landfill from the Washington Avenue intersection and no operational trucks are permitted to travel north on Rapp Road beyond the

landfill entrance. The operation of the Eastern Expansion will not cause a significant change from current operations and the traffic study showed no appreciable impacts from landfill truck traffic, so that the continued operation of the landfill restricted in this approval to current levels will not have a significant adverse impact on local traffic.

There will be an increase in the total traffic during the construction of the Eastern Expansion, but this increase will not impact traffic on Washington Avenue Extension since construction activities will be spread throughout the day. The roads in the area are sufficient to maintain the current traffic flows and levels of service. Therefore, the levels of service along Washington Avenue Extension and the intersection with Rapp Road will not result in significant adverse impacts from either the construction of the Eastern Expansion or its operation.

The Department, based on these facts and circumstances, finds that truck traffic, which will slightly increase during the construction of the Eastern Expansion, and which will not increase during the operation of the Eastern Expansion, will not cause significant adverse impacts on surrounding roads.

# Visual

The existing landfill permit allows a maximum landfill height of 460 feet above mean sea level (AMSL). The Eastern Expansion will have a final height of 470 feet above mean sea level. A Visual Impact Assessment "Assessment" was conducted on the potential impacts of the Eastern Expansion's final height.

The Assessment found that the visual impacts associated with the project would affect motorists' views from I-90 while traveling both east and west, from Route 155 at the bridge over I-90, from portions of South Frontage Road and from portions of Washington Avenue Extension. According to the assessment, motorists would see portions of the landfill expansion for approximately 1 to 39 seconds depending on their location and speed.

The Eastern Expansion would be most visible from Washington Avenue Extension and South Frontage Road for the most prolonged time period while traveling in either direction. The views into the Eastern Expansion will be limited due to existing intervening vegetation, the speed at which the motorist is traveling and the motorists' cone of vision.

The Eastern Expansion, where visible, will be 10 feet higher and appear to those viewers able to see it to be similar in height to the existing landfill and a continuation of its shape rather than a feature which is visually different.

The Eastern Expansion would have the greatest potential impact to the businesses off of South Frontage Road and users of several of the trails within the Albany Pine Bush Preserve. The views of the Eastern Expansion will be mitigated by the growth of existing vegetation in the foreground and midground and by the creation of pine barrens as part of the Habitat Restoration Plan.

Increases in visual impacts will be minimized from both Fox Run Estates as well as existing Pine Bush Preserve lands by maintaining existing vegetation including trees, dunes, and berms. The Eastern Expansion will still be visible from the New York State Thruway but impacts will be ameliorated by existing trees and progression of land filling, including berms, contouring and revegetation of outward-facing slopes.

The visual impact analysis also demonstrates that due to distance, topography and vegetative screening residential areas in the Village of Colonie to the north will not experience any significant change in views towards the Eastern Expansion.

Additionally, during the operation of the Eastern Expansion, landfilling will be phased to screen active operations at the working face from view. Earthen berms will be constructed around the perimeter of the cell areas for each lift above existing visual barriers. The vegetation from the Habitat Restoration Plan, which will be implemented concurrently with the operation of the landfill, will serve to break up the geometric shape and uniform color of the finished landfill.

The Department finds that based upon this analysis the Eastern Expansion will not cause a significant visual change and therefore will not cause significant adverse visual impacts in the existing viewsheds towards the landfill.

# Archaeology

The Eastern Expansion was investigated by a qualified archeological firm who reported its finding to the State Office of Parks, Recreation and Historic Preservation (OPRHP). Department staff examined the OPRHP files for inventoried structures and archaeological sites in the vicinity of the Eastern Expansion that are listed on or that have been determined to be eligible for listing on the State and National Registers of Historic Places. There are no properties listed on the State/National Register on or adjacent to the area of the Eastern Expansion.

The SDEIS contains the findings of a Phase 1B archaeological field study conducted for the Eastern Expansion. Artifacts were recovered during the field study. A laboratory analysis of the artifacts determined that the artifacts weren't significant cultural resource materials.

An archaeological site (A00140.004700) was identified near existing building number 10. This site will be isolated from the Eastern Expansion by a 100-foot protective buffer and not be disturbed. The OPRHP has concluded that the Eastern Expansion would have no adverse effect to historic or archaeological resources under Article 14 State Historic Preservation Act and that no further archaeological investigation is recommended.

An additional archaeological study was completed for the areas to be disturbed by the Habitat Restoration Plan which are largely outside the landfill expansion footprint covered by the study discussed above. A sensitive archaeological precontact site was identified and it will be marked and protected so that any disturbance will be avoided with permit restrictions enforcing the same.

OPRHP has signed off on this approach and its conclusion of "no effect" for avoidance applies to all components of the entire project.

The Department, based on these facts and circumstances, finds that there will be, pursuant to SEQR and the State Historic Preservation Act, no historic or archaeological impacts resulting from the construction and operation of the Eastern Expansion and associated habitat restoration plan.

#### Air Quality

The landfill is subject to a Title V air permit pursuant to 6 NYCRR Part 201 for air emissions associated with the operation of the landfill and the collection of methane to operate the electrical generators. The entire system is subject to the operational standards of the New Source Performance Standards ("NSPS") Subpart WWW as outlined in the Title V permit. The Department has determined that the emissions from the landfill meets state and federal regulatory air quality standards which are protective of human health and the environment. The landfill's operational systems have been developed to ensure that the efficiency of the collection and control system is maximized and that emissions to the environment are minimized. To demonstrate that the required design criteria for the collection and control system are being met, the system will be monitored by the City for compliance with operational standards. The Title V permit has been modified to include the Eastern Expansion.

The landfill has a comprehensive landfill gas collection and control system ("system"). The expansion of the system is incorporated into the construction design of the Eastern Expansion. Control devices will be operated at all times when landfill gas is routed to the device. In the event the electrical generator engines shut down, the gas is automatically diverted to a flare for combustion. In the event a flare shuts down, the system vacuum will reduce, and only enough landfill gas required to operate the engines will be recovered. If the flare and/or engines become inoperable, the gas mover system will be shut down within one hour. Odor releases from the gas to energy facility are required to be fixed within three hours or diverted to the flares. The City is required to 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.

In addition, regulations at 6 NYCRR 217.3 prohibit heavy-duty vehicles, including diesel trucks and buses, from idling for more than five minutes at a time. Trucks entering the facility for any purpose must be in compliance with this state regulation which will further reduce localized air pollution and noise.

The Department, based on these facts and circumstances, finds that there will no significant adverse environmental impact to the air quality from the construction and operation of the Eastern Expansion.

# Odors

The Department has received citizen complaints from residents of the Fox Run Estates, the Village of Colonie and various other receptors in the vicinity of the Washington Avenue Extension. A periodic source of odors relates to the malfunctions in the gas collection and gas to energy plant which are to be expected with a landfill of this size and with the amount of gas it generates. The Fourth SDEIS addresses odors from the smell of surface garbage being placed into the landfill, decomposition gases emitted during the burying of garbage, and odors released during malfunctions of the gas to energy facility. Garbage odors can be unpleasant and a nuisance. Releases of Hydrogen Sulfide landfill gas can cause nausea and may be a health hazard due to its potential (if not treated properly).

Various measures have been undertaken to mitigate and eliminate odors since the landfill was first constructed in 1990. Odors from the disposal of waste are mitigated by the application of daily cover as discussed in the Variance section of this FEIS. Daily cover is currently placed on the exposed municipal solid waste landfill surface twice daily such that no waste is exposed for more than four hours. This procedure is carried over into the Eastern Expansion permit and is more stringent than the regulations at 6 NYCRR 360-2.17 (c) which requires daily cover be placed once a day.

The landfill also uses an odor neutralizer that further reduces the impacts of offsite odors. Furthermore, no more than four trucks are currently allowed on the active face at one time, and no more than one 100-yard or greater capacity truck may off load at any given time. These requirements are also continued in the Eastern Expansion permit.

The City is also required the control odors from the landfill facility so they don't constitute an off-site nuisance or hazards to health, safety or property

As discussed under the Air Quality section, the current landfill has a gas collection system that will be expanded to collect gases from the Eastern Expansion. The delivery of these gases to the landfill's electrical generating facility to generate power further mitigates landfill gas odors. Excess gasses not used are burned off using a flare system. The City is required to 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.

Additionally, Department verification of off-site odors on four separate occasions within any three-day period allows the Department to order the reduction of waste accepted in increments of 200 tons per day until the odors are abated.

The Department, based on the above facts and circumstances, finds that the implementation of landfill cover disposal requirements, the effective collection of landfill gases and generation of power, requirements to prevent offsite nuisance odors, divert landfill gas to flares whenever uncontrolled or unabated off site odors are due to the gas to energy recovery facility and the authority of the Department to immediately order the reduction of solid waste accepted at the

landfill will ensure compliance with 6 NYCRR Part 360 and 6 NYCRR Part 211 and thereby mitigate any potential odor impacts to the maximum extent practicable.

# **Noise**

State Solid Waste regulations 6 NYCRR 360-1.14 (p) sets limits for noise generated from landfills. The Noise currently generated by the operation of the landfill is subject to an hourly maximum Leq level for a suburban environment. The Supplemental SDEIS includes a noise study that demonstrates that noise from the operation of the Eastern Expansion will adhere to and not exceed the regulatory standards of 6 NYCRR 360-1.14(p) which are the suburban standard of 62 dBA one hour Leq during the hours of 6 AM to 10 PM and 57 dBA from 10 PM to 6 AM. The Supplemental SDEIS does indicate that, at times, noise from the construction of the Eastern Expansion will exceed the 6 NYCRR 360-1.14(p) limits but such exceedences will be limited by hours of operation and the overall construction period will be limited in duration to approximately 6 months.

The Eastern Expansion is also subject to the department's Noise Assessment Policy under SEQR which evaluates any increase in noise levels from existing ambient conditions. The assessment coupled with mitigation measures shows such increases are expected to be less than a 6 dBA increase which are considered to be less than the levels that, based upon the criteria in the policy, cause significant environmental impacts.

Noise at the landfill is primarily the result of engine/exhaust sounds generated by the diesel and gasoline powered equipment that is working on the surface of the landfill - bulldozer, compactor and grinder. Other noises are generated by trucks transporting solid waste to the landfill and the back-up alarms associated with the operation of all this equipment.

The landfill operational procedures will be continued in the Eastern Expansion permit to minimize and mitigate any potential off-site noise impacts and to prevent incremental impacts from occurring. Measures identified in the Supplemental SDEIS to mitigate off-site noise include preserving existing vegetation and sand dunes to the maximum extent possible between the active landfill cells and the adjacent residential areas to the north and east; the use of perimeter berms as part of the landfill progression plan to continuously have an intervening land form or topographic feature between the active land filling operation and adjacent residential areas will attenuate noise emissions and mitigate impacts.

In addition to the mitigating measures in the landfill operational procedures, the operating hours for receipt and placement of solid waste at the landfill are limited to the hours of 7:30 AM to 4:30 PM, Monday - Friday. The Eastern Expansion permit would allow the use of the landfill on selected holidays, and five Saturdays per year designated by the City for Spring Cleanup Days. Operating during these hours also minimizes any noise impacts on receptors as the majority of residents are not at home during the majority of these hours.

The Department, based on the above facts and circumstances, finds that preserving existing vegetation and sand dunes, to the maximum extent practicable between the active landfill cells and the adjacent residential areas to the north and east; the use of perimeter berms as part of the landfill progression plan to continuously have an intervening topographic barrier feature between the active land filling operation and an adjacent residential areas, as well as the distance between noise sources and the property line, noise control equipment such as mufflers and limiting the hours of operation will ensure that 6 NYCRR 360-1.14(p) noise limits are not exceeded beyond the property boundaries and any noise increases will remain below the significant threshold in the DEC noise policy of increases greater than 6 dB(a) over the existing ambient level.

# Dust

The Eastern Expansion, is subject to the 6 NYCRR Part 360 1.14 (k) dust requirements that prohibit any dust from being emitted beyond property boundaries. As discussed in the previous noise section, preserving existing vegetation and sand dunes, to the maximum extent practicable between the active landfill cells and the property boundaries in addition to wetting dry areas will reduce the potential for the generation of wind born sand blowing off site. The application of a cover material on the exposed solid waste working surface twice daily will further eliminate any wind born dust from leaving the property boundaries. In addition, the City has a water truck on site to wet down roadways to reduce dust impacts.

The Department, based on the above facts and circumstances, finds that the Eastern Expansion operational procedures, construction design and habitat restoration along with the watering of roads will prevent nuisance dust from leaving the property boundaries to assure compliance with 6 NYCRR Part 360 1.14 (k) and therefore, not cause significant adverse impacts.

#### Nearby Residential Areas

The Supplemental Draft Environmental Impact Statement (SDEIS) discusses how residents of the adjacent Fox Run Estates mobile home park were impacted in the past by landfill odors, noise, dust and nuisance birds. These impacts were mitigated in the original interim landfill and wedge projects to the maximum extent practicable through the landfill's project design and operating procedures and restrictions. As part of the mitigation for the P-4 expansion the City acquired the Fox Run Estates property in August, 2000 and offered the residents the option of a buyout or allowing them to remain until 2015. Several homeowners elected to remain, but have been relocated to the area of the mobile home park which is farthest away from the landfill operations. One homeowner maintains a "life estate" property, but is not a year-round resident.

Birds attracted to the landfill, as discussed in the Second Supplemental DEIS and FEIS, affected the residents because of the noise they make and the droppings left on residences and personal property. The problems tended to have greater impact on properties closer to the boundary of the landfill. Stringent operating procedures, such as covering solid waste twice daily with Posi-Shell have been key in mitigating bird impacts. The City has, over the past three years, been working under a cooperative agreement with the U.S. Department of Agriculture, Animal and Plant

Health Inspection Service and the Department of Interior's Fish and Wildlife Services to develop and implement a bird management plan for the landfill. The objective of the bird control plan is to reduce the number of gulls, starlings and crows at the landfill and surrounding area by methods that don't rely entirely noise creating methods.

The City has also implemented the following measures to further reduce the landfill's impacts to the Fox Run Estates residents: closing of a portion of the landfill closest to the residences, more effective landfill gas collection and control of municipal solid waste smells during disposal and the establishment of a citizen complaint notification process. These measures will be required for the operation of the Eastern Expansion.

Further, as discussed previously, the Eastern Expansion will be visually screened from nearby residential areas in the Village of Colonie and Albany. While distance is an important factor in mitigating noise and visual so too will be new conditions requiring the control and abatement of odors to keep impacts within regulatory standards.

The Department, based on the above facts and circumstances, finds that the impacts to the Fox Run Estates and nearby residential areas have been mitigated to the maximum extent practicable by the acquisition of the Fox Run mobile homes which has resulted in a substantially reduced number of residents, the application of daily cover twice a day to minimize sources of food for birds, the implementation of a bird management program, visual screening, noise screening and controls, improvements to the gas collection system and additional odor control requirements as well as the establishment of a citizen complaint and notification process.

# Wildlife Habitat and Freshwater Wetlands

The upland and wetland areas of the Eastern Expansion provides habitat for a variety of wildlife species and is also habitat and a travel corridor for other common wildlife species. The Supplemental SDEIS evaluated wildlife habitat in the expansion area and concluded there will be a loss of wildlife habitat especially in the forested wetland areas.

The on-site wetlands provide benefits to the environment in the form of flood protection, biodiversity, water quality, and as part of the overall landscape for threatened species habitat. An analysis of the potential wetland impacts was conducted in accordance with the provisions of 6 NYCRR Part 663.

The freshwater wetland regulations at 6 NYCRR 663 contains weighing standards for permit issuance based on a project's compatibility with the preservation, protection and conservation of the wetland and its benefits.

For Class II wetlands, the weighing standards require that the proposed activity must be compatible with the public health and welfare, be the only practicable alternative that could accomplish the applicant's objective and have no practicable alternative on a site that is not a freshwater wetland or wetland adjacent area. In addition, the proposed activity must minimize

degradation to, or loss of, any part of the wetland or its adjacent area and must minimize any adverse impacts on the functions and benefits that the wetland provides. Lastly, the weighing standards for Class II wetlands require that a permit shall be issued only if it is determined that the proposed activity satisfies a pressing economic or social need that clearly outweighs the loss of, or detriment to, the benefits of the Class II wetland.

The Eastern Expansion alternative will impact approximately 8.9 acres of Class II wetland of which 5.05 acres in the expansion area to be filled (an incompatible activity) along with regulated adjacent area, 0.3 acres of the restoration area to be filled, 3.55 acres of temporary impacts in the restoration area for grading. Approximately 1,490 linear feet of stream would be filled, 1,290 linear feet of channel temporarily affected by grading and approximately 3,169.75 linear feet of stream channel restored.

The location of the Eastern Expansion in these Class II wetlands is a fill and constitutes an incompatible activity which is defined as incompatible with a wetland and its functions and benefits under the freshwater wetland regulations. The Department is required to apply a weighing or balancing test to determine whether the Eastern Expansion's pressing economic or social need that clearly outweighs the loss of or detriment to the benefits of the wetland.

The Department has conducted the weighing/balancing test analysis and has determined that Eastern Expansion which will cause the loss of 5.35 acres of Class II wetlands plus regulated adjacent area meets the standards for issuance based upon:

- 1) the pressing economic and social need for the Eastern Expansion outweighs the loss and detriment to this wetland as it is the only practicable alternative that could accomplish the applicant's objectives with no practicable alternative on a site that is not a freshwater wetland or adjacent area based upon the need for continuing solid waste disposal capacity in Capital Region and its municipalities with the current landfill nearing capacity and the 6.5 year lead time necessary to study, determine and implement an inter-municipal longer range alternative;
- 2) while the Eastern Expansion causes a loss of existing wetlands and their current functions and benefits it is through: a) a small pullback of the landfill footprint, b) the creation of approximately 19.82 acres of new wetlands to offset the loss of the 5.35 acres of wetlands and adjacent areas so there will be no net loss of wetlands and d) the implementation of the Habitat Restoration Plan which will restore approximately 254.80 acres (including the 19.82 wetland acres) of previously landfilled area, future landfill area and lands of the Fox Run Estates as well as state lands to Albany Pine Bush ecosystem habitat consisting of upland (including habitat for the federal and state endangered Karner blue butterfly and state threatened frosted elfin), wetland and stream habitat that the proposed activity will minimize degradation to any part of the wetland or its adjacent area as well as minimize any adverse impacts on the functions and benefits that the wetland:

<sup>1</sup> c) 13+/- acre Pinebush land acquisition.

# 3) the project is compatible with the public health and welfare;

The new wetland areas will be created within the same watershed/drainage as those being filled and have been designed to replace the functions and benefits provided by the existing wetlands.

The Habitat Restoration Plan will be concurrently implemented with the construction and operation of the Eastern Expansion so any loss of wetland will begin to be offset soon after commencing construction of the Eastern Expansion. The Habitat Restoration Plan also includes implementation of a wildlife management and wetland mitigation plan provides substantial environmental benefits both by protecting wetlands and essential upland habitat including endangered and threatened species habitat with open fields that are not fragmented by development.

A Habitat Restoration Plan implementation a fee in the amount of \$10 per ton of solid waste disposed of at the landfill will be used for the Habitat Restoration Plan implementation and maintenance. Also a fee of \$1.50 (increasing to \$2.00 after three years) per ton of solid waste disposed of at the landfill will be used to support Albany Pine Bush Preserve Commission habitat management. In addition Albany will use the \$.50/ton difference to fund acquisition of lands for the Albany Pine Bush Preserve to compensate for the taking of and relocation of a state public trail easement (2.4+/- acres) and taking of Pine Bush open space (10.6+/- acres).

The Habitat Restoration Plan provides a unique opportunity to re-establish linkages from west to east in the Pine Bush Preserve through the mobile home park property and over portions of the closed landfill. The City's consultants in researching and developing the Habitat Restoration Plan made detailed investigations of the vegetation, soils and hydrology within project impact areas, degraded areas, and high quality reference areas and used this data to refine concepts.

In conducting the weighing/balancing test pursuant to 6 NYCRR Parts 663 the Department also weighed the alternatives presented in the Supplemental SDEIS. Several alternatives were evaluated including alternative landfill siting, shipment to existing off site landfills, and different on site configurations to avoid wetlands. A comprehensive siting study, conducted previously, identified a new landfill site in the Town of Coeymans. However, the site is nearly all covered with wetlands and therefore any application to construct a landfill on the site would cause substantially more wetland impacts than the Eastern Expansion. The wetland avoidance alternative was found to provide only three years of disposal capacity which is not considered to be enough time to complete the Capital Region Solid Waste Management, Partnership (CRSWMP) Local Solid Waste Management Plan (LSWMP) update process to evaluate and determine the best course of action for solid waste disposal and implement any viable local option that avoids long distance hauling can be developed and implemented. As stated in the recent LSWMP update completed as part of the complete application and permit approval process for this expansion the previously identified local disposal option - a new landfill in the Town of Coeymans is not considered viable as it is completely covered with state and federally regulated wetlands.

The Eastern Expansion, which will provide 6.5 years of landfill space, is found to be the only practicable alternative to meeting both the City's short term and long term disposal needs until an alternative solid waste disposal solution is identified and implemented.

The Supplemental SDEIS analyzes the potential impacts of numerous design scenarios on wetland areas, streams and their functions to reduce impacts. The design process evaluated measures to avoid and/or reduce wetland impacts and incorporated as feasible. Impacts were carefully evaluated and weighed against factors such as landfill design, road alignment, easements, and support structures. In order to minimize wetland impacts, an alternative site design was required to reduce the landfill footprint in the wetland area and the wetland fill. The Eastern Expansion's design minimizes wetland impacts to the greatest extent practicable.

The permit conditions ensure that the set aside acreage is permanently managed for wildlife species, with preservation of Albany Pine Bush associated species being a dominant focus. Implementation of the 254.8 acre Habitat Restoration Plan as part of the Eastern Expansion sufficiently compensates for the loss of wetlands and habitat and is anticipated to ensure this significant and valuable resource will remain in perpetuity within the localized area and results in no net loss of wetlands.

While loss of this habitat and displacement of wildlife is significant, as discussed earlier the Department determines that after weighing and balancing, that the Eastern Expansion satisfies a pressing social and economic need which cannot be met by the other alternatives and outweighs the loss or detriment to the wetland, that the impacts to the wetland have been minimized through a project footprint reduction, that there will be no net loss of wetlands; that there will be the implementation of a Albany Pine Bush ecosystem habitat restoration encompassing wetlands and uplands resulting in a substantial habitat benefit and enhancement including for endangered and threatened species.

This determination by the Department is supported by the facts and circumstances discussed above including the Supplemental SDEIS alternatives analysis and the Habitat Restoration Plan. Which also determines that impacts to wetlands and wildlife species have been mitigated to the maximum extent practicable.

Additionally, permit conditions have been included which will require:

- 1) the City not to use rodenticides at the landfill, in order to eliminate adverse secondary poisoning impacts on Pine Bush predator species; and
- 2) implementation of new continuous landfill gas flare equipment and warning procedures to minimize the potential for harm to raptors from flames and heat from the flare(s), particularly when the flare (s) has to be reignited after a shutdown.

# **Federal Wetlands**

The Eastern Expansion will result in the filling of 5.35 acres of federal wetlands and 1,490 linear feet of stream channel. The City will need a permit pursuant to Section 404 of the Clean Water Act (33U.S.C.1344). On January 20, 2009, the U.S. Army Corps of Engineers ("ACOE") published notice for comment of the City's application for a federal wetlands permit. On February 19, 2009, the comment period closed. On February 12, 2009, the U.S. Environmental Protection Agency ("EPA") in its consultation capacity pursuant to the Clean Water Act notified the ACE of its objection to the issuance of a Section 404 permit because the City had not chosen the "least environmentally damaging practicable alternative". On March 4, 2009, the United States Department of Interior's Fish and Wildlife Service ("FWS"), which also acts in a consultation capacity to the ACE recommended the denial of the Section 404 permit. The City responded to the FWS letter on March 17, 2009. All correspondence and comments received from the public notice are included in the record of this matter.

The Eastern Expansion permit, like all other Department permits, specifically states that it is the City's responsibility to obtain an ACE Section 404 permit and any other non- Department jurisdictional permits and approvals for the Eastern Expansion. The City will not be filling the federal wetlands during the construction of its first solid waste cell in the Eastern Expansion. The Department's sole role is to make a decision on whether to grant or deny a 401 Water Quality Certification (WQC) on the Eastern Expansion. A denial precludes ACE issuance of the 404 permit. Issuance of a 401 WQC results in its conditions being included in an ACE issued Section 404 permit.

In making a determination that the Eastern Expansion meets the standards for issuance of a 401 WQC, the Department considered the project alternatives analysis to avoid and minimize impacts to wetlands (which also includes the federally regulated stream/waterway that flows through the wetland) as well as the Habitat Restoration Plan which mitigates for wetland and waterway impacts, resulting in no net loss of these resources all of which are discussed in the Wildlife Habitat and Freshwater Wetlands section above. The discharge of fill into the wetlands and waterway is determined to be approvable. State water quality standards will be met for discharges to waterways and wetlands outside the fill areas in the Eastern Expansion (including habitat restoration work) during construction and post construction through the implementation of comprehensive NYS required stormwater controls and landfill leachate control systems.

While the ACOE has not acted on the Section 404 permit for the Eastern Expansion, the Department is obligated to proceed with its decision on the permit applications before it including the Section 401 WQC. In addition to determining that the standards for 401 WQC issuance have been met as discussed above the Department is also cognizant of recent court decisions regarding the interplay of federal and state approvals such as the Third Department of the Appellate Division of the Supreme Court in Save the Pine Bush, Inc. V. Common Council of the City of Albany, 56 A.D. 3d 32, 3 Department 2008 (October 9, 2008) which addressed a similar permitting action involving a SEQRA review and a pending federal permit application. The court found that the City didn't have to wait for the issuance of the federal permit to issue its

SEQRA findings provided the lead agency "sufficiently considers the environmental concerns addressed" by the other permits. <sup>1</sup> Notwithstanding the pending review of the City's Section 404 by ACE as stated above the Department is proceeding with project approval but has considered the issues raised by the federal agencies and believes they are sufficiently addressed in the project application record including the EIS, the Findings and permit approvals and conditions.

# Consideration of the EPA Comments

EPA suggests that a modified version of the Eastern Expansion alternative would extend the useful life of the landfill by 2.8 years and avoid the filling of any federal wetlands.

On February 19, 2009, the ACOE forwarded the EPA letter to the City. On March 17, 2009, the City responded to the EPA comments in a letter to the ACOE. The City's letter sets for the practical basis for selecting the Eastern Expansion. The City asserts in its reply letter that the Eastern Expansion will maintain an uninterrupted solid waste disposal services for the City and the Capital Region, maintain a revenue stream for the City, and allow sufficient time for the City to readjust its dependency on landfill revenues and find an alternative disposal alternative. The City also states that there will be no further expansions or overfilling of the landfill after the Eastern Expansion.

The City further states that the other alternatives discussed in the Supplemental DEIS aren't practicable. Alternative 1 involving the 60 acre Fox Run Estates property is impracticable because the land has been dedicated to the Albany Pine Bush Preserve Commission on June 6, 2006 and it is therefore unavailable. Alternative 5 involves overfilling the old landfill and this was found to be technically and economically infeasible.

The City also disputes EPA's assertion that a long term solid waste alternative to the landfill can be developed during the time period suggested by EPA's preferred alternative. The City states the effort to find an alternative long term solid waste alternative is underway but is unlikely to be completed by 2011.

EPA also suggests that other state landfills could be used if the Eastern Expansion were denied and the City rebuts that assertion by referring to research and data that indicates that no New York landfill could absorb the amount of daily solid waste now disposed at the landfill. The existing permit limits the amount of waste to 1,050 tons per day based on a thirty day rolling average. Furthermore, the City argues that the excessive costs associated with hauling waste to the landfills cited by EPA "precludes the "long haul alternative as a practicable alternative."

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<sup>&</sup>lt;sup>1</sup> "Though the SEQRA process and individual agency permitting processes are intertwined, they are two distinct avenues of environmental review," and where "a lead agency sufficiently considers the environmental concerns addressed by particular permits, [it] need not await another agency's permitting decision before exercising its independent judgment on that issue" (*Matter of Riverkeeper, Inc. v. Planning Bd. of Town of Southeast*, 9 N.Y.3d 219, 234, 851 N.Y.S.2d 76, 881 N.E.2d 172 [2007]).

The Department has considered the EPA concerns in determining that the City's requirement under the permit to restore 254.80 acres to pine bush habitat outweighs any of the concerns EPA has raised regarding the temporary loss of wetland and habitat. As previously stated in the Findings, there will be no net loss of wetlands when the habitat restoration is completed. In fact, once the Habitat Restoration Plan is completed, the wetland acreage in the vicinity of the landfill will be substantially increased. The restoration is to commence as soon possible after the construction begins on the Eastern Expansion so there will be immediate positive impacts to the landfill habitat.

# Consideration of U.S. Fish and Wildlife Service (FWS) and US Environmental Protection Agency (EPA) Comments

The FWS letter recommending denial of the Section 404 permit refers to the following environmental concerns: (1) the loss of 15 more acres of pine bush habitat and 5.35 aces of wetlands; (2) the lack of alternatives assessments including using the other existing NY landfills; (3) the lack of acceptable avoidance and mitigation measures in the design; (4) the lack of a long term disposal alternative; the interim loss of wetlands and during the implementation of the Habitat Restoration Plan; (6) the need for a 50-foot buffer between the Eastern Expansion footprint and relocated stream; and (7) references to EPA's letter also recommending denial of the permit.

The U.S. Fish & Wildlife Service (FWS) raises concerns about the interim loss of wetlands during the implementation of the Habitat Restoration Plan. The 50.96 acres of wetlands and the 203.84 acres of pine bush habitat restoration will be constructed concurrently, as previously stated, with the construction and commencement of the operation of the Eastern Expansion. There will be a short period of time when there will be a net loss of wetland but within a few years the full extent of the Habitat Restoration Plan will far outweigh the interim loss of use of the filled and graded wetland. The Habitat Restoration Plan includes the creation of 19.82 acres of wetlands, the restoration of 3.55 acres of wetlands and the enhancement of 27.59 acres of wetlands for a total of 50.96 acres of wetland mitigation to address the Eastern Expansion's 5.05 acres of filled wetland, 0.3 acres of wetland filled for the habitat restoration project and 3.55 acres of wetland graded as part of the habitat restoration plan. The Habitat Restoration Plan will also restore and enhance approximately 202.4 acres of combined dry prairie and dunes and pitch pine oak forest as well as focus extensively on habitat for the federal and state endangered Karner blue butterfly and state threatened frosted elfin.

The EPA discussion above addresses the alternatives assessment in the Supplemental DEIS and the reasons why the Department finds the choice of the Eastern Expansion alternative to be favored alternative. The City's landfill design has addressed the FWS comment regarding the need for at least a 50-foot buffer between the altered stream bed and the foot print of the landfill. The landfill design plans show there is a greater than 50-foot separation.

A special condition of the permit also requires the set aside of \$10 per ton of waste accepted at the landfill to be used for Habitat Restoration Plan implementation and maintenance which is estimated to cost at least \$15 million.

The FWS concerns about a hydrology budget will be addressed in the accepted and complete Habitat Restoration Plan. The City has identified the Pine Bush as a low yielding principal aquifer for purposes of a drinking water supply as partial justification for its variance. The City has conducted sufficient studies as part of its habitat restoration plan development to determine that there is sufficient water to sustain the restoration.

The EPA comments discussion above identifies the issue of whether there are sufficient alternative landfill sites for the immediate disposal of the City and the Capital Region Solid Waste Management Planning Unit Partnership (CRSWMP) communities and other entities' wastes. The Supplemental SDEIS discussion on alternatives discusses the no-build alternative and associated costs to the City in terms of loss revenues and the costs of long hauling. A Special Condition in the permit requires the City to develop and implement a long term solid waste management plan prior to the expiration of the Eastern Expansion permit. The City acknowledges in its response to the EPA letter and in its Supplemental SDEIS that there will be no further applications made by the City to either overfill the landfill or expand it after the issuance of the Eastern Expansion permit.

The Department has considered, in the development of its Findings and Section 401 Water Quality Certification decision, the environmental concerns raised by EPA and the FWS in their review of the Section 404 permit. The decision of the ACOE to issue or deny the Section 404 permit is beyond the jurisdictional control of the Department and therefore the Department is proceeding with the issuance of the FEIS and Findings and the requisite state permits and 401 WQC for the Eastern Expansion. The City has provided plans approved by the Department as part of this approval for an Eastern Expansion Phase 1 which avoids all wetlands impact pending a final decision by ACOE on its Section 404 application. Regardless of the outcome of the ACOE 404 decision on the Eastern Expansion the Department's decision to approve the Eastern Expansion binds the City to full implementation of the Habitat Restoration Plan.

#### Threatened/Endangered Species

The Supplemental SDEIS identifies the Karner blue butterfly (federal and New York State endangered) and the frosted elfin (New York State threatened). Both of these species are found in close association with wild blue lupine. The Eastern Expansion footprint is too wooded with mature trees and too wet for the growth of a food source for these species. Also, the species themselves are not found within the area of the Eastern Expansion. There are several small patches of wild lupine growing at the northwest side of the existing landfill, near the wetland mitigation pond (State Wetland A-33). Frosted elfin have been identified at this site. Karner blue butterflies have not been found at this location, but are known to occur in the vicinity of the Albany Pine Bush Discovery Center which is more than 3,000 feet to the northwest of the Eastern Expansion. The landfill lupine patches are approximately 1,000 feet west of the disturbance limit of the overfill portion of the Eastern Expansion.

No evidence of current occupation in the restoration area by frosted elfin or Karner blue butterfly larvae or adults has been found. In the course of the restoration work, and because restoration

work will be continuing even as restored areas become suitable for these species, and potentially occupied, there is the potential that minor impacts may occur to the Karner blue butterflies and frosted elfins in the course of habitat management or species monitoring activities. These potential impacts are similar to those impacts which occur on lands managed by DEC or the Albany Pine Bush Preserve Commission for these two species. In addition to the Habitat Restoration Plan safeguards, an ECL Article 11 ECL Endangered/Threatened Species License will regulate the City's unintended take of individuals associated with habitat restoration, enhancement and species monitoring efforts.

The ECL Article 11 license conditions will incorporate the Habitat Restoration Plan by reference and limit activities such as mowing, burning and the application of herbicides, be required to minimize the potential of impacts to these species. The City will also be required to have qualified biologists overseeing all work and be in close consultation with and oversight by DEC and the Albany Pine Bush Preserve Commission. These license/permit conditions and other conditions of authorizations granted by the Department also serve to address concerns expressed by U.S. Fish and Wildlife Service in its April 17, 2009 letter to the U.S. Army Corps of Engineers concerning this project.

The habitat restoration will restore 49.55 acres of dry prairie/sand flat dune and dune barrens, enhance 121.93 acres of pitch pine scrub oak barrens, and enhance 30.92 acres of pitch pine oak forest buffer which create substantial additional habitat for these two species. In addition, these restoration efforts will also serve to link existing Karner blue butterfly populations to the west, near State Route 155, and previously restored habitats on Preserve lands to the west, with newly restored habitats. When habitat restoration work is completed, suitable habitat for Karner blue butterflies and frosted elfin will stretch all the way from Rt. 155 to Rapp Road.

Based upon the foregoing facts and circumstances discussed above and the documentary record including the Supplemental EIS the Department finds that the project which includes the Habitat Restoration Plan meets all standards for the issuance of an ECL Article 11 Endangered/Threatened Species License and will have a net conservation benefit for the Karner blue butterfly and frosted elfin and therefore not cause a significant adverse environmental impact to endangered or threatened species.

# Albany Pine Bush Preserve Impacts

The 1988 Commissioner's Decision authorizing the construction of the landfill under 6 NYCRR Part 360 found that the landfill as planned would impact 25 acres of pine bush land. The following mitigation measures were required to offset the loss of the acreage: commitments for real property purchases, the creation of a \$1 million Pine Bush Endowment Fund, and an experimental lupine replanting program. All payments required pursuant to the original permit have been made.

The Eastern Expansion will result in the loss of 5.35 acres of land which is recommended for full protection and inclusion in the Albany Pine Bush Preserve by the Albany Pine Bush Preserve Commission. The Eastern Expansion will also alter buffer or linkage roles afforded by this area

(see Albany Pine Bush Preserve Commission 1993 Preserve Management Plan). The potential impacts on wildlife from the Eastern Expansion will be temporary as the Habitat Restoration Plan is fully implemented. Ultimately, the entire landfill space will be unified as pine bush habitat providing complete linkage with the existing pine bush areas. The day to day potential operating impacts to the Albany Pine Bush Preserve include odors, noise, dust, nuisance birds, and views of the working face from trails within the preserve. The individual sections above in the Findings statement address how these potential impacts will be mitigated or avoided by the design of the expansion and operation requirements. The Supplemental SDEIS does indicate that, at times, noise from the construction (but not operation) of the Eastern Expansion will exceed the 6 NYCRR 360-1.14(p) limits. This noise impact will be limited in duration as construction will be completed in approximately 6 months.

The construction and operation of the Eastern Expansion will temporarily present an increased barrier to wildlife movement until full implementation of the Habitat Restoration Plan. However, wildlife movement through Eastern Expansion area has always been limited because of the access road location. Wildlife which occupy nearby Pine Bush lands will continue to be able to use other open spaces on and around the Eastern Expansion such as along the Thruway fence area south of the landfill and on the north side of the landfill along the sound barrier wall next to Fox Run Estates, and through the estate itself. The sixty-acre Fox Run Estates mobile home park has been acquired by the City of Albany and was dedicated as part of the Albany Pine Bush Preserve. The area will be restored as part of the habitat restoration plan providing a critical wildlife land link between eastern and western areas of the Albany Pine Bush Preserve.

As previously discussed, the permit also provides a mitigation fee requirement of \$1.50 per ton of waste accepted to the Albany Pine Bush Commission for Pine Bush habitat management and maintenance as well as land acquisition. After three years this fee will increase to \$2.00 per ton. The \$0.50 per ton difference between the \$1.50 per ton fee and \$2.00 per ton fee during the first 3 years will be used to fund acquisition of 2.4+/- acres of land to compensate for the Eastern Expansion taking of a state public trail easement, which will be amended and relocated, and to acquire 10.6+/- acres of land for the Eastern Expansion taking of Albany Pine Bush open space.

Based upon trail locations and adjacent site use by the public as well as avoided impacts and impact mitigation measures in areas such as odors, noise and visual discussed in earlier sections of these Findings, the Eastern Expansion is not expected to cause an increase in significant adverse impacts on the users of the Pine Bush Preserve.

The Department, based on the above facts and circumstances, and the Supplemental SDEIS finds that impacts to the Pine Bush Preserve from the Eastern Expansion have been mitigated to the maximum extent practicable.

# Integrated Pest and Invasive Species Management Plan

The City has developed an Integrated Pest and Invasive Species Management Plan for the Eastern Expansion and the areas to be restored. The plan proposes various means for controlling and managing floral and faunal pests and invasive species on the landfill ecosystem. All

management techniques and pesticide use will comply with all federal and state pesticide laws, rules and regulations including application by registered businesses using certified pesticide applicators following label instructions and using only currently registered pesticides. In addition, no rodenticides will be used at the landfill including any of its building facilities to eliminate any impact on predator species including coyotes, foxes and raptors. Also, except for insect control inside facility buildings, no pesticides to control insects will be used in the open areas of the landfill facility. Department approved herbicides are likely to be used to control invasive species during the implementation of the Habitat Restoration Plan. Therefore, there will be no significant impacts from the use of pesticides at the facility.

# **Easements and Property Transfers**

Albany Pine Bush habitat protection will be accomplished through the imposition of conservation easements and land acquisition.

The Eastern Expansion permit includes Special Condition number 37 that requires the permittee to, within 180 days of the effective date of the permit, provide the Department, 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 Eastern Expansion 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.

Further, the permittee will be required within 180 days of the effective date of the Eastern Expansion permit, provide to the Department, 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.

In addition, the City will provide survey map(s), real property description(s), and title abstract(s) for land(s) to be acquired by the City 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 specifically approved by the Department and the Albany Pine Bush Commission as well as not be less than 10.6+/- acres.

As previously discussed, the Eastern Expansion permit also provides a mitigation fee requirement of \$1.50 per ton of waste accepted to the Albany Pine Bush Commission for Pine Bush habitat management and maintenance as well as land acquisition. After three years this fee will rise to \$2.00 per ton. The \$0.50 per ton difference will be used to fund acquisition of 2.4+/-acres for Eastern Expansion taking of a state public trail easement which must be amended and relocated as well as a 10.6+/- acres for Eastern Expansion taking of Albany Pine Bush open space.

Further, the City will make payment of the fee to the Albany Pine Bush Preserve Commission in quarterly installments every year by the following dates: January 30, April 30, July 30, and October 30.

In addition, the City will include a status report on the Albany Pine Bush Preserve Commission Fees in the Habitat Restoration Plan Account Quarterly Report.

# Long Term Solid Waste Disposal/Solid Waste Management Plan

On September 24, 2008, the City submitted a Solid Waste Management Plan modification request to the Department. The Department, as part of its consideration for granting the Eastern Expansion permit, is requiring the City to expedite, in concert with the Capital Region Solid Waste Management Planning Unit Partnership (CRSWMP) communities, the long term solid waste management planning process because there will be no further expansions of any kind at the landfill.

Special Condition number 27 of the Eastern Expansion permit requires the City to submit to the Department by no later than December 31, 2012, a request for proposal 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.

As an interim step in the management of solid waste and to further the state's policy of encouraging solid waste recycling, Special Condition number 23 prohibits the City from accepting waste from a New York municipality that hasn't completed a comprehensive recycling analysis ("CRA") or isn't included in another municipality's Department approved CRA satisfying the requirements of 6 NYCRR 360-1.9(f).

The City will need to develop waste reduction strategies and an alternative to waste disposal once the Eastern Expansion ceases to accept waste. The City and the Capital Region Solid Waste Management Planning Unit Partnership (CRSWMP) communities are in the process of updating the Solid Waste Management Plan (SWMP) that was initially prepared in 1990-91. This plan laid the framework (criteria) for a new landfill siting study that would address the long term needs of the CRSWMP. The study was completed in 1991 and recommended pursuing Site C-2

in the Town of Coeymans. C-2 is not a viable site for a landfill due to the presence of extensive wetlands.

Waste reduction will become an integral part of the SWMP and this will be achieved through source reduction, reuse of materials, and recycling. New York State has proposed a long-term goal of 50% statewide waste reduction, with 40-42% of all waste being reduced through reuse and recycling. The Capital Region Solid Waste Management Planning Unit Partnership (CRSWMP) Planning Unit has developed a recycling program to achieve these goals. The original approved SWMP set a recycling goal of 40%, but explicitly noted that these specific numerical goals are not intended to be used as regulatory requirements. Since the approval of the original SWMP, the City and other members of the Planning Unit have undertaken most of the waste reduction and recycling measures called for by the original SWMP.

Materials recycled include paper and cardboard, bottles and cans, plastics, metals, waste oil, leaf and yard waste, construction and demolition debris, tires, and white goods. The City of Albany, the Villages of Green Island and Voorheesville, and the Towns of Bethlehem and New Scotland, provide for curbside collection of residential recyclables either through the use of municipal forces, or by contract or as a requirement of private haulers. Recycling drop-off facilities are also available to residents and businesses of the other municipalities in the planning unit, as well as in several of those listed above. Individual communities are responsible for developing programs to facilitate and promote the achievement of waste reduction goals.

The updated SWMP will evaluate all possible options for long term solid waste management. Each option will be evaluated with regard to such factors as economic feasibility, treatment feasibility, and ability to be sited and permitted.

The Department subsequently deemed the modification approvable. Special Condition number 26 of the permit requires implementation of the schedule for the development of a Long-Term Plan. It also requires the City Albany to provide to the Department plans and a permit application (if needed) for the implementation of a long term solid waste management project as the outcome of the long term planning process by December 31, 2012. Further, this Special Condition requires the City to fund and staff a City of Albany Recycling Coordinator and a Planning unit Recycling coordinator.

# Community Character:

The proposed Eastern Expansion will allow the operation of the landfill to continue for approximately 6.5 years. It is acknowledged that continued operation may have impacts to the local community with regard to such issues as noise and odors. The City has taken steps to address the noise and odor problems and these are discussed in the SDEIS, the FEIS, and in the landfill operation plans.

The landfill has existed at this location since the early 1970's and is located in an area which is zoned for light industrial use. The Eastern Expansion is located within the same industrial zone and is compatible with this type of use. The lands adjacent to the Eastern Expansion are zoned

for industrial use in the Town of Guilderland to the north and commercial in the City of Albany to the east. The area beyond Guilderland in the Village of Colonie is zoned residential. Except for the remaining few trailers in Fox Run these surrounding areas are undeveloped and protected as part of the Albany Pine Bush Preserve. The Eastern Expansion will eliminate what is currently a natural buffer area and bring the facility closer to these Preserve lands. The expansion also brings landfilling closer to the remaining residences of the adjacent Fox Run Estates property. The expansion will also increase the height of the landfill from 460 to 470 feet above mean sea delete level (AMSL), which is 10 feet above the current approved height of 460 feet AMSL, which makes it continue to be the highest topographic feature in this area.

The City has purchased the Fox Run Estates property with the intent of eventual movement of all the residents from the park, closure of the facility, and transfer of ownership of the property to the Albany Pine Bush Preserve Commission.

The residents who remain at the Fox Run Estates property will be moved further north and west from the working face of the landfill to reduce impacts to them.

Once the Eastern Expansion is filled, the landfill will be closed in accordance with state solid waste regulations and the habitat restoration will be completed. Noise and the potential for operational odor impacts from the landfill facility will cease.

The Habitat Restoration Plan which has been developed incorporates and blends the landfill, after it is closed, into the lands surrounding it to mitigate any visual impacts from landfill operations. The plan will result in the landfill surface and certain lands around the landfill which have been affected by prior development and/or disturbance being restored to Pine Bush Habitat and blended into the surrounding community character.

The City and the CRSWMP communities have a municipal solid waste disposal need that is met by the operation of this landfill. The 6.5 year period is needed to have sufficient time to develop disposal alternatives for these communities.

The Eastern Expansion is compatible with onsite and adjacent zoning. However, impacts to the existing open space habitat character of the expansion site and adjacent areas managed as and in most cases dedicated to the Albany Pine Bush Preserve. The Department finds that the these impacts are balanced out by the social and economic need for this project including the capital region communities being provided with a practicable solid waste disposal alternative that provides the lead time necessary to complete the SWM planning process, identify and implement a feasible SW mgt proposal coupled with the consideration of available alternatives, mitigation of impacts to the maximum extent practicable including noise, odors and visual as well as a designed setback from state property lines, the relatively short project duration (6.5 years which will end nearly 40 years of landfilling at this site by a requirement that will prohibit all future landfilling at this site after this expansion is filled), Fox Run mitigation, minimal landfill height increase of 10 feet and the substantial habitat restoration plan which will restore to Pine Bush habitat the entire landfill including those portions not used in the expansion and areas outside the landfill footprint.

# Use and Conservation of Energy/Greenhouse Gases

Energy use and contribution to greenhouse gases were considered in the EIS. As discussed below, not approving the Eastern Expansion would result in shipping waste long distances to out of areas landfills and contribute to an increase in energy use and GHGs. On site practices (Best Management Practices and energy efficient vehicle replacement) were identified in the EIS to reduce energy use which also results in GHG reductions as wells. A BMP plan will be developed by the permittee with a requirement to submit the plan to the Department for review and approval by 90 days from permit issuance. The plan will also include provisions to acquire and use the most fuel efficient vehicles available for each vehicle type for use in landfill operations as such vehicles are replaced.

#### Alternatives

The Supplemental SDEIS includes an analysis of onsite and offsite alternatives including the proposed Eastern Expansion.

The Eastern Expansion alternative, which includes the 254.80 acre habitat restoration, is consistent with balancing social, economic and other essential considerations from among the reasonable alternatives available, and is the action that avoids or minimizes adverse environmental impacts to the maximum extent practicable by incorporating as conditions to the decision those mitigation measures that were identified as practicable.

In reaching this finding, the Department compared and contrasted various alternatives such as hauling waste to another disposal site, other locations for the landfill, denying the permit application, and overfilling and expanding options for the existing landfill. The Eastern Expansion alternative was chosen as the best alternative among those available under the alternatives consideration requirements found in SEQR, ECL Article 24 6 NYCRR Part 663 Freshwater Wetlands regulations, 401 Water Quality Certification and 6 NYCRR Part 360 Solid Waste Management.

#### Hauling of Waste

The transfer and transport of solid waste to another permitted disposal site was considered as an alternative to constructing another cell at the landfill. The SDEIS considered various factors including the costs for transport and disposal, and the environmental and economic impacts associated with this alternative.

Most landfills or waste to energy ("WTE") facilities that provide commercially available disposal capacity in New York are operating at or near their respective annual permitted capacity. The record contains data that also shows that no one landfill or WTE facility has sufficient additional capacity to replace the capacity of the proposed Eastern Expansion. In addition, the existing permitted transfer stations in the Albany area don't have the excess capacity to handle the 277,200 tons per year ("TPY") of solid waste handled by the existing Albany landfill.

The landfill will reach capacity by November, 2009 at current disposal rates. The City and the CRSWMP communities would need sufficient lead time to develop a hauling plan, line up capacity agreements, develop and build/upgrade hauling facilities in order to assure such capacity is available and cost effective including reasonable hauling costs/distances. The construction of a transfer station at the current landfill or elsewhere by November 2009 is impracticable, given the time needed for the siting and permitting process. The City could restrict only waste from its municipal boundaries and extend the life of the landfill by approximately two years. However, this option would cut off access to about 700-800 tons per day from the CRSWMP communities which would create the same situation and problems for these communities and for the City described above to have their solid waste hauled out.

# **Alternative Landfill Sites**

The SDEIS refers to previous studies undertaken by the City to assess landfill sites within the City of Albany and a site in the Town of Coeymans, owned by the City and known as Site C-2. Ten sites within the City were evaluated in the Third Supplemental Draft Environmental Impact Statement, P-4 Project Landfill Expansion (C.T. Male Associates, P.C. 1999) and are reevaluated in Appendix K of the Fourth Supplemental DEIS. When the characteristics of the various sites were compared and ranked, the proposed Eastern Expansion ranked the highest, primarily due to the fact that this alternative would cause greater environmental impacts including but not limited to land use, traffic and infrastructure impacts than the Eastern Expansion. The Eastern Expansion as part of an existing landfill facility was evaluated as more cost effective. It should be noted that the Albany owned proposed landfill site in the Town of Coeymans is not considered viable as it is covered almost entirely with regulated state and federal wetlands requiring substantial impacts with fill and excavation. These wetlands impacts would be substantially greater than wetland impacts due to the Eastern Expansion.

# Expanding and/or Overfilling the Landfill

Several alternatives were considered for on-site lateral expansion and/or overfilling:

The alternative of expanding laterally onto the Fox Run Mobile Home Park property which is now owned by the City and would provide the City approximately 8 years of additional capacity beyond the current projected capacity isn't a feasible alternative since the land has been dedicated to the Albany Pine Bush Preserve as required by the last Albany Rapp Road (P-4) landfill expansion permit approval and therefore has the status of parkland which would require an act of the State Legislature to be alienated as parkland in order to allow its use as a landfill.

The City also considered a western lateral expansion of approximately 24 acres of new landfill area and an over fill of previously land filled area. Expansion of the landfill under this alternative would also include lands dedicated to the Albany Pine Bush Preserve and would potentially have the greatest impact upon threatened and endangered species and the unique Pine Bush ecosystem. This alternative is not desirable due to these impacts and would also require a

likely opposed act of the State Legislature to alienate this land in order to allow its use as a landfill.

The City considered creating approximately 10 acres of new landfill area with an overfill of previously landfilled areas some lined and some unlined. Some of this land was already dedicated to the Albany Pine Bush Preserve Commission. This alternative would provide eight years of landfill capacity. However, viable high quality pine barren habitat would either be directly or indirectly impacted by this alternative. This expansion scenario is not a reasonable alternative due to its impacts to the dedicated Albany Pine Bush Preserve lands and would require a likely opposed undedication by the New York State Legislature.

Another lateral expansion alternative evaluated would fill only the upland portion of the eastern expansion site thereby avoiding the wetlands completely. The estimated life of the non wetland fill is estimated to be some 3 years which is insufficient to meet the social and economic needs of Albany including solid waste disposal capacity for Albany and the Answers communities, revenue needs including that necessary for implementing the habitat restoration plan and sufficient lead time to study, develop, choose and implement a long term solid waste alternative to the Rapp Road Landfill.

One additional landfill alternative evaluated would overfill portions of the existing footprint of the entire Rapp Road Landfill. From a purely geometric but not necessarily desirable engineering design perspective there appears to be additional landfill capacity in old landfill areas that have not been overfilled. It could be possible to overfill these areas to achieve maximum slopes and height thus creating new disposal capacity. Given that some of the older areas of the facility do not have liner systems that meet current requirements, any overfill of those areas would require construction of a new liner system over the previously filled areas. The construction of new liner systems over previously filled areas can be difficult due to concerns with settlement which could result in the disruption of leachate collection lines within the new liner system. The ability to monitor the liner system for an overfill cell in this area is also questionable. Overfilling in this area would also return landfill operations to the western side of the site and in closer proximity to more sensitive areas of the Pine Bush Preserve. This area is part of the lands covered by the required Habitat Restoration Plan and therefore is unavailable for landfilling. Finally, the estimated life of this overfill is estimated to be 0.8 to 1.2 years which again is insufficient to meet the social and economic needs of Albany including solid waste disposal capacity for Albany and the Answers communities, revenue stream including for the habitat restoration plan and development of long term solid waste alternatives nor the timeframe necessary for completion and implementation of the latter.

The combination of these last two alternatives - upland non-wetland eastern lateral expansion plus existing landfill footprint overfill - was considered, but would provide only some 4 years of disposal capacity and not meet the necessary 6.5 year time needed to study, develop, choose and implement of long term solid waste alternatives nor implementation of the habitat restoration plan.

# Public/Adjudicatory Hearing/Regulatory Standards

Under the provisions of 6NYCRR 621.8(b) no substantive or significant issues have been raised warranting an adjudicatory public hearing and all statutory and regulatory criteria and standards for approval and permit issuance have been met.

# Certification To Approve:

Having considered the draft and final Environmental Impact Statement and having considered the preceding written facts and conclusions relied on to meet the requirements of 6 NYCRR Part 617.11, this Statement of Findings certifies that:

- The requirements of 6 NYCRR Part 617 have been met; and
- 2. The impacts of the Eastern Expansion have been fully examined and after weighing and balancing relevant environmental impacts with social, economic and other considerations that define the need for this project from among the reasonable alternatives, this action is one that based upon this balance avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.

William J. Clarke

Regional Permit Administrator

NYS Department of

**Environmental Conservation** 

Region 4

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