STATE ENVIRONMENTAL QUALITY REVIEW ACT
DRAFT SCOPE
City of Albany Rapp Road Landfill Eastern Expansion
Fourth Supplemental Environmental Impact Statement (SEIS)

Name of Action: Albany Landfill Eastern Expansion

SEQR Status: Type 1

Lead Agency: NYS Department of Environmental Conservation

I. DESCRIPTION OF PROPOSED PROJECT

The proposed project will involve the expansion of the existing City of Albany Rapp Road Landfill on City-owned lands located northeast of the existing landfill in order to continue to meet the solid waste disposal needs of City residents and businesses as well as the communities that make up the Albany New York Solid Waste Energy Recovery System (ANSWERS) Solid Waste Management Planning Unit, and the Capital Region as a whole. ANSWERS is comprised of a consortium of communities that include the cities of Albany, Rensselaer and Watervliet, the towns of Berne, Bethlehem, Guilderland, Knox, New Scotland, Rensselaerville, and Westerlo, and the Villages of Green Island and Altamont.

Expansion of the landfill will involve an overfill of approximately 23 acres of the existing landfill and a lateral expansion of approximately 15 acres onto the adjacent City-owned property. The City proposes to relocate, the existing landfill infrastructure including offices, the recycling building, and other accessory uses to several parcels totaling approximately 3.5 acres located directly east of the landfill entrance road off of Rapp Road. An approximately 3-acre portion of State owned land, also located east of the existing landfill, will be needed to accommodate the relocation of the detention pond. An approximately 1-acre remnant parcel of land owned by the State of New York, under the jurisdiction of the Department of Transportation, would be required to access the relocated landfill operations off of Rapp Road. Refer to the attached layout plan.

An integral part of the landfill expansion proposal is a habitat restoration plan. There is a significant opportunity to re-establish linkages from west to east in the Pine Bush Preserve through the trailer park property and over portions of the closed landfill. Implementation of the plan would be an ongoing process, beginning upfront with demonstration plots and continuing concurrently with the landfill expansion construction phases, operational phases, and following closure. It is envisioned that the landfill can be blended back into the Albany Pine Bush Preserve landscape, providing critical habitat for rare ecological communities and threatened and endangered species.

This Draft Scope is prepared in accordance with SEQR regulations 6 NYCRR 617.8 and the State's landfill regulations provided in 6 NYCRR 360 (Part 360 regulations). The Draft Scope is available for public review. Copies of this scope have been submitted to all Involved Agencies and any Interested Agency requesting a copy.

II. POTENTIAL IMPACTS AND MITIGATION

A Full Environmental Assessment Form (EAF) was prepared to determine the potential significance of the project impacts. Based on this initial analysis, the following scope is provided for consideration.

A. Topography, Geology & Soils

Existing Conditions: Topography, geology and soils surrounding the Albany landfill are unique in that they were created by glacial Lake Albany and include wind swept sands that have formed dunes, creating rolling topography. The soils that are derived from the sands are very high in iron content, which limits the availability of nutrients important to vegetative growth. As a result, unique, fire dependent community types have colonized this area and are collectively identified as the Albany Pine Bush. Geologic and soil characteristics within the landfill expansion area are more common to the region and do not support unique vegetative communities.

Potential Impact: Erosion and sedimentation are potential impacts that can occur when ground is disturbed for construction. This is particularly problematic when sediment-laden runoff from a project site reaches aquatic resources such as streams, rivers, lakes, ponds, and wetlands.

Anticipated Information Necessary to Address the Impact: General information will be identified based on available mapping including USGS quadrangles, surficial and bedrock geology maps, and the Natural Resource Conservation Service soils survey for Albany County. This information will be supplemented with site specific soils and subsurface analysis to address the potential impacts of development. See item B, "Water Resources," for a more detailed scope of subsurface investigations. Soils characteristics will be addressed relative to the physical and chemical properties that dictate vegetative communities and will focus on the proposed habitat restoration areas.

Initial Identification of Mitigation Measures: The SEIS will identify both temporary and permanent erosion control measures to protect wetlands and streams located adjacent to the landfill expansion area and throughout the proposed habitat restoration areas.

B. Water Resources

Existing Conditions: Surface water features and watershed boundaries will be identified using topographic mapping. New York State water quality classifications for surface waters will be identified. The site of the proposed expansion area lies over an unconsolidated sand deposit known as the Pine Bush Formation. This formation is listed as a principal aquifer.

Potential Impact: Landfill expansion has the potential for erosion and sedimentation and water quality impacts. Stormwater runoff also has a potential to impact the adjacent sensitive Pine Bush ecological communities. Groundwater impacts can occur from landfill leachate, however, design criteria required to meet the Part 360 regulations will prevent any significant groundwater impacts.

Anticipated Information Necessary to Address the Impact: Guidelines for the current State Pollutant Discharge Elimination System (SPDES) General Construction Permit are available and will be utilized for the project. A detailed hydrogeologic investigation conducted in accordance with the Part 360 regulations will be undertaken to provide baseline groundwater quality information. Wells will be established within and adjacent

to the project area to identify groundwater elevations and to provide the means for future water quality monitoring. Information from this hydrogeologic investigation will be supplemented by previous studies and data collected from several established wells located adjacent to the landfill. The hydrogeologic investigation work plan has been prepared and submitted to NYSDEC for review.

Initial Identification of Mitigation Measures: Stormwater management policies based on current SPDES regulations will be developed to mitigate impacts associated with runoff. An ecological restoration plan will also address existing and future stormwater and water quality issues as they relate to the establishment of Pine Bush habitat within the proposed restoration areas, including the landfill cap. It is also intended to address the existing runoff issues that have led to the establishment and spread of common reed (*Phragmites australis*) on and adjacent to the landfill. Landfill construction criteria that include a double composite liner system will prevent any significant impact to groundwater resources. Additionally, groundwater will be monitored through wells located downgradient of groundwater flow.

C. Ecology

Existing Conditions: The Albany Landfill is surrounded on three sides by the Albany Pine Bush Preserve and State-owned lands. On the south side of the landfill is the New York State Thruway and major development infrastructure, all of which can affect a large area through hydrological modification, surface and ground water chemistry changes, and an entry point for invasive plants and animals. The Pine Bush is a unique community with several rare species of plants, animals and habitat, including the federally endangered Karner blue butterfly (*Lycaeides Melissa samuelis*). Wetlands also occur within and adjacent to the project area. The project expansion area includes both forested upland and wetland.

Potential Impact: Expansion of the landfill is proposed to occur on City-owned lands that are primarily composed of a forested wetland community and do not contain sensitive Pine Bush ecological communities. However, the expansion will impact forested wetland and a former dredged agricultural ditch that serves as a conveyance stream channel and may also create secondary impacts to more sensitive areas through stormwater runoff and erosion and sedimentation that can change soil characteristics at the interface with the Pine Bush. There will be no significant potential impact to high quality Pine Bush communities since these communities do not occur on lands adjacent to the expansion area. Most of the adjacent non-pine bush lands are highly degraded and include a trailer park area that appears to occupy a former sand mine, remnant fallowed farmed lands and pastures, and some industrial lands. Some of these highly modified lands can become important once restored for re-connection to other Pine Bush communities and are valued as buffers and potentially restorable Pine Bush.

Anticipated Information Necessary to Address the Impact: The project area has and will continue to be investigated for the presence of threatened, endangered, rare, and special concern species through contact with the NYS Department of Environmental Conservation (NYSDEC) Natural Heritage Program, the Pine Bush Preserve Commission, and the U.S. Fish and Wildlife Service and by reviewing the Breeding Bird Atlas and the NYS Amphibian and Reptile Atlas (1990-1999). The site will also be

investigated for the presence of habitat for each species of concern. Should habitat be present, more detailed species assessments will be conducted during the appropriate time periods when these species are active.

Habitat investigation will include the following:

- Literature review – available reports relevant to the expansion and habitat restoration areas and to the specific species of concern.
- Coordination and meetings with the Pine Bush Preserve Commission, NYSDEC and USFWS.
- Establish and conduct quantitative vegetation, hydrology, chemistry sampling of reference areas, State lands, and landfill expansion area. Transects will be set through all impact and potential restoration areas and reference natural areas to characterize vegetative communities and plant species cover, frequency, intercept, plot biodiversity, woody plant densities and canopy intercept, and diversity. Sample plots will be established for reference and baseline data collection in marked and georeferenced transects to allow for relocation and resampling in the future. Detailed hydrology data will not be available for the SEIS but will be used to refine concepts and develop construction level drawings and details during the State and federal permitting process.

Restoration Plan development will include the following:

- Create design standards for restoration of the landfill and offsite areas. This is proposed to be done by sampling reference natural area vegetation composition and structure, hydrology and soils conditions and use this information for development of construction, planting, management and monitoring specifications.
- Establish protocols and conduct sampling for evaluating the zone of ecological/hydrological/chemical influence of the existing landfill impacts on the Pine Bush. Use this to design landfill expansion strategies and techniques to minimize future zone of influence.
  - Soil chemistry impact evaluation
  - Vegetation and invasive plant impact evaluation
  - Fire suppression impact evaluation
  - Buffer effectiveness evaluation
  - Establishment of design criteria, strategies, assurances for minimizing impacts
- Design of restoration demonstration test plots on landfill and in trailer park to test restoration strategies, invasive plant management strategies, hydrology and water/soil chemistry mitigation strategies.

State and federal wetlands within the project area will be identified through a wetland delineation of the project area and lands proposed for habitat restoration.

Initial Identification of Mitigation Measures: Mitigation and enhancement will include protocol for site specific investigations to address site ecology, wetlands, and threatened and endangered species as identified above.

D. Albany Pine Bush Preserve

Existing Conditions: The Albany Pine Bush Preserve Management Plan (April 2002) provides guidance on ecological restoration and management, education and recreation, and protection. The Albany Pine Bush Preserve Commission (APBPC) includes representation from each of the communities in which the preserve lies. With the adoption of the Implementation Guidelines in 1996, projects within the Pine Bush Study/Protection Area Boundary that are undergoing local review are referred to the APBPC for their review and comment. This has helped to protect critical resources and maintain buffers that are important for the viability of this sensitive ecological community.

Potential Impact: The landfill is an intensive land use that creates a barrier for habitat connectivity between preserve lands to the west and those to the east.

Anticipated Information Necessary to Address the Impact: Compatibility issues will be addressed through review of the APBP Management Plan and continued consultation with the APBP Technical staff. A draft restoration plan will be developed and refined during the SEQR process. Actual construction drawings and details for the restoration plan will be addressed through the federal and State permitting processes.

Initial Identification of Mitigation Measures: An important component of the landfill proposal is a comprehensive restoration plan. The plan will identify ways to eliminate the landfill "barrier" through staged restoration. The proposed Restoration Plan is intended to be a comprehensive mitigation and enhancement measure for any impacts to the Pine Bush Preserve as a result of the landfill. For instance, restoration of the trailer park to the north of the landfill would provide direct connections between east and west preserve lands. There is also opportunity to restore Pine Bush habitat across the closed portion of the landfill. Ultimately, the entire landfill could be reabsorbed into the Pine Bush landscape. In addition, the City proposes to continue its $0.75/ton tip fee surcharge payments to the Albany Pine Bush Preserve Commission.

E. Land Use and Community Character

Existing Conditions: Land use adjacent to the landfill includes the Albany Pine Bush Preserve, residential uses including a trailer park, and the NYS Thruway that forms the landfill's southern border.

Potential Impact: Landfill activities are intensive and the primary issues that effect land use are noise, odors, truck traffic, and visual impact. The landfill also presents safety issues for individuals, especially children who might trespass on the landfill property, due to the use of heavy equipment and the presence of wastes.

Anticipated Information Necessary to Address the Impact: Surrounding land use and zoning will be compiled through available mapping and road-side verification. The Albany Pine Bush Preserve Management Plan will be reviewed and supplemented by meetings with Preserve Commission staff to identify future goals and plans for the lands

adjacent to the landfill. Much of this will be addressed under the Ecology section of the SEIS and the Habitat Restoration Plan.

Initial Identification of Mitigation Measures: Mitigation for land use conflicts will be addressed through measures to mitigate odors, noise and visual issues. Furthermore, the majority of residents of the adjacent trailer park have left and it is the intent to revert the trailer park to Pine Bush and wetland habitat. The closest residential uses to the landfill expansion area are immediately adjacent to the east of existing landfill operations and are proposed for acquisition in order to relocate offices and other ancillary uses.

F. Visual Resources

Existing Conditions: The landfill itself is one of the tallest features in the surrounding landscape, which is generally flat. As a result, some of the most striking views of the Pine Bush Preserve and the Helderberg Escarpment are from the top of the closed landfill, which is currently unavailable for public use. Views towards the landfill from surrounding lands are limited by the presence of forest and other vegetation. However, there are some locations that do have direct views.

Potential Impact: Views of an active landfill from locations where such views were previously not present may create an impact on quality of life for residents, visitors to the Preserve and passers-by.

Anticipated Information Necessary to Address the Impact: Viewsheds and vistas surrounding the site will be inventoried, mapped and analyzed to identify the potential impacts that expansion may have on these resources in accordance with NYSDEC Policy DEP-00-2, *Assessing and Mitigating Visual Impacts*. The following are components of the visual impact assessment (VIA):

- Prepare a preliminary viewshed analysis map using only the existing topography, without obstructions from vegetation, to allow the maximum number of theoretical views into the site.
- Model the viewshed using digital USGS quadrangles, Digital Raster Graphics (DRG), and their corresponding Digital Elevation Models (DEMs) downloaded into AutoCAD R2006 with AutoCAD Raster Design to identify potential visibility based solely on topography as an obstruction.
- Identify sensitive receptors that would include residences, parks/public open space, historic resources and other areas identified from mapping and discussions with public officials.
- Identify potential views of the landfill expansion from sensitive receptors and all other areas identified through initial viewshed modeling. To accomplish this, a balloon is flown at the highest elevation of the proposed landfill expansion and all areas of potential views are investigated and photographed.
- Identify key views. The key views are representative of the relationship major viewer groups have with the project site; locations which best represent the visual character of the area and locations that most clearly demonstrate the project's visual impact on the environment.
- Prepare photosimulations for the key views.

Initial Identification of Mitigation Measures: Views from sensitive receptors can often be mitigated through plantings of trees and shrubs.

G. Traffic

Existing Conditions: Trip generation at the landfill is primarily truck traffic during normal hours of landfill operation (7:00 AM to 4:30 PM weekdays, except 8 AM to noon on New Years Day, Memorial Day, July 4th, Labor Day, Thanksgiving and Christmas when such holidays fall on a Monday through Friday). Access to the landfill is from Rapp Road via Washington Avenue Extension.

Potential Impact: Expansion is likely to have minimal impact on the road network. The landfill will not be increasing the amount of waste accepted at the landfill, so the trip generation and peak hour trips will remain the same.

Anticipated Information Necessary to Address the Impact: Existing traffic data will be collected from State and County sources to evaluate the road network within the Study Area. Additionally, current and projected truck trips will be identified from Albany Landfill records.

Initial Identification of Mitigation Measures: No mitigation is anticipated since it is not anticipated that the landfill expansion will have any impact on trip generation.

H. Air Quality & Odor Control

Existing Conditions: Emissions from the landfill are currently authorized under a permit issued by NYSDEC. Odor control has been an issue for residents in the past and the landfill has undertaken several measures to address this issue including the use of an active gas collection system that burns off methane generated by decomposing wastes and partnering with a private sector business that utilizes the gas to generate energy. The City is negotiating with another private business to process the gas and compress it for various uses.

Potential Impact: The proposed landfill expansion may impact air quality due to increased landfill gas emissions, increased landfill gas combustion, vehicle traffic, and dust and odors associated with the construction and operation of the proposed landfill expansion.

Anticipated Information Necessary to Address the Impact: Potential impacts will be based on the estimated emission rates using currently accepted air emission models. The effect of mitigation measures that are being used at the landfill will be applied to these projected emissions. The resulting air quality will be compared to ambient air quality standards established by EPA and New York State. The odor impact from the proposed landfill expansion will be evaluated based on currently accepted models that estimate the concentration of specific gases known to cause odor problems.

Initial Identification of Mitigation Measures: Current and future efforts to control emissions and odors will be identified.

I. Noise

Existing Conditions: The primary noise generator in the vicinity of the landfill is the NYS Thruway. Noise is generated at the landfill by truck traffic and heavy equipment including dump trucks, loaders, compactors, and a waste shredder.

Potential Impact: Landfill noise is generated from operations of the mobile equipment and site construction as well as the landfill gas collection system. Expansion of the landfill (both vertical and lateral) may result in an increase in noise levels at receptor locations.

Anticipated Information Necessary to Address the Impact: Existing noise levels in the project area will be identified using a Metrosonics DB3080 Noise Dosimeter which meets the criteria for an ANSI Type II noise meter, using slow metering characteristics and A-weighting. Daytime hourly equivalent noise measurements (8 a.m. to 4 p.m.) will be taken during anticipated landfill operation times. Locations of measurements will be at the landfill site, at landfill property lines and at sites (primarily residential properties) to the north and east of the project area. The noise measurement data will be used as existing noise levels for the area within and surrounding the site.

Site generated noise will be predicted using the Federal Highway Administration's (FHWA) highway construction noise computer program, HICNOM (updated, March, 1992). Traffic generated noise will be predicted using the FHWA Traffic Noise Model (TNM) version 2.1 computer program. Information generated from the predicted site and traffic noise will be combined and used to develop contours depicting the noise levels throughout the property for the existing and built conditions. Areas impacted by site generated noise and/or traffic generated noise will be identified based on criteria established in the Part 360 regulations and maximum noise levels identified in local ordinances.

Initial Identification of Mitigation Measures: Typical mitigation measures to control construction noise relate to construction vehicle maintenance and specification of reasonable construction hours. Impact from operating noise is not anticipated due to the high ambient noise levels primarily generated by highway traffic.

J. Cultural Resources

Existing Conditions: A cultural resources investigation will be conducted for the site. The analysis will include file searches, map review, and limited field analysis. The purpose of the analysis will be to identify known historic and pre-historic sites and to address the sensitivity for the discovery of cultural resources.

Potential Impact: Expansion may have the potential for disturbing and eliminating sites containing cultural resources.

Anticipated Information Necessary to Address the Impact: A Phase 1 Cultural Resource Assessment will be conducted for the landfill expansion area and the undisturbed areas proposed for mitigation and habitat restoration. This work will include literature, site file and map review and detailed shovel testing over the impact areas.

Initial Identification of Mitigation Measures: Should cultural resources be identified within the landfill expansion area, alternatives for avoidance will be considered. Mitigation for impact would require the preparation of a mitigation plan with agreement from the NYS Office of Parks, Recreation and Historic Preservation (OPRHP). Typically a mitigation plan involves the excavation of the resource and data collection and documentation. Once this has occurred and is approved by OPRHP, the project can proceed.

Within areas proposed for mitigation and habitat restoration there is much greater opportunity to avoid the cultural resources through design modifications.

III. REASONABLE ALTERNATIVES TO BE CONSIDERED

The following project alternatives will be discussed:

A. Alternative Expansion Scenarios – Several expansion scenarios were evaluated in the initial planning phases prior to selecting the Eastern Expansion. A comparison of the relative impacts of each of these alternatives will be provided.

B. Alternative Sites – Consideration will be given to alternative sites. This will include the Coeymans site (Site C-2), as well as alternative sites within the City of Albany. The potential availability and feasibility of a given site will be evaluated based on available GIS mapping and data and discussions with City officials.

C. No-Action Alternative – The No-Action Alternative will address the potential impact of not expanding at the Albany Landfill, including exportation of waste.

IV. OTHER SEIS COMPONENTS

A. Executive Summary – Includes a brief description of the project and a summary of impacts, mitigation and alternatives.

B. Cumulative Impacts – This section will evaluate impacts of the entire landfill area developed as a whole and future closure plans.

C. Unavoidable Adverse Impacts that Cannot be Mitigated – This section will summarize all the impacts for which mitigation is either not available/feasible or not sufficient to completely mitigate the impact. The potential significance of these impacts will also be discussed.

D. Growth-Inducing Impacts – The potential effect on growth, if any, in the ANSWERS communities by providing landfill space at the Albany Landfill will be discussed.

E. Irreversible and Irretrievable Commitment of Resources – This section will evaluate those finite resources, such as land, that would be impacted by the project.

F. References

G. Preliminary List of Appendices

- Final Scope
- Correspondence

- Stormwater Management Plan
- Hydrogeologic Report
- Ecology Data
- Visual Impact Assessment
- Traffic Data
- Air Quality and Odor Study
- Noise Study
- Cultural Resources Report