ALLIED WASTE SERVICES

December 3, 2008

Angelo Marcuccio, Environmental Analyst
New York State Department of Environmental Conservation
Region 4 Headquarters
1130 North Westcott Road
Schenectady, New York 12306

Dear Mr. Marcuccio,

On behalf of Allied Waste Services of Albany LLC I am submitting these comments regarding the City of Albany's planned expansion of the Rapp Road waste management facility. Allied Waste is the second largest waste hauling, recycling and disposal company in America. As such we are often involved with development and expansion of waste management facilities across the United States.

First and foremost, Allied Waste acknowledges the leadership and perseverance of Albany Mayor Jerry Jennings for shepherding this project through the regulatory process. Every project, regardless of type or scope, has its supporters and detractors. It's not uncommon for various interest groups to focus solely on their parochial concerns. However, the responsibility of elected leaders is to safeguard the public's welfare by planning prudently to ensure that such responsibilities as basic as sanitation are fulfilled.

For decades the City of Albany has taken the lead in addressing the waste management needs of the City and surrounding communities. The City provides environmentally safe and economically stable disposal options for the waste generated by our communities. Instead of garnering appreciation for providing this invaluable service, the City and its leaders are more often recipients of critical comments regarding matters related to solid waste management. It is regretful and merits mention that this criticism is rarely, if ever, accompanied by a sustainable, practical and economically reliable option to the local landfill disposal plan. No other officials have stepped forward to offer land in their community to site a landfill.

It is ironic at best to assert that the lack of regional attention to what may indeed become a major environmental and economic problem for the Capital Region is due to the great job the City of Albany and others in the waste industry have done handling waste disposal needs. The waste disposal crisis that was predicted in the late 1980s and early 1990's never happened.

136 Sicker Rd
Latham, NY 12110
518.785.7030 / FAX 518.785.1329
www.disposal.com

Why…because the Rapp Road Facility continued its operation and private companies developed waste transfer capacity to handle the remaining volume of waste generated in our communities. That is why there's no waste disposal crisis in Bethlehem or Guilderland. That's why the residents of Watervliet and Cohoes haven't noticed any problems with solid waste disposal. The waste goes out to the curb and it disappears so to most people in those communities "what's the problem"?

But to some the facts are impossible to ignore - we know better. We know that we rely too heavily on exporting our waste to other regions; already sending over 1,000 tons per day of waste from the Albany area to sites in western New York. We know that an accident or snow storm on the NYS Thruway could quickly cause waste to stay on the curb uncollected because transfer trailers full of waste would be unable to reach disposal sites and transfer stations would be forced to temporarily cease operations. We have already experienced export problems during the floods in the Mohawk Valley when the Thruway was forced to temporarily close. Placed into a broader environmental context, development of local waste disposal capacity reduces the carbon footprint which would result from total reliance upon shipping forty more tractor trailer loads of waste each day over 300 miles to be emptied because there isn't local waste disposal available.

We agree with and support the strategy advocated by the DEC that other solutions such as enhanced recycling programs and composting sites should be developed. But we also know that tomorrow's solutions are not here today, and that any alternative will most certainly face the arduous task of being sited, developed and built in the same communities that want no part of the solid waste problem we confront today. Add to all that the stark reality of today's challenge to market recyclable commodities during a global economic turndown, while bearing in mind that we will continue to generate waste.

And we also know that there will be a terrible financial impact on the area should the expansion not proceed. Simply put, expansion of the Rapp Road landfill provides the most cost-effective alternative for the region's waste disposal needs.

The City of Albany has sometimes been criticized for making money from the landfill operation. Some critics feel that environmental issues should be analyzed and addressed independent of economic concerns. That just can't be. Without the economic means, solidly defined environmental solutions cannot be credibly supported.

The City needs to generate revenue to operate the landfill as well as account for the future cost of closure and post-closure monitoring and maintenance. In the interim, if the City manages to generate some extra money, that is an appropriate benefit for taking the lead role in regional solid waste management. Statewide we are facing revenue reductions on a magnitude never before seen. It is entirely appropriate for the City of Albany to generate a reasonable surplus cash flow while providing necessary environmental services in order to ensure funding for future solid waste management programs.

Allied Waste supports the expansion of the Rapp Road facility and respectfully requests that the DEC issue the permit to construct and operate this new landfill cell as soon as possible.

Sincerely,

Bob Griffin
General Manager
Allied Waste Systems of Albany LLC

ANDY ARTHUR:
COMMENTS ON THE PROPOSED EXPANSION PERMIT OF THE RAPP ROAD LANDFILL

December 3, 2008

15A Elm Ave
Delmar, New York 12054

(518) 210-7423
andy@nycowboy.org

www.newyorkcowboy.org

Andy is a political activist who has worked on a variety of environmental issues. He enjoys spending time in many outdoor areas, including the globally unique Albany Pine Bush and is concerned that another expansion of the Rapp Road Landfill would have irreversible impacts on this unique habitat.

POINT 1: The proposed expansion would take more acres out of the rare and unique Albany Pine Bush

Every landfill expansion proposal in our state is likely to garner a lot of public attention and concern. It may be easy to gloss over this tiny 15-acre expansion proposal, but I would encourage the department to give it deep scrutiny. This landfill not only has the problems facing other solid waste facilities in our state; it is located in the center of the globally unique ecosystem with only about 2,500 acres remaining in the world today. The proposed expansion of the Rapp Road Landfill will directly result in taking of land that either is Pine Bush habitat or land that could with reclamation efforts become Pine Bush habitat, sustaining several unique species including the beautiful Karner Blue butterfly. This is unacceptable when there is so little habitat remaining that is similar in climate, geology, flora and fauna as the Albany Pine Bush.

POINT 2: The proposed expansion would bring the landfill closer to emergency water supply and popular fishing location

Not only would the proposed expansion extend into a significant portion of the remaining Pine Bush acreage, it also would bring the landfill closer to a popular fishing spot, along with Albany's emergency source of water, the Six Mile Waterworks. Indeed, to get this expansion, 7 acres of wetlands that feed this important lake would have to be destroyed. The possibilities of future leachate leaks from the expansion are high, especially in view of the city's haphazard management of the landfill which has caused leachate leaks that required the removal of trash and patching of the several cells. Should this water not be available after a terrorist attack or accident with the Alcove Reservoir Aqueduct, a documented threat to New York State's Capital City, our city and surrounding suburbs would be in a crisis. With Osama Bin Laden threatening to attack our nation again, it makes no sense to become more vulnerable.

POINT 3: The increasingly urban location of the landfill is incompatible with other surrounding land uses; creates a nuisance and health hazards

The landfill, in its urban location continues to blight surrounding communities. Many neighbors, including those in the non-ANSWERS community of the Village of Colonie have become so annoyed by toxic odors, that they are considering selling their house and leaving the area. Others have illness from the hydrogen sulfide and other landfill gas leaks. The landfill, first sited in a remote location in the Albany Pine Bush in 1969 may have made sense, however since then urban growth has surrounded the landfill, creating serious conflicts between neighbors and solid waste management. The city has taken many steps to reduce the impact of the landfill, but it is simply a facility not compatible with urban land use. Moreover, forty years ago much of the Pine Bush remained intact compared to the relatively few acres left today.

POINT 4: There is plentiful landfill space across the nation for waste exportation

There is ample landfill space across New York. This is the smallest MSW landfill expansion proposal in our state, and the most troublesome due to the rare nature of the habitat it seeks to expand onto. The department is currently considering 300-acre, 700-acre, and 1,500-acre expansions of large commercial MSW-facilities. Those proposals would not take land as rare or precious as the proposed expansion of the city landfill. Landfills operators across the country would welcome the business of the city. There are many landfills across the nation that desire the 120 tons a day of trash the city generates. While their may be slightly higher costs associated with exporting trash out of the region, the reality is tipping fees across the nation are far below the rate that many people currently pay at the city's tiny landfill. Higher costs associated with waste exportation would encourage waste reduction, more recycling, and material recovery, all desirable by the state's solid waste policy.

POINT 5: Privatized waste exportation removes potential conflicts of interest; creates market-based incentives for recycling

The city should get entirely out of the trash business, and allow private businesses, subject to DEC regulations handle waste and materials recovery. Publicly owned waste facilities pose a dangerous conflict of interest for government regulators, and socialize malice. The Carbone decision was clear to this fact. The city should regulate private haulers and ensure compliance with state and local law, but should allow freedom of contract to haul to any landfill

that is legally allowed to accept waste under respective local laws. Well-regulated private industry would bring in innovation to how Albany manages it's waste and recovery of materials. Albany should guide waste management in the city, but not operate waste facilities.

POINT 6: Cities like Schenectady have sustained finances after city landfill closures; Albany in best economic shape of upstate cities

Some local officials are of the unfortunate view that the city finances could not sustain the transition that would occur after the landfill closes. Schenectady has proven that model to be wrong. When Schenectady's city landfill closed they continued to balance their budget. Exporting waste to ANSWERS then High Acres in Rochester proved to be an affordable alternative. Schenectady is a city with declining industry, while Albany's outlook remains bright as the center of state government and associated industry. Albany also enjoys the highest credit rating outside of New York City. Moreover, the biggest town in the ANSWERS consortium, Guilderland, is considering contracting lower cost facilities then the expensive city landfill. To make up for shortfalls associated with closing costs of the Rapp Road Landfill, we need a tax on waste generation in Albany County, similar to what the State of Vermont and it's localities levy on all waste not beneficially reused. This tax in Vermont is $10 per ton with half being disbursed to localities. A similar tax would bring in $3.2 million a year, and could be used to retire any remaining bonds on the Rapp Road landfill and pay for restoration of the Pine Bush. A waste generation tax would also make organics and technical material recovery more cost competitive. This would achieve more waste diversion then unenforced city mandates.

CONCLUSIONS: City landfill expansion demands strict review; denying expansion permit would be beneficial to environment, surrounding communities

There is no reason to allow this expansion into the Pine Bush, and it demands a full review of the irreversible consequences. I ask that you as the lead agency, request a full review by an administrative law judge of the impacts of an expansion of the landfill to this ever precious habitat. It is morally unacceptable to grant another expansions in the Pine Bush when there are many other landfills that desire to receive the city's waste. It is now 2009, and not 1969, and we must consider new ways to manage the city's waste then dumping in an increasingly rare Pine Bush.

From: "FRANK BOGEDAIN" <vze46z9t@verizon.net>
To: <r4dep@gw.dec.state.ny.us>
CC: <lynnejackson@mac.com>, <tellis@cectoxic.org>
Date: 12/3/2008 1:53 PM
Subject: Rapp Road Landfill, Albany(C), Albany County

I want to get on record to oppose further expansion of this landfill.
Capacity will be reached in one year. If approved another five years will be added to the serviceable life of this facility.
However any longer term option will take a MINIMUM of 10 years to implement, i.e. from planning to operation..
Therefore any longer term solution is anywhere from 4 years to 9 years behind schedule, again minimum, already.
The City of Albany has been temporizing, and doing more of the same is not going to solve the current odor condditions.. In fact they will be made worse.
The City and its customers need to get serious and solve the problem of solid waste disposal before they are sued which will only result in still more delay and cost to the City's taxpayers and customers.

November 30, 2008

Dear Mr. Marcuccio,

We are against the Part 360 Permit Application and the Supplemental Draft Environmental Impact Statement for the proposed landfill expansion on Rapp Road in the City of Albany.

The expansion in a highly populated area which will affect the air quality for all age groups from nursery school children, to little league baseball players, businesses, residents and nursing home residents should not be approved.

The city and outlying towns using this dump should find a much less populated area for dumping if they are really concerned about the the environmental impact on the population.

There is time to reconsider and explore a better location for this dump and not let money and expediency force a very bad decision.

Sincerely,
Anna Boyle
John P. Boyle

Angelo A. Marcuccio
NYS DEC Region 4 Headquarters
1130 North Westcott Rd
Schnectady, NY 12306

Dear Mr. Marcuccio:

Why does Albany keep getting permission to continue an out-dated garbage handling system? Why does it not mandate the productive composting approach? Why does the State not encourage some approach other than increasing the eye sore (bad image of capital city and state small s.) along one of our busiest highways?

Another tragedy will happen is an eyesore even for residents commuting to work in State and other offices. Does it inspire anyone to think outside the box, to be progressive in solving any kind of problem?

But you are only concerned with the safety of expansion of Albany landfill and you think it is safe. I tell environment and conservation in your title. Is the landfill safe for wildlife for a peaceful area of beauty and emotional renewal for today's harried citizens. It was when I lived and worked in Albany but it was being pushed toward oblivion. When will its slide be halted ... by your decision on increasing or holding landfill?

Alice Brittenbaker
601 Jones Rd
Erin NY 14838

Dec. 12, 08
phone 607-739-1630 evening

From: "Sheree" <sheree@nycap.rr.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/8/2008 8:04 PM
Subject: DEC# 4101-00171/00011, Modification to NYS Solid Waste Management Facility permit (6NYCRR Part 360)

Dear Mr. Marcuccio,

This is my public comment on the proposed expansion of the Albany City landfill at Rapp Road.

1. An alternative to the expansion that I did not see in the plan is the reduction of waste by NYS agencies whose waste is NOT managed by the Office of General Services. This includes the agency for which I work (the New York State Education Dept.) as well as many other agencies within the City of Albany. I assume that the trash from my workplace goes to Rapp Road. There is no attempt at waste reduction, save for the recycling of paper and cardboard. The last memo from the SED administration to office workers concerning what can and cannot go into the paper recycling bins was in 2005. There is no metal, glass and plastic separation program for the office workers to use, save for a collection location in one area of the basement, in the concession stand that sells snacks and packaged lunches. Office workers are not encouraged or educated to reduce the amount of trash they generate. In fact, our office was instructed to take out the trash from our desks each evening, or at least once a week. That is assuming that people are generating trash at a hefty rate. This assumption could be stood on its head, and people could be asked to generate as little trash as possible, and put their organic waste into a special receptacle at day's end. Even for deposit containers are thrown into the trash, because, as the cafeteria manager explained to me, there were complaints about the potential for messiness that could arise from collecting for deposit containers separately, and thus diverting them from the waste stream.

2. I am not certain that the ambitious plan to restore Pine Bush ecosystem on top of the capped landfill makes sense, ecologically. Soil and its microorganisms, soil structure, underground animals, and such have evolved over much time, and are, I would think, an integral part of the ecosystem.

3. As has been stated by dozens of others, Albany's landfill is filling up at a fast rate because Albany is accepting trash from beyond its waste shed. An agressive waste reduction effort, combined reuse of items that need not be trashed, and recycling of those that cannot be reused, along with a limiting to the ANSWERS communities and the City of Albany, along with a separation of organics into a special composting area, might extend the life of the landfill for a great many years.

Thank you for the opportunity to comment.

Cheryl Cammer
137 Hidley Rd.
Wynantskill, NY 12198

From: "Richard Clark" <rclark384@nycap.rr.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/4/2008 9:33 AM
Subject: rapp toad /andfill

Mr. Angelo Marcuccion

Environmental Analyst

New York State Department of Environmental Conservation

Region 4 Headquarters

1130 North Westcott Road

Schenectady, NY 12306

Dear Mr. Marcuccion,

I wish to comment on the proposal of the city of Albany to expand the Rapp Road Landfill. I am a resident of the Avila Retirement Community located less than a half mile from the current landfill and the proposed expansion. A number of Avila residents have been concerned about plans to expand Rapp Road since we first found out about these plans in September, 2005.

We soon discovered the city of Albany had previously been granted permission to expand in year 2000, At that time (2000) the city promised this would be the last expansion at Rapp Road. The city promised to dedicate the land occupied by the Fox Run Trailer Park to the Pine Bush Preservation Commission. In 2005 they proposed to expand Rapp Road on land they had promised to dedicate five years earlier. Somehow, no one had followed up to see that the city of Albany did what was promised.

Avila residents and many other individuals and groups wrote letters to local newspapers and at public meetings. We protested broken promises, but we also called for a careful planning effort. We asked an advocates of waste to energy to present his position. The current city of Albany proposal discusses this phase as part of the prose on Alternative one. Early in 2006 the city of Albany proposed the western expansion of the landfill described by the city as Alternative 2. Most of the land in question had already been dedicated to the Pine Bush Preservation Commission. Again many Avila residents protested in print and in writing. Again, many of us called for more comprehensive planning and in greater efforts to reuse and recycle.

Avila residents also attended and commented on the first NYSDEC hearing when the city of Albany presented the results of their preliminary environmental review and requested permission to proceed with a full plan. Avila residents who spoke continued to oppose the expansion plan and continued to call for more extensive planning efforts.

At the time this fiest DEC hearing was held all living close to Rapp Road often experienced foul odors from the landfill. Avila resident Marion Kuritz took leadership in informing residents of how to report complaints to DEC and to the city of Albany. The odor problems, and efforts to correct them, are described on pages 11-13. When odors were strong we sought more information concerning whether landfill emission might bring health risks. We found more uncertainty than the city of Albany proposal suggests. We were told that DEC used to do more monitoring of emissions than they do currently.

We agree we are getting fewer complaints about foul odors

I am one Avila resident concerned about the Pine Bush as a unique eco-system. I am sure you will hear from SAVE THE PINE BUSH representatives positions contrary to those stated in the city of Albany plan to expand. I urge you to give these alternative views very careful consideration in planning next steps.

I am pleased with some of the promises made by the city of Albany in their current proposal to expand, but I know they have broken similar promises in the past. I hope the city will be asked to set up a specific timeline regarding some of their promises. For example, when can we expect a new Solid Waste Management Plan? When can we expect an ANSWERS group to be assembled?

Albany promises 15 to 20 million dollars for a habitat restoration fund. I think the city of Albany should be asked to establish an escrow account and establish a set of payments to this account. A procedure to monitor city contributions to this account should be set up.

The city of Albany should be asked to make a list of all plots of land to be dedicated, and the proposed time when the city administration will urge the Albany Common Council to take the necessary legislation. I realize the city can only offer land to be dedicated.

I am not in a position to evaluate fully the consequences at this stage of refusing DEC permission to expand Rapp Road. The city of Albany mentions off-site transportation as an alternative, They talk of the need for a quick budget adjustment and of the impact on ANSWERS municipalities. They don't talk about the construction costs of the expanded dump. Officials in some ANSWERS communities are on public record as seeing off=site transportation as viable. I hope NYSDEC has or can get experts to evaluate these economic aspects. They should take into account the Mayor's statement that he will not charge city residents for trash removal.

Thank you for the chance to share my views with you.

Richard M. Clark

Avila Independent Living Community

100 White Pine Drive

Albany, New York 12203

Phone 640-9676

From: "pcoager" <pcoager@nycap.rr.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/10/2008 8:01 PM
Subject: Rapp Road Landfill

Dear Mr. Marcuccio,

I writing you concerning the proposed expansion of the
Rapp Road Landfill. We have lived on Broderick St. for over
35 years. We have had to live with the stench from the landfill having to close our windows on beautiful days when we should be enjoying the fresh air or when entertaining at our home, had to explain to our guests where the disgusting odor is coming from.

I'm sure if Mr. Jennings lived in the area of the Rapp Road landfill, I would not be writing this letter. The City of Albany has had sufficient time to find other sites to replace the Rapp Road landfill. This proposed expansion will impose more health hazards for the neighboring communities, lower our property values, impact the Pine Bush aquifer and destroy rare Pine Bush ecosystem.

Please reconsider this expansion. Make the city find another site away from populated areas.

Thank you,

Mr. and Mrs Lauren Coager
76 Broderick St.
Albany, NY 12205

December 8, 2008

Mr. Angelo A. Marcuccio
NYSDEC Region 4 Headquarters
1130 North Westcott Rd
Schenectady, NY 12306

Dear Mr. Marcuccio,

I write to express my opposition to the proposed expansion of the City of Albany landfill. I urge the New York State Department of Environmental Conservation to reject the application in question.

The "Eastern Expansion" of the City landfill has been proposed in the absence of a genuine effort to reduce solid waste received at the site. Only now has the City proposed the creation of a new waste management plan as well as creating a position of City Recycling Coordinator. However, such policies and positions should have been implemented and created long before the current landfill was filled ahead of schedule.

Furthermore, it is uncertain whether the City owned Coeymans site will ever receive solid waste. If the Coeymans site is not operational at the end of the life of this proposed expansion, the same issue will occur again in a few years.

Recent media reports have referenced a "Pay-as-you-Throw" system as an alternative to current collection procedures within the City. This would reduce waste at the site as there would be a greater incentive to reduce, reuse and recycle. I would be supportive of such a proposal conditioned upon:

- A "Pay-as-you-Throw" system being revenue neutral to the City of Albany
- A fee exemption provided to City residents living in close proximity to the landfill, which would include The Dunes, Point of Woods, Pinehurst Estates, Village in the Green, Daughters of Sarah, Teresian House, Avila and those residing on Rapp Road and Wilan Lane.

This fee exemption would be an equitable compromise to these residents as they are already subjected to extraordinary costs such as air pollution, sound pollution and known or potentially unknown adverse health effects. Subjecting these residents to any additional costs would be an unfair burden.

Sincerely,

Frank Commisso Jr.
130 Cottage Avenue
Albany, New York 12203

From: "sally" <sbgarden@gmail.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/10/2008 1:33 PM
Subject: More time!

Hi Mr. Marcuccio,

DEC gave the public a hearing to let their voices be heard on whether there should be another landfill expansion at Rapp Rd. Unfortunately many people were unable to attend, but still would like their voices to be heard.

I politely request that you give the public more time to get all our comments together and sent out. This is a critical issue. I, for one, would move if the landfill expansion is approved. I live over 2 miles from the current landfill and can at times smell it. I am a keen gardener and need to be able to smell my flowers and not the dump odors. My husband has asthma and this, plus the unhealthy toxins that spew out into the air, would be dangerous to his health. We are also concerned about the run off getting into the natural aquifer that would be right below the landfill, and this making its way into the emergency water supply that is 6 Mile Waterworks.

Please give us more time!
Sally Cummiongs

December 3, 2008

Public Hearing for Albany Landfill

Ladies/Gentlemen:

Many times when driving through the Washington Ave./Fuller Road area or sometimes at my residence near Crossgates Mall, I have experienced the unpleasant odor of "landfill flatulence" emanating from the Albany landfill. What seems an irony to me is that the much heralded relocation of SEMATECH, and its associated high tech jobs, will be within the landfill's "stink zone" at the Albany NanoTech Complex (Washington Ave./Fuller Road) which already includes high tech research and development. The proposed landfill expansion will bring the landfill even closer to one of the most advanced technological research centers in the world. Albany deserves a better way to rid itself of garbage.

Burying garbage is the most primitive form of disposal - greenhouse gases escape from the landfill, there is no guarantee that toxins will not leek through the barriers, land is wasted, a good portion of the garbage does not decompose and the smell increases.

A waste-to-energy plant that recycles non-combustible materials would generate income from tipping fees and power production, contribute to energy independence, recycle materials and reclaim the landfill area by recycling and burning garbage already buried. There are many waste to energy plants around the world that have good pollution control technology. Additionally, with the upcoming federal emphasis on alternative energy, this would be a good time to seek federal assistance for building of a modern recycling/waste-to-energy plant.

In order to significantly increase recycling rates in Albany, the city should partner with RecycleBank (recyclebank.com) which already has greatly improved recycling rates in Massachusetts by providing reward points for households that recycle.

If Albany wants to develop a truly high tech research center then it should deal with its garbage problem in a more high tech manner utilizing modern pollution control methods.

Sincerely:
Lawrence D'Arco
1202 Greenwich Drive
Albany, NY 12203
456-0919

DOWNTOWN ALBANY
Business Improvement District

522 Broadway
Albany, NY 12207
p 518.465.2143
f 518.465.0139
www.downtownalbany.org

3 December 2008

Angelo Marcuccio
NYS Department of Environmental Conservation
Region 4 Headquarters
1130 North Westcott Road
Schenectady, New York 12306

RE: Rapp Road Landfill

Dear Mr. Marcuccio:

I am writing on behalf of the Downtown Albany Business Improvement District (BID) regarding the above referenced. The BID represents a significant portion of the Central Business District in the Capital City. The BID members include approximately 800 property owners, tenants, attraction venues and merchants located within the geographic boundaries of Broadway to the east, Eagle Street to the west, Clinton Avenue on the north and Madison Avenue to the south.

For the past 13 years property owners within the BID have contributed to the organization to support its mission to restore, promote and maintain the character and viability of downtown Albany and improve the quality of life and overall image for all those who live in, work in and visit the Capital City. Cleanliness and waste management has been a core mission of the Downtown Albany BID.

The Board of Directors understands the need for our members to have a stable tax environment conducive to a vibrant downtown and recognizes that any additional financial strain on the City may have a negative economic impact on our property owners and businesses. To that end, the Board of Directors voted to support the proposed plan to expand the landfill while a viable long term solution is sought for the City and the Region.

Sincerely,

Pamela Tobin
Executive Director

DOWNTOWN Albany
WORTH DISCOVERING SINCE 1609

RECEIVED
DEC 08 2008
By_____

From: Tom Ellis <tellis@cectoxic.org>
To: <r4dep@gw.dec.state.ny.us>
CC: "tellis@cectoxic.org" <tellis@cectoxic.org>, James Travers <jatrav@yahoo...
Date: 12/14/2008 10:41 AM
Subject: rapp road dump

Angelo Marcuccio
NYSDEC Region 4 Headquarters
1130 North Westcott Road
Schenectady, NY 12306

Re: City of Albany Proposed Landfill Expansion

Dear Mr. Marcuccio

I hope you did not lose power at your home during the recent ice-storm.

There comments are in addition to the verbal and written comments I made February 21, 2007 at the Scoping Session and the verbal comments made and documents submitted at the December 3, 2008 hearing held on the above referenced matter.

I support the request made at the December 3 hearing by Save the Pine Bush attorney Peter Henner that the comment period be extended until the end of January of 2009. Members of the public have not had sufficient time to review the thousands of pages of documents. We also have many unanswered questions about how the landfill application and the draft Solid Waste Management Plan Modification for the Capital Region Solid Waste Management Partnership Planning Unit (the "modification") are connected. The latter document is filled with vague statements about steps the city might take with respect to solid waste.

There were lengthy, obnoxious, painful-to-the-ears technical problems at the onset of the December 3 meeting with very loud feedback coming from the speakers. It is possible that some people exited the meeting then so as to avoid this noise pollution and injury to their hearing. Such persons were thus excluded from speaking. These problems also delayed the start of the meeting.

As was the case at the February 21, 2007 hearing, not every person was able to speak at the December 3 hearing. Made people left before their names were called. Only one hearing was held each time; thus some people have not been able to make a verbal comment. Some people are much more comfortable speaking than writing and those people were denied an opportunity to participate. At the hearing last year and this year, several people requested that an additional hearing be held so all could speak. This request was not granted in 2007. I propose that DEC hold a second public hearing and allow those who did not speak on December 3 to speak first.

At the December 3 hearing, the presiding judge allowed consultants for the dump applicant to make lengthy presentations. Those presentations should have been made before the 7:00 pm. scheduled start of the public hearing to assure that members of the public could begin speaking at 7:00 pm, and all could participate. On the hearing notice, DEC could have announced that the applicant would make a one-half-hour presentation beginning at 6:30 pm for anyone interested in listening.

It should also be noted that the presentation made by the city's consultants December 3 was the first time the city has briefed the public on the nature of its dump application. The city has not offered the public any meeting where we could ask questions to anyone representing the city on the specifics of what the city is proposing. The city also hides behind its consultants; the city evades being held accountable by not offering the public any opportunity to question officials from the Department of General Services about the landfill application and related matters such as waste reduction, reuse, and recycling programs, and the September 24, 2008 draft Solid Waste Management Plan Modification for the Capital Region Solid Waste Management Partnership Planning Unit. This longstanding city policy of systematically excluding the public is an important matter; it makes it more difficult for the public to submit informed comments to DEC; it also contradicts the comments made at the December 3 hearing by Albany Mayor Gerald Jennings that the city welcomes public involvement in the landfill application process.

At the December 3 hearing, the presiding judge allowed elected officials to speak prior to the general public. They were not subject to any time limit. One elected official spoke for about 25 minutes. The first speaker from the general public began at 8:15 pm, well over an hour after the public hearing began. Prior to allowing the first speaker from the general public to begin, the judge announced that due to the large number of people who wished to speak, he would limit each person to five minutes. While this rule was not strictly enforced, many members of the public, myself included, were rushed and could not complete our comments.

The comment deadline should be extended because many people have lost electric power due to the recent ice-storm, can not send emails to DEC, and may not be able to until the current December 15 deadline passes.

For these reasons, I request that a second public hearing be held and the comment deadline be extended until January 31, 2009. I also request that before the public comment deadline is terminated, DEC schedule and hold a meeting at which DEC staff explain how the dump application, the DEIS and the "modification" are related. The second public hearing should be held subsequent to this DEC meeting. Thank you.

Sincerely,

Thomas Ellis

43 North Pine Avenue
Albany, NY 12203

International Union of Operating Engineers

Local No. 106, 106A, 106B, 106C, 106D
44 Hannay Lane, Glenmont, NY 12077
(518) 431-0600 ❖ Fax (518) 431-0726
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Robert J. Jones
Bus. Mgr./Fin. Sec.

Michael Dodig
President

The landfill located at Rapp Road is an essential resource for the Capitol District and the proposed expansion should move forward due to its convenience and fiscal sensibility. The existing property provides a reasonably priced service to the Capitol District for waste disposal and in a time of economic despair, the last thing our residents need is another increased cost for a necessity such as disposal of waste. If the expansion does not occur, the region's waste will have to be hauled off to distant landfills, thus raising the cost for residents. Also, a denial of the permit would result in a closure of the Rapp Road site in late 2009 or 2010. This being said, the time that the proposed expansion would provide for the transition to a new facility would result in a property tax increase or put an economic strain on Albany. Business Improvement Districts that are located in predominately urban areas which are already plagued with inappropriate disposal practices would be further affected and more waste would be left in improper places due to increased disposal costs if a regional landfill is not accessible. The expansion will also provide the time needed for the City and NYS DEC to implement more comprehensive waste reduction and recycling programs thus minimizing the portion of waste that needs to be disposed of at any landfill. The Pine Bush Preserve remains a contentious issue and we are proud of the progress that has been made in establishing such a preserve. The landfill expansion includes a motivated Habitat Restoration Plan that would be the single largest investment in the Pine Bush reserve and would result in restoration and improvements of around 250 acres of land in proximity to the landfill. This would more than compensate any impact as a result of the expansion of the landfill onto the needed fifteen acres of the City owned land that is not part of the Preserve. If the expansion is not approved, the public's growing unease with carbon emissions and climate change would be broadened. Tractor trailers would have to transfer the areas waste for long haul transport to far-away landfills instead of the utilizing the sensible alternative of having a regional landfill to take care of our own waste. All of these examples are an effort to solidify our point of view that the landfill expansion is a win/win situation for the City and the region and we hope that the proposed expansion will come to fruition in the near future.

Thank you,

Robert J. Jones
Business Manager
IUOE Local 106

MILLER, MANNIX, SCHACHNER & HAFNER, LLC

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November 6, 2008

Angelo Marcuccio, Environmental Analyst
NYS Department of Environmental Conservation
Region 4 Headquarters
1130 North Wescott Road
Schenectady, NY 12306

Re: City of Albany Rapp Road Landfill Expansion

Dear Mr. Marcuccio:

We are Special Counsel to the Town of Coeymans which, as you know, has a strong interest in following the efforts of the City of Albany to properly manage its solid waste disposal practices in the Capital District. More specifically, the Town of Coeymans includes the site which was targeted by the City now more than a decade ago as the possible location of a regional landfill; a project which, as the Town has previously pointed out on numerous occasions, was poorly planned and ill-conceived.

The City has long owned and operated the Rapp Road Landfill and appears to have done so reasonably successfully. In contrast to the City's initial Coeymans facility proposal, expansion of its existing landfill seems to address the needs of the City and those surrounding communities utilizing the facility in a very appropriate manner. The application undoubtedly raises some technical issues which we trust will be properly reviewed by the Department during the Permit Application review and Permit issuance process.

In conclusion, please be advised that the Town of Coeymans supports the efforts of the City of Albany to manage its solid waste disposal issues through expansion of its existing facility. However, the City's Coeymans proposal apparently remains listed as an "active application" in the Department's files. The Town reiterates its opposition to that application and our request that it be deemed inactive and withdrawn in light of the City's failure to prepare any Environmental Impact Statement after issuance of the SEQRA Positive Declaration and, especially, now that the City is pursuing a much more sound alternative.

Thank you for your consideration of the comments of the Town of Coeymans.

Very truly yours,
MILLER, MANNIX, SCHACHNER & HAFNER, LLC

Mark Schachner (up)

Mark Schachner

cc: Coeymans Town Board

G:\CORR\COEYMANS - TOWN OF\LANDFILL\Marcuccio.doc

12/1/08

To Angelo A. Marcuccio

My wife and I are opposed to the proposed expansion of the Landfill in the Pine Bush.

On Sunday (Nov 30th 2008) at 7:30 AM we could smell an odor (foul odor) from the dump and we could see the yellow flames from a chimney at the dump. I would like to know the composition of the exhaust from the burning going on? Has a study been done on whether this burning exhaust poses ~~ass~~ a health hazard to the area residents?

The area is too densely populated to allow any expansion of a dump so closely positioned to so many people.

Why should a dump positioned in an urban area be allowed to accept garbage from rural areas? It makes no sense!

Lastly, put people ahead of profit. End the landfill expansion into the Pine Bush.

Yours Truly,
Charles P. Morreale
Margie H. Morreale

25D Pine Lane #6
Albany, N.Y. 12203
11/25/08

Dear Mr. Maraccio,

I am writing to comment on the landfill expansion that the City of Albany is proposing.

You must, I'm sure, be aware of the odor problem emanating from the Rapp Road Landfill. Now the City would consider inflicting another 6 years of noxious odors in our area. I'm guessing that in all probability, those making the decision do not live near the landfill.

Additionally, there is the serious impact to the Pine Bush, since expansion means permanent destruction. Surely there must be other viable alternatives to solving the "garbage issue" that would not so negatively effect people living in the area as well as further damaging a delicate and important ecosystem.

A short term (6 year) "solution" that costs at least 41 million dollars as well as all of the previous stated reasons would, I hope, be enough cause to reconsider such an ill-conceived plan.

Thank you for your consideration of these comments.

Sincerely yours,
Frieda Morrison
FRIEDA MORRISON

439 Elk Street
Albany, NY 12206
December 14, 2008

Angelo Marcuccio
Environmental Analyst 2
Division of Environmental Permits
NYS Dept. of Environmental Conservation
Region 4
1130 N. Westcott Road
Schenectady, NY 12306-2014

Dear Mr. Marcuccio,

Save the Pine Bush is very concerned about the risk of contamination to the food chain from the Albany Landfill do to rodenticides and we ask DEC to deny the permit to expand the Albany landfill.

According to NYS Wildlife Pathologist Ward Stone, whom I spoke with in November, the landfill is required to file paperwork on rodenticide that is used. Dr. Ward Stone, was quite sure the City of Albany routinely uses some form of rodenticide at the Albany Landfill in the Pine Bush (Conversations in November of 2008). I had called to ask about the possibility of other landfill contamination entering the food chain when Dr. Ward Stone said "It's more direct than that. They use rodenticide which can travel right up to the hawks."

We are concerned because there are several raptors that hunt rodents in the Landfill, including Cooper's Hawks and Sharpshinned hawks* which are NYS species of special concern.

On Thursday, December 11, 2008, I spoke with Peter Nye, also of the NYS DEC (and renowned for his extraordinary work with helping eagles recover from DDT contamination in the past) said that he didn't think the landfill used rodenticide but wasn't sure.

Nonetheless, Ward Stone is not only the NYS Wildlife Pathologist but also has worked on landfill related wildlife health issues for decades. He's a good source on this.

Rodenticides are usually anti-coagulants -- they poison rodents and can kill hawks and other animals that eat rodents. They are usually used to control the rat populations that are common in landfill facilities.

We want feather tests to be done, as well as tests on rodents. These are routine pathology, necropsy and toxicology procedures, and should not be neglected.

Sincerely,

Grace Nichols

Grace Nichols
Volunteer, Save the Pine Bush
CC: Peter Nye
Ward Stone,
Peter Henner.

*We have also another by another DEC employee that Northern Harriers, a NYS threatened species, hunt in the Landfill. So far, however, we do not have literature established that the Northern Harrier breeds in the Pine Bush.

From: "Grace" <mtbluegreen@juno.com>
To: <aamarcuc@gw.dec.state.ny.us>
CC: <discuss@nodumpinthepinebush.org>
Date: 12/15/2008 4:09 PM
Subject: Please deny the Landfill Expansion application, ASAP.

Grace Nichols
439 Elk St.
Albany, NY 12206
December 14, 2006

Angelo Marcuccio
Environmental Analyst 2
Divsion of Environmental Permits
NYS Department of Environmental Conservation
Region 4
1130 N. Westcott Road
Schenectady, NY 12306-2014

Dear Mr. Marcuccio:

My first concern is a democracy concern.

I called the NYS DEC main number in November and asked "When is the hearing about the landfill expanding into the Pine Bush? I'm a parent and my kids play in the Pine Bush and I'm concerned about this issue. I'd like to know how to get there by public transportation." The receptionist told me she didn't know but would ask. She returned to the phone 15 minutes later and asked me when the hearing was. I said that I was asking the DEC that, as it was their meeting.

After another 10 minute delay, she came back on the line and told me to call Judge Casuto. I did that and left a message on his machine with the same simple questions: "When and where is the hearing, and how do I get there by public transportation?" As yet, and the hearing is now over, I have not received a return phone call.

The absence of clear postings about this hearing in DEC facilities such as Five Rivers Environmental Center or the lobby of Albany's Downtown office, serve as additional evidence that the NYS Department of Environmental Conservation is not overly concerned with public access to this hearing, or the many other important hearings they conduct. Failure to inform affected citizens about opportunities to participate in the political process is inherently anti-democratic.

Nonetheless, I did file some comments about the SDEIS asking for a landfill expansion at the public hearing after Lynne Jackson of Save the Pine Bush was kind enough as to enlighten me regarding its date and location.

I am adding a couple more comments:

After reviewing over 1000 citizen complaints, I am outraged at the public health implications of the current practices over at the Rapp Road Facility. In view of consent order after consent order, illness after illness, and the negative impact on local businesses associated with the landfill, I know it must close.

The environmental consequences of the landfill operation include loss of habitat for rare and endangered species, groundwater and aquifer contamination, erosion of precious soils, casualties of rare reptiles, destruction of wetland habitat, the release of global warming culprit methane (6500 tons a year) and air quality decline. In addition, the City has neglected its own duty to proactively address solid waste policy reform.

In addition, the woefully inadequate attempts of the City of Albany to educate and encourage its citizens, schools, businesses and apartment complexes to recycle, the completely ineffective and nearly secret campaign to get all Albany households to drive to one inadequately staffed household hazardous waste site once a month, the resulting environmentally dangerous conditions at the landfill which is full of household hazardous waste, the absence of a composting program for kitchen wastes and the failure to construct a materials recovery facility with its necessary infrastructure to support resale of materials, illustrate the City's lack of commitment to sound solid waste policy.

It would be criminal negligence to approve this application.
Please deny the application.

Grace Nichols
mtbluegreen@juno.com
518-436-9731

DEC Commissioner - Extension of Comment Period

From: Grace Nichols <mtbluegreen@juno.com>
To: <commissioner@gw.dec.state.ny.us>
Date: 6:56 AM 12/10/08
Subject: Extension of Comment Period

Date of Correspondence 12/10/08

Grace Nichols
439 Elk St.
Albany NY, 12203

County:Albany

Email:mtbluegreen@juno.com

Email received from Website:
I am concerned about the expansion of the landfill located next to the Albany Pine Bush preserve, as are many of my neighbors. In order to properly review and discuss the SDEIS, we need more time. We are also awaiting some FOIL data that pertains to this expansion.

In the interests of fairness, and an environmentally sound permitting process, I hope you will extend the comment deadline until the end of January 2009. We are not asking for an unreasonable delay -- simply a month and a half to give you thoughtful feedback, representing the concerns of citizens, scientists and public officials who have serious concerns on behalf of public safety and environmental conservation.

Thank you.

December 3, 2008/

A Call for Data:

Some Concerns Generated by SDEIS on proposed expansion of Rapp Rd. Landfill

--Submitted by Grace Nichols, 439 Elk St., Albany, NY 12206, Albany Resident, Biology teacher.

As a person with some science training, the thing that disturbed me most about this SDEIS prepared by C and H for the NYSDEC is the paucity of scientific data. The report leaves the casual reader with serious doubt as to whether the report has assessed the safety of the landfill for either the ecosystem and its species or for the residents of this region.

Though there are many areas of concern, such as the distinctly weird and inappropriate suggestion that we declassify a NYS Principal aquifer instead of protect it (p. 3-13, 3-14), I have focused on the following areas of concerns: Contamination of mammals and birds within the food chain, Presence of Hazardous Waste in the Landfill, Weather safety considerations not discussed in the SDEIS, and Methane fuel preferred to composting.

I. Contamination of Wildlife

Request for Data:

We need **rodenticide records** of what, when and how much was applied. The landfill workers are required to keep these records and the public has a right to see them.

We need **tests of both rats (somehow not listed in the list of mammals surveyed on page 3- 55 -- why not?) and other mammals** if rodenticide has entered the food chain. In other sections of the state, the application of *rodenticides that use anti-coagulants can kill raptors* We are particularly worried about the welfare of the hawks that frequent the landfill for hunting and demand good tests to show if their food is contaminated and to at least test their feathers for heavy metal content. We are especially concerned about raptors that nest in or near the landfill and expansion area.

While we are testing for rodenticide contamination, we must be mindful that rodents (chipmunks, mice etc.) like to burrow and like to chew. Since there are household hazardous wastes in the landfill, what they are chewing on could be bringing hazardous materials into the food chain as well.

Page 3-59 (of the SDEIS) says The expansion area is "marginal habitat for Cooper and Sharp-Shinned hawks" and used for foraging. Anyone driving down Interstate 90 sees many hawks hunting and feeding in the landfill.

The SDEIS says that they use "adjunct, much higher quality habitats present in the Preserve" during migration or nesting season. Those nests in the adjacent areas should be

found, and the hawk feathers tested for contamination. We should similarly test crows for rodenticide poisoning as well as contamination by other contaminants in the landfill.

This is a description of the effects of rodenticide on raptors presented by the Hungry Owl Project:

"Commercial rodenticides contain an anti-coagulant ingredient called brodifacoum that causes accidental secondary poisoning when raptors consume rodents that have been poisoned. In studies in both California and New York, brodifacoum was found to account for 80% of the secondary poisonings by rodenticides. It is extremely dangerous to raptors through secondary exposure – eating a poisoned rodent….. ***Accidental or not, the death of raptors by use of rodenticides can be a federal offense under certain circumstances.***"

We would like to see the **2008 data regarding woodcock populations and whippoorwill populations (data was collected in the spring of 2008 by the Commission for a larger study that was then published—attachment *)** to accompany the 2006 data cited in the SDEIS(p. 3-59). Have these birds been surveyed near the expansion site? What is the data? If we need to do surveys in the relevant geographical areas, we should do those next spring.

All the species of the Pine Bush are negatively impacted by the removal of land from the preserve but we need to – by law – make sure that these rare birds are not impacted, rather than just say it, based on 2006 data, when field surveys were also done last spring.

II. The Presence of Hazardous Wastes in the Landfill

Request for Data:

The condition of Albany's landfill is a direct reflection of the state of recycling and household hazardous waste education in this region. We need accurate figures to show if we are meeting our goal of making sure no hazardous materials are stored in the landfill which has not been created to safely dispose of these items.

We want studies of landfill content to reveal the frequency of all of the items supposed to be collected on HHW day to calculate comparative frequency of hazardous waste in the landfill per month versus frequency of hazardous waste in the appropriate facility per month.

The list of items of we are tracking are as follows:

Aerosols
Ant Bait or Traps
Antifreeze
Artist Paints
Asbestos
(double bagged and wetted)

Auto Cleaning Products
Automotive Fluids
Automotive Paints
Lead/Acid Batteries
Battery Acid
Caustic and Acidic
Cleaners
Chemistry Sets
Drain Cleaners
Driveway Sealer
Flammable Caulks/Adhesives
Flammable Waxes/Abrasives
Garden Products
Gasoline
Propane Cylinders
Herbicides
Insecticides
Pesticides
Fertilizers
Household Cleaning Products
Lacquers
Lawn Care Products
Mineral Spirits
Mercury Filled Light bulbs
Motor Oil
Paint (Oil and Water)
Pet Supplies
Photographic Chemicals
Developers
Thinners
Fixers
Varnishes
Rodent Control Products (ironically)
Swimming Pool Chemicals
Computer Monitors/CPUs
Televisions

Because it is a long list, the effort to educate the public as to how to identify and correctly dispose of their household hazardous waste is a particularly challenging task. Currently, the City has barely begun to take on the task of effective public education.

We want a survey of diverse populations (sifted by zip code to ensure equal distribution of respondents) about their knowledge of household hazardous wastes such as: can they identify some, what they do with theirs, how do they change their motor oil and antifreeze and can they remember ever spilling these or dumping them in the sewer Respondents should be asked when is HH Waste Collection Day and whether they go there.

If HHW Collection Day is not utilized, the household should be given an open ended question in which they get to tell us if 1) they are aware of the dates 2) If they can attend the next one and 3) what might get in their way of participating in HHW collection times.

Currently people need the internet to find out about Household Hazardous Waste Day and they need a car and evenings free to actually go there. This process is prohibitive to

many people. To effectively address the problem, we need a door to door pick-up for Household Hazardous Wastes.

We want several specific positions created to address the Household Hazardous Waste program and the vast popular education campaign needed to address the problem and safeguard our groundwater and air quality.

It seems that the money for these projects might be generated from fines levied against industrial polluters, violators of solid waste or recycling policy, and other violators of state conservation law.

Priority should be given to preventing the presence of hazardous wastes in our landfill. We remember the outrage of New York State citizens against General Electric for inappropriate dumping of hazardous chemicals and we do not consent to allowing the city to be similarly negligent by failing to educate all city citizens and provide them with safe, convenient, local Household Hazardous Waste disposal options.

Education Needs:

We are fortunate to have a curriculum designed specifically for New York State which teaches watershed awareness and aspects of water science – Project WET.

In this book, projects inform students about the connections between our behavior and healthy waterways and engage students in activities that model these connections.

For example, in some parts of the country, young people have been labeling storm sewers with stencils and spray paint to point out the connection between individuals dumping motor oil or allowing fertilizer run-off to join the storm water and the eventuality of dead fish and dead creeks or streams. These efforts have been going on for decades but are not seen in this area of New York State.

Here in New York State, and particularly in less privileged communities, the important work of educating our children about household hazardous wastes and the threat they pose to the environment is not being accomplished. We must mandate that this get done; it fits within the science curriculum, particularly the 8th grade physical science curriculum. Because many students take Earth Science or Biology instead of the 8th grade General Science, this knowledge should also be covered in the 4th and 5th grade, alongside a general "reduce, reuse and recycle" unit.

Project WET holds teacher training sessions periodically. As an adjunct to specific trainers that go into the classroom, the training of classroom teachers is an important step to reaching household compliance in getting hazardous wastes out of the landfill.

Green Collar Jobs:

Reforming our recycling, recovery and reuse practice in local communities, in recycling and reuse depots and in "freecyle" programs, can create much needed green collar jobs – particularly in the field of recovering reusable items, thereby avoiding the energy costs and practical costs of recycling or disposal.

The Hazardous Household Waste study (requested above) should find out what supports for recycling and reuse would be helpful to communities. If programs to educate and encourage communities to recycle effectively and to collect hazardous wastes are built by the communities themselves with jobs created in the communities, they will be effective.

III. Weather considerations

We need to see specific information and data about the readiness of "the highest land feature in the area" (p. 3-1)-- currently 460 AMSL (average mean feet about sea level) and expected to reach 470 AMFSL soon)--to withstand the high winds and precipitation to which it is subject both in normal weather and in the extreme weather events that are becoming more and more common throughout the world as climate conditions change.

Currently, there is a tendency for bags to blow about, as well as contents of bags to get scattered. We respectfully notice that there was a tornado in the Catskills recently. Are the wind control mechanisms equal to those wind velocities?

Are the erosion control mechanisms which permit the landfill contents to remain in the appropriate area actually capable to withstand steep slope runoff in the incident storm conditions. In other areas of the country, steep slopes which have been denuded of trees have collapsed on to highways and towns in the wake of storms and floods. Is the dump vulnerable to that in some weather conditions? What investigative studies have been done to show that this mountainous landfill is safe in extreme weather or when weathered by mechanisms of erosion over time?

Soil Disturbance (which can be associated with erosion)

On page 3-11 the report recommends the importation of soils from other regions to the landfill – they will come from the Albany Pine Bush commission as well as Saratoga. I'd like to see an assessment of the impact on the Pine Bush and other areas of the soil removal. This is a disturbing proposition as the Pine Bush soil is especially vulnerable to erosion when disturbed. (It is for this reason that there has been a serious effort within the preserve to discourage dirt bikes and off trail hiking.)

In the SDEIS p. 3-11 says:

"A large amount of native soils will be required to complete all the components of the Habitat Plan. Since the plan will be phased over a number of years (throughout the life of

the proposed expansion), it is intended to obtain soils through other development activities within the Albany Pine Bush Preserve Study Area and beyond, including the sand plains in Saratoga County."

I am curious as to what development activities we expect to see within the Preserve.

These questions about weather and weathering at the landfill are not addressed in the SDEIS. But they are reasonable concerns and there should be some serious thinking about the safety of the landfill in storms.

IV. Composting versus methane fuel

Currently, Albany makes no attempt to compost kitchen waste or yard waste. *If we did compost, it would remove the source of methane that currently runs generators at the landfill.* The city has chosen to burn 80% of the methane it produces and release 20%.

20% is actually a lot when it comes to an extremely potent greenhouse gas.

This is on composting from EnviroZine:

Composting is an important way to recycle at home, at school and at work. It is estimated that about 45 percent of all waste produced could be composted! Composting not only helps to reduce the amount of waste going to landfills, it can help reduce the amount of methane emissions attributed to them. If disposed in landfills, these materials decompose anaerobically and produce methane. ***By composting these materials, they are diverted from landfill and do not contribute to methane generation. Landfill sites account for about 38 per cent of Canada's total methane emissions. Methane is 20 times more potent as a greenhouse gas than carbon dioxide.***
(EnviroZine, Environment Canada, 70 Crémazie Street, 7th FloorGatineau, Quebec K1A 0H3)

The composting of plant wastes is the process that mimics what undisturbed natural systems do with organic products. When we can, allowing natural organic molecules to return to the soil is a sustainable system, generating methane is not.

Conclusion:

The plans for expansion are not a conservative option. They place more risk in the same fragile ecosystem that is over a Principal Aquifer and which is already facing tremendous risks from previous dumping.

It's time to seriously address reducing the quantity of the waste, which the City of Albany has failed to do through inadequate recycling and household hazardous waste programs and through nearly nonexistent education programs. The City of Albany has totally

failed to reach into the communities which are chronically noncompliant with basic recycling practice and educate them. The City of Albany has failed to enforce recycling practice amongst apartment complexes.

The City of Albany has made its household hazardous waste day information inaccessible to most citizens by its failure to conduct a public education campaign and its demand that people drive to a facility on their own time rather than come and pick up their hazardous waste. The city has been consistent in its refusal to include citizens who do not have cars, do not have internet, do not have evening hours free and/or are not aware of the problem.

The City of Albany has failed to create a composting program which would eliminate the production of methane. Instead, they release 20% of the methane they produce and burn the rest. This is ecologically unsustainable and particularly objectionable ***methane is 20 times more potent as a greenhouse gas than carbon dioxide.***

The City of Albany's Landfill is costly, environmentally unsustainable, dangerous to wildlife and not in the spirit of the healthier solid waste plan goals being proposed by the NYS DEC.

For all these reasons, it is time to wave goodbye to the Albany Landfill now, and not continue this disaster into the future through this expansion or any more like it.

Comments Regarding the proposal to expand the current Rapp Road Landfill

Submitted by:
Gary Powell
3311 Old State Rd
Schenectady NY 12303

The New York State Department of Environmental Conservation should NOT approve any expansion of the Rapp Road facility based on the following:

Odor / Impact on the Health and Safety of the Community
When the atmospheric conditions are right, the landfill odor can be detected at my home in Guilderland. I have often seen that the landfill is not getting proper daily cover and resulting in terrific odors. I do not believe NYSDEC has adequately considered the health impact of the various odor causing species or look in detail at all of the components of the fugitive emissions. Expansion of the landfill will make this situation worse.

Impact on Wildlife
The operation of the landfill currently results in the migration of many scavenger species into the surrounding community. Crows and gulls are becoming problematic in the area near my home. This situation can only get worse with the proposed expansion.

Visual Pollution
The welcoming view on entering our gateway to the Adirondacks is a steaming heap of "Mount Jennings". This is not the right image for the capital of New York State. Piling garbage higher and deeper will not help.

Environmental Justice
I do not believe NYSDEC has adequately considered the relative impact of the expansion on those not receiving any benefit from the operation.

Lack of adequate consideration of Alternatives
Albany views the landfill as a revenue stream versus a depleting environmental resource. Albany should consider dramatically increasing the dump fees for the existing landfill (2X to 5X current rates). This will encourage conservation (recycle and waste minimization) as well as the development of greener alternatives to landfill. It will also provide the resources to properly operate the current facility and close it properly.

In summary, NYSDEC should not approve or even consider any expansion of the current Rapp Rd Facility.

From: "George R. Robinson" <grobins@csc.albany.edu>
To: <r4dep@gw.dec.state.ny.us>
CC: <chawver@tnc.org>, <mob02@health.state.ny.us>
Date: 12/10/2008 8:53 AM
Subject: Comment on Albany Landfill Expansion permits

Angelo Marcuccio, Environmental Analyst
NYS DEC Region 4 Headquarters
1130 N Westcott Rd
Schenectady, NY 12306

Dear Mr. Marcuccio,

This letter pertains to the pending permits for expansion of the Albany Landfill. I have read through many of the documents pursuant to this matter, and I attended the December 3 public hearing. I wish to comment on three matters, (1) the newly prepared Solid Waste Management Plan for the ANSWERS participants, (2) the inadvisability of further enlarging the landfill from an educator's perspective, and (3) the proposed post-closure restoration plan submitted and presented at the public hearing.

First, I am grateful to see that this permitting process has led to a long-overdue SWMP for the region, and I thank you and your colleagues for your role in prompting this effort. As a co-leader of UAlbany's Task Force on Environmental Sustainability, I help to plan and oversee our recycling and other waste management programs, responsibilities that we take very seriously. We look forward to working with the City of Albany (the recipient of our campus' sanitary waste) to improve our waste stream management.

Second, as an educator who brings college students to the Albany Pine Bush for field trips and research exercises, I must say that the Albany Landfill has become increasingly intrusive. Its size has already made it the tallest landform in the Preserve, and it now stands out as the most dominant visible scar on the landscape. While it is useful to explain to students where their trash ends up, I was able to do that 15 years ago, when the landfill was much smaller. Also far more noticeable at this time is the noise associated with pest bird management. It was most apparent this past fall, when the incessant blasts interfered with our field trip experience. Enlarging the landfill will only make things worse.

Third, I begin by noting that I have had considerable experience in the field of landfill restoration, and I have included a list of some pertinent publications as evidence below. Much of my research was conducted at the Fresh Kills Landfill on Staten Island, which was highlighted during your pubic hearing as an example of successful integration of a closed landfill into a natural landscape. Dr. Apfelbaum, representing the City of Albany's professional consultants, is quite knowledgeable in the field of ecological restoration, but his portrayal left out many of the lessons we learned and the problems encountered by us and other researchers. Among the challenges to establishing native vegetation on closed landfills are steep slopes (dry above, wet below); continuous erosion problems; weedy plant invasions; poor soils; variable soil depth composition, pH, and nutrients; exposure to harsh winds; settlement with decomposition; and landfill gases escaping into growth zones. None of these problems is necessarily insurmountable, but the few small tests I have observed at the Albany Landfill have been insufficient to identify, much less address them.

In my professional opinion, a more convincing restoration plan needs to be in place for the entire Albany Landfill (including older sections) before proceeding. Furthermore, if expansion is approved, I strongly concur with the request made by Chris Hawver, Albany Pine Bush Preserve Commission Director, at the public hearing. Mr. Hawver asked for a bonded commitment from the City of Albany to a fully effective post-closure restoration, befitting the world-class nature preserve surrounding the landfill. I would add that any such restoration plan should be carefully vetted through advanced testing and scientific scrutiny.

Thank you for the opportunity to send these comments.

Sincerely,

George Robinson
Associate Professor
Department of Biological Sciences
State University of New York at Albany
1400 Washington Avenue
Albany, NY 12222-0001
518-442-4302
FAX 518-442-4767
grobins@albany.edu

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Publications relevant to landfill restoration:

Robinson, G.R., and Handel, S.N. 1991-92. Reports on experimental studies to revegetate the Fresh Kills Landfill, New York City Dept. of Sanitation, and New York State Dept. of Environmental Conservation.

Robinson, G.R., Handel, S.N., and Schmalhofer, V.R. 1992. Survival, reproduction and recruitment of woody plants after fourteen years on a forested landfill. Environmental Management 16: 265-271.

Robinson, G.R., and Handel, S.N. 1993 Forest restoration on a closed landfill: Rapid addition of new species by bird dispersal. Conservation Biology 7: 271-278. Reprinted in Readings from Conservation Biology, Wildlife and Forests, 1995, Blackwell.

Handel, S.N., G.R. Robinson, W.F.J. Parsons, and J.H. Mattei. 1994. Interaction of woody plant roots with capped landfills: A review of root dynamics and experimental data. Report to NY City Dept. of Sanitation, and NY State Dept. of Environmental Conservation.

Robinson, G.R. and Handel, S.N. 1995. Woody plant roots fail to penetrate a clay landfill liner: Management implications. Environmental Management 19: 57-64.

Robinson, G.R., and R.J. Gill. 1996. Summary of field research on ecological effects of the Albany Landfill. Report to the Albany Pine Bush Commission, 4/96.

Handel, S.N., Robinson, G.R., Parsons, W.F., and Mattei, J.H. 1997. Restoration of woody plants to capped landfills: Root dynamics in engineered soils. Restoration Ecology 5: 178-186.

Robinson, G.R. and Handel, S.N. 2000. Directing spatial patterns of recruitment in an urban woodland restoration. Ecological Applications 10:174-188.

Robinson, G.R., S.N. Handel, and J.H. Mattei. 2002. Experimental Techniques for Evaluating the Success of Restoration Projects. Korean Journal of Ecology 25: 1-7.

Mattei, J.H., S.N. Handel, and G.R. Robinson. 2003. Limitations of introducing woody plants by direct seeding to landfill restoration sites. Ecological Restoration 21: 62-63.

Comments of Tom Scarff

IF THE COMPTROLLERS REPORT IS ACCURATE THIS EXPANSION SHOULD ABSOLUTELY BE REJECTED. WE WILL INCREASE THE LONG-TERM DEBT FOR A SIX YEAR GAIN OF APPROX 2 MILLION A YEAR.

THIS AMOUNTS TO PUTTING A BANDAID ON A SEVERED ARTERY. THE BLOOD IS GUSHING OUT OF THE CITY BANK ACCOUNTS AND WE ARE RUNNING AROUND THE EMERGENCY ROOM LIKE THE 3 STOOGES.

CAN ANYONE ANSWER HOW MUCH MONEY HAS BEEN SPENT ON THE COEYMANS LADFILL ALTERNATIVE PROJECT? THIS PROJECT WAS VIABLE AND COULD HAVE BEEN THE ANSWER TO OUR PROBLEM.

IT SEEMS THAT THE MESSAGE IN THIS CITY FOR SO MANY OF OUR PROBLEMS IS TO BE REACTIVE RATHER THAN PROACTIVE. WE HAVE KNOWN FOR HOW MANY YEARS THAT THIS DAY WAS GOING TO ARRIVE. A DAY WHEN WE WOULD BE FACED WITH A CONUNDRUM OF THE HIGHEST LEVEL.

TO EXPAND THE LANDFILL WILL BE A MEASURE TOWARD ERRADICATING THE PINE BUSH ENVIRNMENT AS WE KNOW IT.

IN 1993 THEN ALDERMAN JENNINGS WAS AWARDED THE OUTSTANDING LEGISLATOR AWARD FOR HIS COMMITMENT TO SAVING THE SANCTITY AND BEAUTY OF THE PINE BUSH. HE HAD A STEADFAST COMMITMENT TO PROTECTING THE KARNER BLUE BUTTERFLY.

WHAT A DIFFERENCE 15 YEARS WILL MAKE IN A PERSON'S STANDARDS AND ETHICS.
IN ADDITION TO THE DESTRUCTION OF THE ENVIRONMENT IN THE PINE BUSH, THIS PROPOSED EXPANSION WILL PUT OUR ALTERNATIVE WATER SOURCE AT RISK BY WEIGHING GARBAGE INTO THE AQUIFUR.
OUR NATURAL RESOURCES SHOULD NEVER BE COMPROMISED AND I STRONGLY SUGGEST THAT THE DEC REJECT THIS PROPOSED EXPANSION.

Bert Schoen
11 Norwood St
Albany NY
221 8693
bert.090355@gmail.com

12-3-04

When reviewing the newest landfill expansion approval, serious consideration should be given to the impact of the Public Health Safety and Welfare since the last expansion.

I have read some of the complaints by local citizens, workers/businesses and travelers and encourage those persons making the final decision for this approval to read them as well. Their anger and frustration cannot be ignored. The impact on the quality of life for the nearby residents was negatively impacted for years, some complained they were not just offended by the odors affecting their daily lives, but sickened. Fines were issued but this will not replace the loss of use of private property, loss of sleep, sick leave used or lost businesses when the stench was high. Nor, will it replace the loss of use of the neighborhood park by some. One complaint was by a very agitated man who showed up in his pajamas at the gate, I could only imagine how often and how offensive the odor was.

While I live east of Fuller Road and often times could smell the dump, especially at night, on one occasion I woke up thinking there was a gas leak in the house before I realized it was coming from outside. Some have had similar experiences calling both the Fire Department and/or Niagara Mohawk. These instances often required emergency review, I wonder what the total economic cost was to the public, businesses, fire/police department and utility company. A local daycare complained of lost business due to the frequent offensive odors. The list could go on and on. The sad part is that this stench often reaching past Central Avenue, Fuller Road, Western Avenue and Rt 155 went on for years. While violations were issued, what impact on our health and quality of life would have been required for the Permit expansion to be revoked. When the odors were high, thousands were likely impacted daily, and I am not counting the through travelers on the Northway or Thruway.

Second.

The proposed expansion will continue to negatively impact our water resources. The groundwater table at the expansion site is either at (wetlands) or within 2 feet of the surface. Further, this site sits over a Principle Aquifer and the expansion requires a variance from the very regulation to protect our valuable water resources. 6 NYCRR 360-2.12©(1) prohibits siting a landfill over a primary water supply aquifer or principal aquifer. Since 1995.

For the last expansion, the DEC granted the variance based on the City's economic hardship, that the public health safety and welfare would not be impacted, public water supplies were not existent nearby, and since the double liner system would be sufficient to protect the aquifer. Ironically, the comments by DEC during creation of this regulation stated that a double liner would not be sufficient over an aquifer. Since the last expansion, there have been a number of liner leaks resulting in greater than allowable gallons of leachates per day into the secondary layer, and there were pump failures that went on for months. It seems the original DEC position was correct.

With the groundwater at or so close to the surface and the years of impact on the public health safety and welfare, it is inconceivable that another variance can be approved. Further, the same year that the Save-the-Pine Bush lost its appeal for the last expansion, the City of Albany sold the water rights to Rensselaer Lake (located across the street), to the Water Authority for $7 million dollars as an emergency backup supply. This was not only post 911 but after the Normanksill landside almost took out the City's main water line. Why did this transaction not impact the Aquifer Variance?

Further, there is already a plume of contaminated groundwater from the older unlined section of the landfill, the groundwater and surface water flows eastward toward Rensselaer Lake. A SUNY study of the Patroon Creek shows a leachate indictor at the southern tributary which leads to a culvert under Rapp Road. Further water studies are needed. REFER TO 1. PART OF STUDY

Although, what will be the outcome I do not know. But based on the last expansions much touted Environmental Benefit, a Feasibility Study to investigate this plume, resulted in a NO action recommendation, largely due to the cleanup costs. Would this be the same answer were the groundwater near the proposed expansion contaminated by leachate leaks? If clean-up required, would the City even have the fiscal resources for cleanup?

These issues, together with the loss of wetlands, wildlife, the Pine Bush Preserve and Karner Blue Butterfly, please protect our natural resources by not approving the application for the landfill expansion

From: "Linda Schroll" <LSCHROLL@nycap.rr.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/8/2008 7:12 PM
Subject: Fw: Landfill smells

Mr. Marcuccio: Tom Ellis suggested I forward my comments below to you concerning the Rapp Road Landfill. I hope you an include my comments in your considerations. Linda Schroll

----- Original Message -----
From: Tom Ellis <tellis@cectoxic.org>
To: Linda Schroll <LSCHROLL@nycap.rr.com>; <lynnejackson@mac.com>
Sent: Monday, December 08, 2008 3:48 PM
Subject: Re: Landfill smells

> Hi Linda,
>
> I am sorry the fumes are so bad. I agree that if Jennings had to smell it like you do, he would put a stop to it.
>
> Please forward this comment to the DEC by Friday. Thanks.
>
> Tom Ellis
>
> -----Original Message-----
> >From: Linda Schroll <LSCHROLL@nycap.rr.com>
> >Sent: Dec 3, 2008 12:22 PM
> >To: lynnejackson@mac.com, tellis@cectoxic.org
> >Subject: Landfill smells
> >
> >Dear Lynne and Tom: I'm writing today in support of your efforts to prevent
> >expansion of the landfill and put a stop to those horrible smells it
> >creates. It was a welcome sight to receive your notice on my door - knowing
> >that someone/organization realizes the horrible impact of these odors and
> >all that goes along with them. It was several years ago that I had my first
> >experience with the toxic odors. It was alarming because it smelled like a
> >gas leak and I didn't know if I should call the fire dept. I live at 18
> >Westmere Terrace and my backyard abutts to the Westmere Fire Dept. back
> >field lot. I decided to wait and see if the smell got worse - and then
> >after a couple of days, I realized it was a smell that was carried by the
> >wind. It was the time of the year where you would have your doors and
> >windows closed but would go out for a walk during the day or early evening.
> >Well, the smell was sooooo bad that you didn't want to go outside and
> >sometimes in the evening or very early morning, the smell would permeate
> >through the windows - it was awful. Then a few weeks later, I read in the
> >paper that this landfill odor was an issue and then I knew what the smell
> >was and where it was coming from. Since then I have read that measures have
> >been taken to eliminate or control the smell - and it hasn't been so bad
> >lately (at least it doesn't gag you), but nonetheless, it does require that

> >you close your doors and windows. It's a serious matter of quality of life
> >and maintaining the value of our residential neighborhoods. If Mayor
> >Jennings had to live this with condition, you could be sure he would put a
> >stop to it very quickly. I don't know what has happened to common sense.
> >Why should we have to put up with a deteriorating quality of life so the
> >mayor can balance his budget? And why would he expects us to? While I'm
> >not an active environmentalist, I can appreciate the common sense issues
> >involved with this request to expand the landfill. If this expansion is
> >approved, he(or his successor) will be back again to request more land and
> >it will go on and on until the Pine Bush is totally eliminated. This is
> >very wrong at so many levels. I will try to attend the meeting tonight to
> >show my support. Thank you so much for what you are doing. So many of us
> >who have no real voice are very grateful. Linda Schroll
> >
>

From: "Timothy C. Skinner" <tskinner@nycap.rr.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/2/2008 10:58 PM
Subject: Rapp Road Landfill

Mr. Angelo Marcuccio,

Please make sure the Rapp Road Landfill is not expanded. Visitors to Albany who come down the Northway or through exit 24 on the Thruway are already welcomed by horrible smells and views of the dump. Some days it can be smelled miles away in Colonie and Guilderland. Can't we find a better, more modern way to dispose of our garbage? Can't we do a better job of recycling?

Please stop the expansion.

Tim Skinner

Albany

From: patrick sorsby <patsorsby@hotmail.com>
To: <r4dep@gw.dec.state.ny.us>
Date: 12/11/2008 11:39 AM
Subject: Re: May comments be e-mailed to this e-mail by the 15th?

Dear Mr. Angelo, Can we e-mail comments about the proposed albany landfill expansion. If so I assume they will be made apart of the record. Lastly I agree with Attorney Henner in that the given time frame for comment is inadequate. I know that a lions share of the comments you will receive are from members of Save the Pine bush and residents near the dump. HOWEVER, as I am an avid runner, a University at Albany and Albany Law alumni, I feel given more time there are more diverse voices that could and should be brought into this debate. Presently I am working to get letters from the HMRRC and Albany running exchange in opposition to the expansion. A strong argument for an extention to the comment period is the fact that the City has of its volition introduced a new alternative to the expansion of landfill. This new alternative (a pay-as-you throw program in the city of Albany) has introduced an entirely new issue to the landfill expansion debate. Namely the issue is whether or not a pay-as-you throw program could generate revenue sufficient to eliminate the need for importing waste to the Rapp road landfill. If the answer to this question is yes than the annual waste intake at Rapp road would shrink by a minimum of 50% to 80% which would extend the maximum capacity date from the end of 2009 to somewhere between the end of 2010 and the end of 2017. Thus the city of its own accord within the last couple of months has introduced as part of its revised application a completely new alternative that has significant tax implications and which ironically may in fact eliminate the need for expansion at all.

Therefore as matter of fundamental fairness and sound deliberation it is imperative that the DEC extend the comment period so that public may adequately weigh and respond to the citys' new alternative to landfill expansion.

Sincerely,

Patrick Sorsby

From: patrick sorsby <patsorsby@hotmail.com>
To: dec <r4dep@gw.dec.state.ny.us>
Date: 12/15/2008 10:27 PM
Subject: Comments on Land fill expansion

Patrick Sorsby
71 Cottage avenue
Albany NY 12203

Mr. Angelo,
Last week I e-mailed you inquiring as to wether or not e-mailed comments would be made apart of the record.

As I recieved no response I assume they are. Therefore my opposition to the proposed expansion of the landfill below.

A little backgorund first. I commented on the record at the hearing so this e-mailed letter of opposition is in part affirmation of that and a little more.

I am a recent garduate of Albany Law School and I am aquiring my MBA from the University at Albany.

This is important because I intend very soon to marshal and organize my allumni to open a new front on this controversy not only to appose but to offer alternative. I also am a member of two large running groups that use the pine bush and I am working to get them involved in this debate.

For too long one group has had to shoulder the battle to protect the gem of New york States ecosystem.
I intend to change that. So though not an expert on this issue my arguments are below.

Arguments

1. The DEC cannot grant a landfill permit to build over an aquifer. The regulations cannot be any more clear. Ironically under the proposed landfill expansion there is anaquifer.

2.The City is pleading with the DEC for an expansion because it needs 6 years for Coeymans to come online.
Yet they have no assurances from the core of engineers that thier proposed wetland remediations. Which leads me to point 3.

3. The city has put all of its eggs in one basket namely site C2. Are there really no brownfield sites available. I mean as between an endangered ecosystem and a brownfield which is better landfill site.
The point is the city failed in excercising due diligence for the last years by not lining up back up sites in case site C2 failed. Now the City is asking the DEC inspite of this irresponsibility to provide a stop gap measure so that Coeymans site can come online and so that they can simultaneously pursue the alternative site that they Identified so that in six years we wont need another expansion.... Oh wait a minute. Sorry the city did not learn from its past derilection and actually failed again to identify any alternative to site C2.

4. It would be one thing if the city had learned from its past mistakes and this time ensured that this would be the last expansion by at least indentifing alternative sites to site C2. Do you not wonder what the city plans to do if the core of engineers rejects the city's remedial plan for C2. Well if they havent identified other viable sites they will have no choice but to come back to the DEC for another expansion. It seems quite irresponsible for the city to point a figurative gun to your head cryning we need an expansion now to give us time to prepare for the future but than dont actually plan for the future in a responsible way.
Its a lot like the auto industry asking for billions before submitting a plan to become competitive.

5. The citys application actually offers a short term solution that eliminates the need for the proposed expansion. Thats right the city has offered a pay-as-you-throw program which would make up the lost revenue from not excepting garbage from outside the capital district. Based on the citys own revised application it is clear that city could eliminate the need for expansion by merely accepting only refuse from the capital district and charging city residents $2.00 a bag. This may be the first DEC application where the applicant has asked for a landfill permit after demonstrating that in point of fact there is no need for one.
Bizarre indeed!

Based on the arguments above and all of the environmental and human health arguments made at the hearing I believe as follows.

The proposed expansion should be denied indefinitely but in the worst case alternative (and I mean that) I propose that the application be denied until such time that the city submits a revised application that includes detailed plans to open a waste facility at alternative sites other than the C2 site.

Sincerely,

Patrick Sorsby

From: patsorsby@hotmail.comTo: r4dep@gw.dec.state.ny.usSubject: Re: May comments be e-mailed to this e-mail by the 15th?Date: Thu, 11 Dec 2008 16:39:01 +0000

Dear Mr. Angelo, Can we e-mail comments about the proposed albany landfill expansion. If so I assume they will be made apart of the record. Lastly I agree with Attorney Henner in that the given time frame for comment is inadequate. I know that a lions share of the comments you will receive are from members of Save the Pine bush and residents near the dump. HOWEVER, as I am an avid runner, a University at Albany and Albany Law alumni, I feel given more time there are more diverse voices that could and should be brought into this debate. Presently I am working to get letters from the HMRRC and Albany running exchange in opposition to the expansion. A strong argument for an extention to the comment period is the fact that the City has of its volition introduced a new alternative to the expansion of landfill. This new alternative (a pay-as-you throw program in the city of Albany) has introduced an entirely new issue to the landfill expansion debate. Namely the issue is whether or not a pay-as-you throw program could generate revenue sufficient to eliminate the need for importing waste to the Rapp road landfill. If the answer to this question is yes than the annual waste intake at Rapp road would shrink by a minimum of 50% to 80% which would extend the maximum capacity date from the end of 2009 to somewhere between the end of 2010 and the end of 2017. Thus the city of its own accord within the last couple of months has introduced as part of its revised application a completely new alternative that has significant tax implications and which ironically may in fact eliminate the need for expansion at all. Therefore as matter of fundamental fairness and sound deliberation it is imperative that the DEC extend the comment period so that public may adequately weigh and respond to the citys' new alternative to landfill expansion. Sincerely, Patrick Sorsby

Comments on Rapp Road Landfill Expansin Permit Aplication.txt

From: James Travers <jatrav@yahoo.com>
To: Andy Marcuccio <aamarcuc@gw.dec.state.ny.us>
CC: <r4dep@gw.dec.state.ny.us>
Date: 12/19/2008 12:00 PM
Subject: Comments on Rapp Road Landfill Expansin Permit Aplication
Attachments: AnswersGEISExecutiveSummary by Malcom Pirnie August 1990.pdf; Misleading In
formation 95001.pdf; Misleading Information 95002.pdf; Misleading Informati
on ANSWERS Consortium Communities Map004.pdf; INFORMATION BULLETIN City of
Albany Rapp Road Landfill Expansion January 2006.wps; Information Bulletin
Long Range Siting Process ANSWERS Solid Waste Management Planning Unit Janu
ary 2006.wps; city-mitigates-odor-problem.pdf; TU Article 7-25-95 Albany Ha
s Dim View of Rensselaer Dump001.pdf; ATSDR Health Studies Related to Landf
ill Gas Exposures.wps; 40CFR258.12 - Page 396 - 397 MSW Landdfills Location
Restrictions - Wetlands.wps; TU Article 1-18-08 Keeping landfill option op
en.wps; Albany%20Landfill%20Report%20Comptroller[1].pdf; Angelo A Marcuccio
.doc

Angelo A Marcuccio
NYSDEC Region 4 Headquarters
1130 North Westcott Rd
Schenectady, NY 12306
(518)357-2069
r4dep@gw.dec.state.ny.us

Dear Mr. Marcuccio,

Please find attached my further comments, in addition to those given at the Dec. 3 Legislative Hearing, regarding permit application number 4-0101-00171/00011 which was submitted by the City of Albany seeking DEC approval for the modification of their existing municipal solid waste management permit for the expansion of their Rapp Road Landfill.

As indicated in the opening of the attached comments, which has been taken from the notice of completed application as published in the Environmental Notice Bulletin on October 22, 2008, the proposed expansion involves a modification to the landfill'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); and a SPDES Stormwater permit for construction related activities.

Jim Travers

Angelo A Marcuccio
NYSDEC Region 4 Headquarters
1130 North Westcott Rd
Schenectady, NY 12306
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Re:

http://www.dec.ny.gov/enb/20081022_reg4.html#401010017100011

Albany County

Applicant:

City of Albany
City Hall
24 Eagle St
Albany, NY 12207

Facility:

Albany Landfill
Rapp Rd
Albany, NY 12205

Application ID:

4-0101-00171/00011

Permit(s) Applied for:

Article 19 Air Title V Facility
Article 24 Freshwater Wetlands
Article 27 Title 7 Solid Waste Management
Section 401 - Clean Water Act Water Quality Certification

Project is Located:

Albany, Albany County

Project Description:

The City of Albany proposes a modification to its current 6NYCRR Part 360 landfill permit to allow for an expansion of its interim landfill operations at the Rapp Road facility onto City-owned lands located east of the existing landfill. The proposed expansion, commonly referred to as the "Eastern Expansion," will allow the City 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.

The main components of the landfill expansion include a landfill liner system, leachate collection and removal system and a landfill gas control system. The Eastern Expansion of the landfill involves an overfill of approximately 23 acres of the existing landfill and a lateral expansion of approximately 15 acres that includes 2 acres within the existing landfill operations area (disturbed/developed lands) and 13 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 proposed expansion would have a project capacity of approximately two million tons and is projected to extend the life of the current landfill for approximately 6.5 years.

The expansion would require the direct filling 5.05 acres of wetlands and an additional 4.06 acres of wetlands would be regraded as part of the overall wetland mitigation and restoration plan. The mitigation plan for the wetland impacts will involve the creation of 22.14 acres of new wetlands in areas that are currently uplands. An additional 27.45 acres of existing wetlands would be enhanced in quality and function.

The proposed expansion involves a modification to the landfill'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); and a SPDES Stormwater permit for

construction related activities.

Public Legislative Hearing: A legislative public comment hearing will be held on Wednesday, December 3, 2008, commencing at 7:00 p.m. at the Polish Community Center, Washington Avenue Extension, Albany. All persons having an interest in this project are urged to attend or be represented either individually or collectively and provide verbal comments on the pending applications.

This hearing location is reasonably accessible to persons with a mobility impairment. Interpreter services may also be made available to deaf persons, at no charge, upon written request to the DEC Contact Person named below, no less than 10 days prior to the hearing, pursuant to SAPA § 202(1).

Following the hearing, the Department will make a determination on whether substantive or significant issues have been raised as defined in 6NYCRR Part 621 Uniform Procedures and whether an Adjudicatory Hearing Issues Conference should be scheduled before an Administrative Law Judge. In order to raise substantive and significant issues written comments expressing objections to or opposition to the application must explain the basis of that opposition and identify the specific grounds which could lead the Department to deny or impose significant permit conditions on the project.

Availability of Documents: The Department has prepared a draft Air Title V permit which may be reviewed, along with the Supplement Draft Environmental Impact Statement, and supporting documentation, at the locations listed below during normal business hours:
City of Albany, Office of General Services, 1 Connors Blvd., Albany, NY 12205 City of Albany, Main Library, 161 Washington Ave., Albany, NY 12210 Town of Colonie - William K. Sanford Library, 629 Albany-Shaker Road, Loudonville, NY 12211 NYS DEC Region 4 Office, 1130 North Westcott Road, Schenectady, NY 12306
In addition, the documents are posted on the world wide web for accessibility by interested parties on the Capital Region Solid Waste Management Partnership website at: http://www.capitalregionlandfill.com

Opportunity for Public Comment: Written comments may be submitted to the DEC Region 4 office E-mail address at: r4dep@gw.dec.state.ny.us or to the Region 4 office address listed in this notice. All comments should be addressed to the attention of the DEC Contact person listed in this Notice and must be received by DEC no later than Close of Business (4:45 p.m.) on December 15, 2008. Comments should include specific information relative to the project.

Availability of Application Documents:

Filed application documents, and Department draft permits where applicable, are available for inspection during normal business hours at the address of the contact person. To ensure timely service at the time of inspection, it is recommended that an appointment be made with the contact person.

State Environmental Quality Review (SEQR) Determination:

A draft environmental impact statement has been prepared on this project and is on file.

SEQR Lead Agency: NYS Department of Environmental Conservation

State Historic Preservation Act (SHPA) Determination:

A cultural resources survey has been completed. Based on information provided in the survey report, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has determined that the proposed activity will have no impact on registered or eligible archaeological sites or historic structures. No further review in accordance with SHPA is required.

Coastal Management:

This project is not located in a Coastal Management area and is not subject to the Waterfront Revitalization and Coastal Resources Act.

Opportunity for Public Comment:

Comments on this project must be submitted in writing to the Contact Person no later than *Dec 15, 2008*.

Contact:

Angelo A Marcuccio
NYSDEC Region 4 Headquarters
1130 North Westcott Rd
Schenectady, NY 12306
(518)357-2069

r4dep@gw.dec.state.ny.us

Dear Mr. Marcuccio,

Please find herein my comments regarding permit application number 4-0101-00171/00011 which was submitted by the City of Albany seeking DEC approval for the modification of their existing municipal solid waste management permit for the expansion of their Rapp Road Landfill. As indicated above, which has been taken from the notice of completed application as published in the Environmental Notice Bulletin on October 22, 2008, the proposed expansion involves a modification to the landfill'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); and a SPDES Stormwater permit for construction related activities.

First and foremost, DEC must reject and deny this application because it is incomplete. Secondly, because this application requires intrusion into sensitive wetlands in violation of CFR 258.12 (attached) and because it runs contrary to the "No Net Loss" (of wetlands) policy of the EPA it must not be allowed. A lateral expansion of the existing Rapp Road Landfill, which requires the destruction of existing wetlands, will surely discharge both treated and untreated leachate into Albany's nearby and virtually contiguous emergency water supply.

This area is also known to contain many endangered species.

In the past DEC has permitted several expansions of this landfill which is located above a principal aquifer in clear violation of 6 NYCRR Part 360 2.12 (c) without the applicant meeting all of the exclusionary requirements. Another expansion cannot be permitted. Again the City has not met the exclusionary conditions as set forth in subsection 2.12. No Stability studies are included in the application and other nearby capacity is available for the city's waste disposal. (See attached Albany Times Union article dated 1-18-08 "Keeping landfill option open") The City's application doesn't mention or explore the potential for utilizing this fully operational permitted Northumberland landfill.

The City has been fined by the DEC for violations of its Title V air permit and I

contend that after trying several technologies and expending well in excess of one million dollars, the City is still unable to control the odors, which are known to contain toxic chemical components dangerous to Human Health. (See attached ASTDR document relating to various health studies of individuals living in close proximity to landfills, particularly #3 "**Study of Cancer Incidences Surrounding Municipal Solid Waste Landfills, New York State"**)

Regarding Recycling, the city has done relatively little to enhance its most basic existing program and has until after the submission this most recent application has not provided the public with much education about recycling or waste reduction. As early as 1990, the date of the attached Malcom Pirnie report, Albany has continually ignored or done as little as possible to comply with DEC rules regarding recycling. Even after receiving over the past few years grants of nearly $200,000, the only thing the citizens of Albany have been offered is on optional "green bin" if they choose to request one.

As far as financial hardship is concerned, the City has created it's own situation. Some time ago the City offered major haulers a much less costly tipping fee than its ANSWERS members, who dump more than twice the waste of Albany and the member communities combined.

In fact the City's goal has continually run contrary to DEC's goal of Waste Reduction. The City has done everything in its power to increase the intake of garbage at Rapp Road since the last expansion, seeking and being granted increases in Daily Tonnages permitted and by extending their days of operation.

There has been no accounting as to why the landfill has been filled six years earlier than their consultants and DEC predicted it was to last. According to former City of Albany Comptroller Nitido, the City nets approximately three million dollars a year from landfill derived revenue. When the more than two million dollars waste collection services fees are tallied onto this, their profit becomes barely negligible.

Please deny this application. The Planning Unit communities have not been in compliance with the required recycling regulations as set forth by DEC in their MSW Planning Unit Plan guidelines.

Thank You.

Sincerely,

James Travers

587 Blodgett Hill Road

Ravena, New York 12143
518-756-7591
jatrav@yahoo.com

[Code of Federal Regulations]
[Title 40, Volume 22]
[Revised as of July 1, 2003]
From the U.S. Government Printing Office via GPO Access
[CITE: 40CFR258.12]

TITLE 40--PROTECTION OF ENVIRONMENT

CHAPTER I--ENVIRONMENTAL PROTECTION AGENCY (CONTINUED)

PART 258--CRITERIA FOR MUNICIPAL SOLID WASTE LANDFILLS--Table of Contents

Subpart B--Location Restrictions

Sec. 258.12 Wetlands.

(a) New MSWLF units and lateral expansions shall not be located in wetlands, unless the owner or operator can make the following demonstrations to the Director of an approved State:

(1) Where applicable under section 404 of the Clean Water Act or applicable State wetlands laws, the presumption that practicable alternative to the proposed landfill is available which does not involve wetlands is clearly rebutted;

(2) The construction and operation of the MSWLF unit will not:

(i) Cause or contribute to violations of any applicable State water quality standard,

(ii) Violate any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act,

(iii) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973, And

(iv) Violate any requirement under the Marine Protection, Research, and Sanctuaries Act of 1972 for the protection of a marine sanctuary;

(3) The MSWLF unit will not cause or contribute to significant degradation of wetlands. The owner or operator must demonstrate the integrity of the MSWLF unit and its ability to protect ecological resources by addressing the following factors:

(i) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the MSWLF unit;

(ii) Erosion, stability, and migration potential of dredged and fill materials used to support the MSWLF unit;

(iii) The volume and chemical nature of the waste managed in the MSWLF unit;

(iv) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of the solid waste;

(v) The potential effects of catastrophic release of waste to the wetland and the resulting impacts on the environment; and

(vi) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

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(4) To the extent required under section 404 of the Clean Water Act or applicable State wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent practicable as required by paragraph (a)(1) of this section, then minimizing unavoidable impacts to the maximum extent practicable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and practicable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

(5) Sufficient information is available to make a reasonable determination with respect to these demonstrations.

(b) For purposes of this section, wetlands means those areas that are defined in 40 CFR 232.2(r).

RAPP ROAD LANDFILL 2007 FINANCIAL REVIEW	Projected 1/1/-12/31/07	Actual as of 12/31/07
SALARIES AND EMPLOYEE BENEFITS	**$1,326,268**	**$ 1,361,739**
LANDFILL CONSUMABLES		
Supplies & Maintenance	$ 150,000.00	$ 475,468.00
Fuel	$ 250,000.00	$ 225,606.00
Utilities	$ 70,000.00	$ 122,765.00
Contracted Services	$ 425,000.00	$ 381,361.00
Landfill Development	$ 640,000.00	$ 1,421,986.00
Post Closure	$ 200,000.00	$ 391,198.00
TOTAL LANDFILL CONSUMABLES	$ 1,735,000.00	$ 3,018,384.00
TOTAL LANDFILL EXPENDITURES	**$ 3,061,268**	**$ 4,380,123**
ANNUAL REVENUE ESTIMATES		
City of Albany (140 tons per day X $0.00)	$0	$0
ANSWERS (125 tons per day X $52)	$1,472,000	$1,163,387
Commercial (85 tons per day X $70)	$1,791,960	$1,156,855
Allied Waste (650 tpd @ $40)	$6,812,000	$7,533,824
PCS / ADC	$1,564,140	$1,210,287
MM Albany Gas Sales	$200,000	$50,000
MM Abany O&M Agreement	$48,000	$48,000
MM Albany Capital Improvement Projects	$50,000	$50,000
Msc Sources (recycling revenue, permits, fines)	$250,000	$231,339
TOTAL LANDFILL REVENUES	**$12,188,100**	**$11,443,692**
SUMMARY		
TOTAL LANDFILL REVENUES	**$ 12,188,100.00**	**$ 11,443,692.00**
AVOIDED COSTS (Transfer option: 35,700 tpy @ $49	**$ 1,750,000.00**	**$ 1,750,000.00**
TOTAL LANDFILL EXPENDITURES	**$ (3,061,267.97)**	**$ (4,380,123.00)**
DEBT SERVICE/PRINCIPLE AND INTEREST	**$ (2,334,020.00)**	**$ (2,334,020.00)**
NET BENEFIT	**$ 8,542,812.03**	**$ 6,479,549.00**

Solid Waste Management Program

recycled paper

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT/SOLID WASTE MANAGEMENT PLAN

EXECUTIVE SUMMARY

ANSWERS Wasteshed

August 1990

MALCOLM PIRNIE

ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

DOCUMENT:

DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT/SOLID WASTE MANAGEMENT PLAN (DRAFT GEIS/SWM PLAN)

PROJECT:

ANSWERS WASTESHED SOLID WASTE MANAGEMENT PROGRAM

LOCATION:

ANSWERS WASTESHED, ALBANY COUNTY, NEW YORK (EXCLUDING THE TOWN OF COLONIE AND THE VILLAGES OF COLONIE AND MENANDS) AND THE CITIES OF RENSSELAER, NEW YORK AND SCHENECTADY, NEW YORK

LEAD AGENCY:

CITY OF ALBANY, NEW YORK

PROJECT SPONSOR AND ADDRESS TO WHICH COMMENTS SHOULD BE SENT:

ANSWERS WASTESHED PLANNING UNIT
c/o CITY OF ALBANY
DEPARTMENT OF PUBLIC WORKS
ERIE BOULEVARD EXTENSION
ALBANY, NY 12204

CONTACT FOR FURTHER INFORMATION:

COMMISSIONER OF PUBLIC WORKS, CITY OF ALBANY
(518) 432-1144

PREPARED BY:

MALCOLM PIRNIE, INC.
FOUR CORPORATE PLAZA
WASHINGTON AVENUE EXTENSION
ALBANY, NEW YORK 12203

DATE OF ACCEPTANCE: 8-20-90

FINAL DATE FOR FILING COMMENTS: 10-4-90

THIS DOCUMENT IS PRINTED ON RECYCLED PAPER

0942-19-1

NOTICE OF FUNDING

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ANSWERS WASTESHED
DRAFT GEIS/SWM PLAN
EXECUTIVE SUMMARY

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DRAFT GEIS/SWM PLAN
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ANSWERS WASTESHED
DRAFT GEIS/SWM PLAN
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EXECUTIVE SUMMARY

This executive summary, as a stand alone document, is not intended to satisfy the requirements of 6 NYCRR Part 360, State Environmental Quality Review Act (SEQR). A copy of the complete draft Generic Environmental Impact Statement/Solid Waste Management Plan which satisfies SEQR will be available for public review at the following libraries:

Albany Public Library - Main Library

Altamont Free Library

Town of Berne Library

Bethlehem Public Library

Colonie Town Library

Guilderland Free Library

Menands Public Library

Ravena Free Library

Rensselaer Library

Rensselaerville Library

Schenectady County Public Library

- Duane Branch
- Hamilton Hill Branch
- Mount Pleasant Branch

Voorheesville Public Library

Watervliet Public Library

Westerlo Public Library

In addition, complete copies may be purchased from the City of Albany Department of Public Works. Interested parties should call (518) 432-1144.

ANSWERS WASTESHED
DRAFT GENERIC ENVIRONMENTAL IMPACT STATEMENT/
SOLID WASTE MANAGEMENT PROGRAM

EXECUTIVE SUMMARY

PREFACE

The development of a solid waste management program for the ANSWERS Wasteshed Planning Unit (the Planning Unit) is subject to the New York State Environmental Quality Review (SEQR) process, 6 NYCRR Part 617. The SEQR Act suggests a Generic Environmental Impact Statement (GEIS) as a means for agencies to review the conceptual framework of a proposed plan, and thus give early consideration to environmental factors, as well as social and economic issues. This document presents a combined draft GEIS and the solid waste management plan (SWM Plan) for the Planning Unit.

The geographic scope of this GEIS/SWM Plan is the communities composing the Planning Unit. Table ES-1 and Figure ES-1 present a listing of the communities currently composing the Planning Unit and their locations, respectively.

The Planning Unit was created in early 1989 by resolutions passed by each of the member municipalities. The City prepared an Environmental Assessment Form (EAF) to determine whether the proposed action would have a significant impact on the environment. Based on the EAF, it was determined that the development of a long-term solid waste management program may have significant environmental impacts. After corresponding with over 100 potentially involved and interested agencies to seek their concurrence, and based on resolutions passed by each of the Planning Unit members, the City of Albany (City) has been designated as lead agency for the review of this draft GEIS/SWM Plan, pursuant to SEQR requirements. The City, as lead agency on behalf of the Planning Unit has prepared this draft GEIS/SWM Plan.

This draft GEIS/SWM Plan defines the Plan, addresses its environmental, social and economic impacts, and presents an approach and criteria for siting the recommended additional solid waste management facilities. Implementation of the Plan will require the selection of a site for each

of the recommended additional facilities, and may require preparation of a site-specific EIS to address site- and technology-specific environmental impacts and support permit applications to the New York State Department of Environmental Conservation (NYSDEC). After the City, as lead agency, determines that this draft GEIS/SWM Plan is complete, it will be released for public review and comment. After this review process, the City will prepare a final GEIS/SWM Plan which will incorporate public comments and appropriate changes. The City may also opt to issue a supplementary draft GEIS/SWM Plan prior to the final GEIS/SWM Plan to incorporate the application of siting criteria to the Wasteshed. If so, the issuance of the supplemental GEIS/SWM Plan would be followed by a public review and comment period. After issuance of the final GEIS/SWM Plan, the City, as Lead Agency for the Planning Unit, will prepare and adopt a findings statement on the final GEIS/SWM Plan.

OVERVIEW OF THE PROPOSED PLAN

The Plan for the ANSWERS Wasteshed incorporates implementation of a recycling program of waste reduction, recycling and reuse; continuation of the Albany New York Solid Waste Energy Recovery System (ANSWERS); and implementation of a long-term state-of-the-art landfill for disposal of non-processible waste, bypass waste from ANSWERS and incinerator residue generated by ANSWERS. This combination provides an integrated approach that effectively addresses environmental, technical, and economic considerations. The Plan also includes provision for a backup technology, should the ANSWERS RDF Plant, for any reason, be unable to successfully process and market RDF. Figure ES-2 presents a diagram of the solid waste management program recommended in the Plan. This section outlines the major components of the Plan.

Waste Reduction

The New York State Solid Waste Management Plan (NYSSWMP) identifies a goal of 50 percent waste reduction, recycling and reuse of solid waste by 1997, including eight to ten percent from waste reduction. Since implementation of waste reduction initiatives is more appropriately within the purview of the State and federal governments than that of local

municipal governments, the Planning Unit's role in waste reduction will be to support State and federal legislative efforts on waste reduction and to encourage conservation through public education programs designed to reduce the purchase of non-recyclable and non-reusable materials. For example, the City, on behalf of the Planning Unit, will continue to sponsor education and public information programs on the topic of waste reduction, such as the City's recent television commercials promoting waste reduction.

Recycling and Reuse Programs

Recycling and reuse of materials helps to reduce the volume of waste requiring disposal. The Planning Unit has developed an aggressive recycling program designed to assist the ANSWERS Wasteshed in meeting the State's goal of recycling and reusing 40 to 42 percent (by weight) of the solid waste stream. A three-phased plan is proposed; in general, the Plan proposes a strategy for implementing programs for recycling the following materials:

- Residential Sector:
  - Newspaper,
  - Plastic (HDPE and PET),
  - Glass,
  - Aluminum cans,
  - Ferrous cans,
  - Corrugated cardboard;
- Commercial Sector:
  - Paper,
  - Corrugated cardboard,
  - Plastic,
  - Metal;
- Leaf and Yard Waste;
- White Goods;
- Tires;
- Waste Oil
- Construction and Demolition (C&D) Debris;
- Wastewater Treatment Plant Sludge (as compost); and
- Metals from Mixed Municipal Waste Stream.

programs will be used to generally educate residents and promote recycling and waste reduction within the Planning Unit. At present, the City is promoting waste reduction via television commercials and recycling through radio announcements. In addition, specific promotional programs will be used for new recycling efforts within the ANSWERS Wasteshed. Public awareness efforts may include use of the following, where appropriate:

- Radio Announcements;
- Television Commercials;
- Press Conferences;
- Door Hangers;
- Brochures/Flyers; and
- Elementary/Secondary Education.

Continuation of ANSWERS

In 1982, the City of Albany and the State of New York (State), in a joint project, commenced operation of ANSWERS to serve as part of an integrated system to manage the solid waste processing/disposal needs of the Planning Unit. ANSWERS is a regional resource recovery program which currently processes approximately 500 tons per day (tpd) of solid waste (five days per week), produces a refuse-derived fuel (RDF) for steam generation and recovers energy and recyclable ferrous materials. ANSWERS consists of two separate facilities: a Refuse-Derived Fuel (RDF) Processing Plant (RDF Plant) owned by the City and operated under a contract with a private vendor, and the New York State Office of General Services (OGS) Steam Plant (OGS Steam Plant) owned by the State and operated by the OGS. The ANSWERS project is secured by a 20-year Contract under which the City produces RDF for purchase by the OGS. The energy produced by combusting the RDF is recovered as steam and used for heating and cooling purposes at the Empire State Plaza and other major State buildings in the City.

One of the goals of this Plan is to identify an appropriate future role of ANSWERS in continuing to serve the needs of the ANSWERS Wasteshed communities. ANSWERS is evaluated in terms of technical, environmental, contractual and economic considerations. Based on the evaluations performed, ANSWERS offers the Planning Unit a technically sound and economically attractive method of processing and disposing of portions of

the waste stream in a manner which complies with environmental requirements. Therefore, the recommended Plan includes continuation of ANSWERS, minimally, through the term of the ANSWERS contract which expires in the year 2002, and, if mutually agreeable to the City and the State, beyond the term of the Agreement. The continuation of ANSWERS represents a no-action alternative for processing/disposing of a portion of the waste stream generated in the Planning Unit. For planning purposes, however, it has been assumed that landfill capacity will be required for all unrecycled waste managed by the Planning Unit for the period 2003 through 2013, the years in the planning period beyond the expiration date of the ANSWERS Contract.

Landfill Facility

The recommended Plan also includes implementation of a new long-term landfill to handle disposal of (a) waste which is not recycled or reused, and is not processible at ANSWERS; (b) bypass waste from ANSWERS; and (c) incinerator residue produced at the OGS Steam Plant. It is recommended that the Planning Unit acquire one or more sites for locating a landfill within the ANSWERS Wasteshed. An estimated 100 to 130 acres of landfill fill area will be needed during the twenty-year planning period (1994-2013). Including area for administrative activities and buffer requirements, a minimum acreage purchase requirement of approximately 250 acres is recommended. Landfill sizing assumptions include capacity for all waste which is not recycled or reused after the year 2002 through the end of the planning period. Implementation of the long-term landfill will be phased, with only a limited portion of the acreage initially developed for landfilling.

Household Hazardous Waste Program

As part of the implementation of the recycling plan, it is recommended that the Planning Unit assist individual municipalities to expand existing municipal household hazardous waste collection programs. As part of these programs, household hazardous waste collection days will be established. Residents would be notified of the collection date and would transport their materials to the household hazardous waste drop-off center, where the materials would be separated and prepared by or on

behalf of the municipalities for transport to and disposal at a permitted hazardous waste disposal facility. Household batteries will be included in this program, unless separate collection is deemed appropriate by current markets.

Siting Approach and Criteria

An approach to siting recycling facilities and landfills is presented as part of this draft GEIS/SWM Plan. The siting approach is three phased:

- Phase 1: Exclusionary Phase;
- Phase 2: Preferred Area Phase; and
- Phase 3: Evaluation/Recommendation Phase.

As part of the implementation of the Plan, it is recommended that the siting criteria be applied to the ANSWERS Wasteshed to identify locations for siting the proposed solid waste management facilities.

The application of the three phases of landfill siting criteria should result in the recommendation of several potential landfill sites for further study. The application of the recycling facility siting criteria should result in the identification of the ANSWERS site among others which might be appropriate for development of the recommended MRF. The City plans to issue, in 1990, a request for proposals for the procurement of a full-service MRF.

Projected Implementation Schedule

Figure ES-3 shows the proposed schedule for implementing major components of the Plan. As shown in Figure ES-3, Phase I of the Recycling Plan has already commenced, the MRF is expected to be on-line in 1992, and the long-term landfill may be required to commence operations as early as 1994.

INTRODUCTION

In 1982, the City of Albany and the State of New York, began operation of a joint solid waste energy recovery project referred to as ANSWERS, the Albany New York Solid Waste Energy Recovery System. ANSWERS is a regional solid waste management project. As part of this project, the City owns and operates the ANSWERS RDF Plant which processes incoming

solid waste into RDF. The RDF is sold to the State under a long-term contract, and used as a fuel at the State's OGS Steam Plant.

The City also owns and operates the Greater Albany Landfill which accepts non-processible waste, bypass waste from ANSWERS, and incinerator residue generated by the OGS Steam Plant.

The City has, over the years, entered into long-term contracts with many of the ANSWERS Wasteshed communities for the processing and disposal of residential and commercial waste. Individual municipalities currently retain responsibility for processing and disposal of other components of the waste stream including leaf and yard waste and construction and demolition debris. Individual municipalities are also responsible for collection and transport of solid waste to the facilities designated in their contract with the City.

In October 1985, the Greater Albany Landfill came under consent order by the New York State Department of Environmental Conservation (NYSDEC). Phased closure of this landfill has been proceeding since 1982, and it is anticipated that the landfill will reach capacity in 1990. The City has proceeded to implement an interim landfill at a site adjacent to the Greater Albany Landfill, referred to as the Rapp Road Landfill. The permit for construction of this interim landfill was issued on March 2, 1990.

The members of the Planning Unit have joined together to develop a long-term solid waste management project to provide for the ANSWERS Wasteshed solid waste needs after the interim landfill reaches capacity. This development of a solid waste management program for the Planning Unit is subject to SEQR. The City has been designated as lead agency for the subsequent development of the GEIS/SWM Plan.

Legislation which has been endorsed by the ANSWERS Wasteshed communities and which would create an ANSWERS Wasteshed Solid Waste Management Authority (Authority) was introduced in 1989 in the New York State Legislation. However, this legislation was not passed prior to the close of the legislative session. It is expected that this legislation will be reintroduced at the commencement of the next legislative session. After its creation, the Authority will have the power to regulate the management of solid waste generated within the ANSWERS Wasteshed.

The City, on behalf of the Planning Unit, has assembled a project team to assist in developing a solid waste management program. The

project team includes the following members representing the City of Albany: the Commissioner of the Department of Public Works, the Director of the Planning Department, Corporation Counsel from the City's Department of Law, and the Director and Deputy Director from the City's Budget Department. In addition, to date, Malcolm Pirnie, Inc. has been retained to provide technical services; and Nixon, Hargrave, Devans & Doyle, serves as special legal counsel to the Planning Unit. The City has also formed an Advisory Committee (AC) to serve as a channel for receiving input from the members of the Planning Unit and their constituents and disseminating project information.

Although formal scoping of potential project issues is not required by SEQR, the City, on behalf of the Planning Unit, elected to hold formal public scoping meetings on May 18, 1989. The City then prepared a scoping responsiveness document addressing questions and comments raised at the scoping meetings.

In developing this GEIS/SWM Plan, the City also solicited public input on the siting approach and criteria proposed for use in the plan. Two public meetings were held on August 30, 1989, for this purpose. The City then prepared a siting responsiveness document addressing questions and comments raised at the siting meetings.

The SEQR process also provides for public input throughout the planning and decision-making process to ensure that the key issues in developing a project are addressed prior to decision-making. A public comment period of 45 days will be provided for public review of the draft GEIS/SWM Plan.

The City may opt to issue a supplemental GEIS/SWM Plan which addresses the application of the siting criteria to the Wasteshed. If so, the issuance of the supplemental GEIS/SWM Plan would be followed by a public review and comment period. After public review of the draft GEIS/SWM Plan, and, if applicable, a supplemental GEIS/SWM Plan, a final GEIS/SWM Plan will be prepared. The final GEIS/SWM Plan document will address all substantive comments received during the public comment period(s). The City as lead agency will then file the final GEIS/SWM Plan, and prepare a findings statement, both of which provide the basis for subsequent action by the lead agency.

DESCRIPTION OF THE PROPOSED ACTION

The ANSWERS Wasteshed is located in east-central New York State, approximately 140 miles north of New York City, and covers approximately 483 square miles. In 1988, the ANSWERS Wasteshed population was approximately 281,000, and it is expected to increase to approximately 282,000 by the end of the planning period, the year 2013. The Planning Unit's 15 municipalities are composed of five cities, two villages, and eight towns.

The solid waste disposal needs of the ANSWERS Wasteshed are currently managed with the following solid waste processing/disposal facilities:

- various recycling and reuse programs;
- ANSWERS;
- the Greater Albany Landfill;
- the Town of Coeymans Landfill;
- private and individual municipal construction and demolition debris landfills;
- individual municipal leaf and yard waste programs;
- wastewater treatment plant sludge disposal facilities managed by individual sewer districts; and
- water treatment plant sludge disposal managed by individual water authorities.

Medical waste in the ANSWERS Wasteshed is currently managed by individual hospitals using hospital incinerators. Hospital incinerator ash (non-hazardous) is and will continue to be managed by the Planning Unit. At present, consideration is being given to implementation of a regional medical waste autoclave facility to handle medical wastes. If this proposal is implemented, and the ANSWERS Wasteshed participates in this regional program, the hospital incinerator ash currently being disposed will cease to exist. The quantity of medical waste in the region indicates that, even if a) the regional autoclave facility were sited in the ANSWERS Wasteshed, and b) the Planning Unit were to manage disposal of autoclaved materials, the quantities involved are not substantial enough to significantly impact the planning and sizing of facilities presented herein.

The Greater Albany Landfill and the Town of Coeymans Landfill are both under consent order to close. The need to obtain additional solid waste disposal capacity, and to implement State mandated recycling programs, has created the need to re-evaluate waste disposal methods in

the Planning Unit and develop expanded strategies of solid waste management.

The proposed action is the development of the solid waste management plan recommended in this GEIS/SWM Plan. The Plan for the ANSWERS Wasteshed incorporates implementation of a recycling program of waste reduction, recycling and reuse; continuation of the Albany New York Solid Waste Energy Recovery System (ANSWERS); and implementation of a long-term state-of-the-art landfill for disposal of non-processible waste, bypass waste from ANSWERS, and incinerator residue generated by ANSWERS. This combination provides an integrated approach that effectively addresses environmental, technical, and economic considerations. The Plan also includes provision for a backup technology, should ANSWERS, for any reason, be unable to successfully process and market RDF.

The Planning Unit will be responsible for all aspects of the Plan not specifically delegated to other parties as follows:

Individual Municipalities

- Solid waste collection and transportation to designated solid waste processing and disposal facilities.
- Implementation of source-separation recycling programs to coordinate with the overall Wasteshed program.
- Recycling, processing and disposal of leaf and yard waste in accordance with the goals of the Plan.
- Recycling, processing and disposal of construction and demolition debris in accordance with the goals of the Plan.
- Maintaining records of quantities of waste recycled or reused as part of individual municipal recycling efforts (independent of Planning Unit MRF).
- Adoption of waste flow control, source separation and other ordinances as needed to support the Plan.

Sewer Districts

- Management of wastewater treatment plant sludge generated at their respective municipal wastewater treatment plants.
- If applicable, management of any hazardous sludge incinerator residue or hazardous wastewater treatment plant skimmings.

Water Authorities

- Management of water treatment plant sludge generated at their respective water treatment plants.

ALTERNATIVES TO THE PROPOSED ACTION

SEQR requires the consideration of reasonable alternatives that achieve the same or similar objectives, have relatively the same or reduced adverse environmental effects, and can be implemented in a time frame similar to that of the proposed action. The following five alternatives to the proposed action have been considered:

- No-Action Alternative - Existing solid waste disposal practices would continue in the ANSWERS Wasteshed. Landfilling at the Greater Albany Landfill and the Town of Coeymans Landfill would continue, at least initially, as the primary means of waste disposal. The interim landfill would then be used, assuming regulatory approvals are obtained, for a limited period of up to four years. Existing recycling programs would not be expanded.

- More Immediate Implementation Alternative - The Planning Unit would accelerate the proposed schedule for program planning, acquisition of a site(s), selection of technology(ies), procurement of vendor services, and construction of solid waste management facilities.

- Expanded Planning Unit Plan Development Alternatives - This alternative would involve the planning and development of a broader regional solid waste management program for both the Planning Unit and one or more neighboring counties in the Capital District (Albany, Rensselaer, Schenectady and Saratoga Counties).

- Reliance on the Private Sector - This alternative would involve entering into an agreement with a private company for management, disposal or processing of solid waste either in another county or state, or within the Planning Unit. This alternative includes proposals made by American Ref-Fuel and TEAMCO, Inc.

- Waste Exportation - This alternative would involve exportation of the ANSWERS Wasteshed waste-stream out of the Planning Unit, to a solid waste processing/disposal facility managed by the public or private sector.

The No-Action alternative is not feasible for several reasons. Current landfill capacity, along with the present recycling efforts, cannot continue as the primary means of solid waste management since the

existing landfills are under NYSDEC consent orders to close, and present recycling efforts will not attain the State goal. Even including the additional landfill capacity of the proposed interim landfill, the ANSWERS Wasteshed communities may need alternative processing/disposal capacity by as early as 1994.

More immediate implementation of a waste disposal facility is not feasible, given the current fast-tracked approach and SEQR requirements.

Reliance on the public sector is not recommended for several reasons. Most importantly, the Planning Unit currently has in place a technically-sound, economically-attractive solid waste processing/disposal technology to handle processible waste generated in the ANSWERS Wasteshed -- the ANSWERS project. The existing contract for this project extends to the year 2002. Therefore, at this time, the only processing/disposal needs of the Planning Unit are for non-processible waste, bypass waste from ANSWERS and incinerator residue from the OGS Steam Plant. Existing proposals offered by the private sector address primarily the processible segments of the waste stream, i.e., those components for which the Planning Unit already has a viable solid waste management system.

Finally, the Planning Unit has opted not to increase its size at the present time. Although expansion of the Planning Unit may be considered in the future, the currently required time frame, and the inherent risks to the Planning Unit of failing to meet its tight schedule are prohibitive. In addition, several neighboring counties -- Rensselaer County and Saratoga County -- are proceeding independently with solid waste management planning. It is, therefore, in the best interest of the Planning Unit to develop the Plan.

SOLID WASTE STREAM ANALYSIS

One of the major components in developing a solid waste management plan is an analysis of the solid waste stream in terms of current and projected quantities and composition. This information is used to estimate the potential impacts of recycling, reuse, and waste reduction on the projected waste stream, as well as the needed capacity at solid waste management facilities.

Twenty solid waste components are addressed in this GEIS/SWM Plan:

- Residential Waste;
- Commercial Waste (including non-hazardous industrial waste);
- Tires;
- White Goods;
- Waste Oil;
- Leaf and Yard Waste;
- Construction & Demolition Debris;
- Water Treatment Plant Sludge;
- Wastewater Treatment Plant Sludge;
- Air Pollution Control Sludge;
- Contained Gaseous Materials;
- Hospital Incinerator Residue;
- Wastewater Treatment Plant Skimmings;
- Discarded Cars;
- Power Plant Ash;
- Offal;
- Oil-Soaked Dirt;
- Returnable Container Act Materials;
- Sludge Incinerator Residue; and
- OGS Incinerator Residue.

1988 Solid Waste Quantities

An estimate of the quantity of solid waste generated in the ANSWERS Wasteshed in 1988 is presented based on 1988 ANSWERS scale house records, and information available from solid waste generators and haulers, State and local agencies and municipal representatives. Based on this information, the estimated 1988 solid waste generation rate for the ANSWERS Wasteshed is approximately 1,300 tons per day or approximately nine pounds per capita per day (pcd). Although this estimate may appear high, the ANSWERS Wasteshed solid waste stream includes a number of components of significant quantity that are not typically included in solid waste stream estimates, such as construction and demolition debris, sludges, offal, oil-soaked dirt and discarded cars. The estimated 1988 solid waste generation rate for those materials more typically referred to as "municipal solid waste", i.e., residential waste, commercial waste, leaf and yard waste, tires and waste oil, is approximately 5.7 pounds per capita per day. The 1988 waste generation rate for the 20 components of the ANSWERS Wasteshed's non-hazardous solid waste stream are as follows:

Solid Waste Stream Component	Estimated Waste Generation Rate (tpd)
Residential Waste	407
Commercial Waste	272
Tires	8
White Goods	6
Waste Oil	11
Leaf and Yard Waste	115
Construction and Demolition Debris	203
Water Treatment Plant Sludge (@ 25% solids)	9
Wastewater Treatment Plant Sludge (@ 25% solids)	170
Air Treatment Control Sludge	0
Contained Gaseous Material	0
Hospital Incinerator Residue (@ 25% moisture)	3
Wastewater Treatment Plant Skimmings	3
Discarded Cars	36
Power Plant Ash	<1
Offal	10
Oil-Soaked Dirt	62[1]
Returnable Container Act Materials	19
Sludge Incinerator Residue	N/A[2]
OGS Incinerator Residue	N/A[2]
Rounded Total	1,300 tpd

1988 Solid Waste Composition

Estimates of the composition of the commercial and residential waste generated in the Planning Unit are necessary for the development of the recycling programs. The composition of the Planning Unit's residential and commercial waste is estimated as follows, based on general composition data available from waste composition studies performed for a number of communities in New York State and other northeastern states:

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[1]Not all of the oil-soaked dirt delivered to the ANSWERS scale house is generated in the ANSWERS Wasteshed.

[2]The 3,900 tons of Sludge Incinerator Residue generated from the burning of wastewater treatment plant sludge in 1988 and the 26,000 tons of OGS Incinerator Residue generated from the incineration of RDF are not included in the total since the materials which, when processed, result in these residues, are already counted.

	Percent by Weight	
	Average	Range
Paper and Corrugated	47	42-60
Plastics	7	5-11
Metals	11	10-12
Glass	8	5-12
Food Waste	5	0-14
Wood	13	8-17
Textiles, Leather and Rubber	3	1- 5
Fines (brick, ashes, dirt, etc.)	4	0-11
Other	2	0-18
	100	

Projected Solid Waste Quantities

Solid waste projections are a function of population and per capita waste generation rates, the latter assumed to increase at a rate of approximately one percent each year. (The basis for this assumption and the method for projecting each of the solid waste stream components is described in detail in Section 4.0 of the GEIS/SWM Plan.) As a result, the solid waste generation rate for the ANSWERS Wasteshed, before consideration of waste reduction, is estimated as approximately 550,000 tons per year, or approximately 1,500 tpd by the year 2000, and, in the year 2013, the last year of the planning period, as approximately 600,000 tons per year, or approximately 1,640 tpd. These figures represent the total quantity of waste generated prior to any waste reduction, reuse, and recycling.

Waste Reduction

The NYSSWMP identified a goal of eight to ten percent waste reduction by 1997. Waste reduction is given highest priority in the State's solid waste management hierarchy, but it is generally recognized that effective implementation will require State and possibly federal legislation. Some examples of waste reduction practices would be changes in the way goods are manufactured and packaged to reduce the wastes associated with each product. Expansion of the Returnable Container Act and institution of legislative tax incentives are also cited by NYSDEC as possible methods

of waste reduction. Waste reduction quantities (including RCA materials) are estimated as a minimum of approximately 19,700 tons per year, or approximately 54 tpd by the year 2000, and are expected to meet or exceed this minimum through the remainder of the planning period.

Recycling and Reuse

Recycling is given high priority in the State's solid waste management hierarchy. As described in Volume III of the GEIS/SWM Plan, Recycling Plan, the Planning Unit proposes a set of recycling and reuse programs designed to meet the State goal of reducing the waste stream by 50 percent by 1997 through a combination of waste reduction, recycling and reuse. Recyclable materials addressed in the Recycling Plan include paper, bottles and cans, plastics, metals, waste oil, leaf and yard waste, construction and demolition debris, tires, and white goods. Recycling and reuse quantities are estimated to be approximately 257,000 tons per year or approximately 700 tpd in the year 2000, and approximately 284,000 tons per year or approximately 780 tpd in 2013, the last year of the planning period.

The Resultant Waste Stream

The resultant waste stream is that quantity of solid waste requiring disposal after waste reduction, reuse, and recycling. The resultant waste stream is estimated to be approximately 250,000 tons per year or approximately 680 tpd in 1988; approximately 160,000 tons per year, or approximately 440 tpd in the year 2000; and approximately 190,000 tons per year, or approximately 520 tpd in 2013, the last year of the planning period. The projected resultant waste stream quantities are used in the technology evaluation presented in Section 5.0 of the GEIS/SWM Plan in an evaluation of the need for additional solid waste processing/disposal capacity in the ANSWERS Wasteshed over the planning period.

Summary

Tables ES-2 and ES-3 present a summary of the expected disposition of each component of the ANSWERS Wasteshed solid waste stream for the year 1997.

SOLID WASTE PROCESSING/DISPOSAL TECHNOLOGY EVALUATION

The following approach was utilized to evaluate solid waste disposal technologies:

- A primary objective of the technology evaluation is to reduce the amount of solid waste which will require landfill disposal, regardless of the technology or group of technologies recommended in the GEIS/SWM Plan.

- The first step in solid waste processing/disposal is waste reduction, recycling and reuse, to the extent that economic markets are available. Waste reduction, recycling and reuse programs are an integral part of solid waste management in the ANSWERS Wasteshed.

- The second step is an analysis of the future role of ANSWERS, the existing solid waste processing/disposal system serving the ANSWERS Wasteshed.

- The technology evaluation will also focus on identifying technologies relevant to processing/disposal of the resultant waste stream, i.e., waste remaining after application of the recycling programs and ANSWERS.

Recycling

The New York State Solid Waste Management Plan identifies a goal of 50 percent (by weight) waste reduction, recycling and reuse of solid waste by 1997, including eight to ten percent from waste reduction. The proposed action includes Planning Unit support of State and federal legislative efforts on waste reduction and encourages conservation through public education programs designed to reduce the purchase of non-recyclable and non-reusable materials. The Planning Unit has developed a recycling program designed to assist the ANSWERS Wasteshed in meeting the State's goal of recycling and reusing 40 to 42 percent (by weight) of the solid waste stream. A three-phased plan is proposed in order to ensure that investments and resources are used in a cost-effective manner, that progress can be measured, and that additions and adjustments to the program can be carried out effectively.

Phase I of the Recycling Plan (January 1, 1989, through December 31, 1990) consists of the continuation and expansion of all existing recycling programs and activities for the residential and commercial (including institutional and non-hazardous industrial) sectors, as well as the

expansion of leaf and yard waste composting programs throughout the Wasteshed by the individual municipalities in the Planning Unit. Under Phase I, the Planning Unit will begin to develop mechanisms for involving the private sector in implementation of commercial recycling activities including (a) waste audits to further characterize the commercial waste stream; (b) source separation of recyclables by commercial establishments; (c) the development of private sector waste reduction and recycling programs; and (d) record-keeping and monitoring programs to coordinate private sector activities with the overall Planning Unit recycling goals. These efforts will allow for more accurate identification of the quantities and sources of the commercial waste stream, which is approximately 40 percent of the Wasteshed's generated waste. Household hazardous waste collection days, on which residents are requested to bring household hazardous wastes including used batteries to a designated collection site, are also planned for initiation during this phase.

Phase II of the Plan (January 1, 1991 through December 31, 1997) will be highlighted by the development and implementation of a MRF to serve all ANSWERS Wasteshed communities. Facility processes will include the baling of newspaper, corrugated cardboard and mixed paper, the crushing of glass, the magnetic separation and flattening of cans, and volume reduction, as appropriate, of HDPE and PET plastics. In addition, the Planning Unit will continue the efforts initiated under Phase I to foster the implementation of intensive commercial sector waste reduction and recycling programs throughout the Wasteshed. In general, Phase II includes programs for regional source separation of portions of the residential and commercial waste stream, and composting of portions of the wastewater treatment plant sludge, and leaf and yard waste components of the waste stream generated in the Wasteshed. In addition, existing recycling methods for white goods, tires and waste oil will continue, and be expanded where applicable. Current reuses of oil-soaked dirt, offal, power plant ash and discarded cars are expected to continue throughout the planning period. This phase also involves the establishment of mandatory source separation in accordance with Section 120-aa of the General Municipal Law.

Phase III (January 1, 1998, to December 31, 2000) will include the continuation and, where applicable, the expansion of existing recycling

activities and programs in all ANSWERS Wasteshed communities, for both the residential and commercial recycling sectors.

Assessment of the Future Role of ANSWERS

The GEIS/SWM Plan includes an evaluation of ANSWERS in terms of technical, environmental, contractual and economic considerations. Since ANSWERS is an existing system, a reasonableness standard is applied in the evaluation. The purpose of the evaluation is to determine if, at this time, any reasons exist which would preclude continuation of ANSWERS in its current role as a processing/disposal technology through, at least, the expiration of the ANSWERS contract in the year 2002, and potentially through the planning period (1994-2013). The following paragraphs summarize the four phases of the evaluation.

Technical Considerations - Both the ANSWERS RDF Plant and the OGS Steam Plant were found to be acceptable in terms of technical considerations, although the quantity of RDF processed and combusted has never met the contractual target of 183,000 tons per year. Both the City and State are committed to continuing, and even improving current operations at both facilities.

However, there have been periodic difficulties in processing RDF at the OGS Steam Plant and the OGS Steam Plant will need to be retrofitted to meet anticipated air emissions regulations. Although resolution of both of these issues is expected, nevertheless, they suggest that it is prudent to include a backup technology evaluation to identify a recommended technology to be implemented should the ANSWERS RDF Plant, for any reason, be unable to successfully process and market RDF.

Environmental Considerations - The ANSWERS facilities -- the RDF Plant and the OGS Steam Plant were assessed in terms of the following environmental factors:

- air quality;
- health effects;
- surface and ground water quality;
- noise;
- odors, vectors, litter, fugitive dust;
- explosions and fire;
- traffic; and

- regulatory compliance.

Based on the assessment performed, no environmental or regulatory issues have been identified that cannot be addressed or mitigated adequately, or are of sufficient seriousness to warrant any change in the current role of the ANSWERS project.

Contractual Considerations - The ANSWERS Contract entered into in 1982 and the supplemental agreement entered into in 1987 define the responsibilities of the City and the State in the ANSWERS project. Based upon a review of the contractual obligations presented in the agreements, it appears that the existing agreements adequately meet the current needs of the ANSWERS Wasteshed. Several issues which may need to be negotiated between the parties are also discussed. The major issue, related to the discussion present above under technical considerations, is that the City, in practice, does not appear to be protected from shortfalls in the amount of waste accepted by OGS. This situation contributed to the City's decision to include in the Plan provision for a backup technology.

Economic Considerations - The ANSWERS project is economically favorable for the ANSWERS Wasteshed when compared to available alternatives.

Summary of ANSWERS Assessment - The results of the assessment indicate that it is appropriate to continue to utilize ANSWERS in its current role. However, it is also recommended that the Plan include provision for a backup technology.

Complementary Technology Evaluation

The evaluation of technologies to address the remaining waste stream after application of the proposed recycling programs and continuation of ANSWERS, was conducted, considering the full spectrum of alternative technologies as grouped into these five categories:

- Material recovery systems;

- Biological recovery systems;
- Thermal recovery systems;
- Landfills; and
- Exportation.

An analysis of the remaining waste stream indicated that, if the recycling programs meet the goals targeted in the Recycling Program, and if ANSWERS continues to process 90,000 to 150,000 tons per year of RDF, the remaining waste stream will consist primarily of non-processible waste. Non-processible waste will not be reduced by biological or thermal recovery systems. Since the proposed action already provides for recycling of materials for which an economic market exists, the application of a materials recovery facility was determined to be inappropriate to the remaining waste stream. The only remaining alternative is landfill. An analysis of the benefits and risks of waste exportation versus development of a new landfill are discussed. The result of this analysis is a recommendation that the Planning Unit implement a new landfill for disposal of non-processible waste, bypass waste for ANSWERS, and OGS incinerator residue.

Backup Technology Evaluation

An analysis is presented which identifies a recommended backup technology for the ANSWERS Wasteshed. To provide needed input for the analysis, an investigation of potential energy markets was also performed.

Backup Energy Markets Identification - An investigation was performed to identify potential energy users in the ANSWERS Wasteshed: The markets investigated were:

- Refuse-Derived Fuel (RDF);
- Ash Residue;
- Steam and Hot Water; and
- Electric Power.

The energy markets investigation identified the following potential markets. Three potential RDF markets were identified -- Blue Circle

Atlantic, Independent Cement Corp., and Lydall-Manning Paper Company. One potential ash residue market was identified -- Colonie Block and Supply Company. No viable steam or hot water markets were found. Two potential electric power markets were identified -- Niagara Mohawk, and Central Hudson Gas & Electric.

Backup Technology Evaluation - The evaluation of technologies to address the waste stream remaining after application of the proposed recycling programs is presented, considering the full spectrum of alternative technologies as grouped into these five categories:

- Material recovery systems;
- Biological recovery systems;
- Thermal recovery systems;
- Landfills; and
- Exportation.

These technologies are analyzed by evaluating environmental, technical, economic, and siting criteria in a three-phased approach as follows:

Phase	Evaluates	For These Factors	and Identifies
1	Solid Waste Technologies	Technical & Environmental	Acceptable Technologies
2	Acceptable Technologies	Technical, Economic & Environmental	Preferred Technologies
3	Preferred Technologies	Environmental & Economic	Recommended Technologies

Figure ES-4 illustrates how the phased evaluation process was performed.

The following twelve technical and environmental factors are considered in Phase 1:

Technical Factors

- Commercial availability
- Successful U.S. operational history
- Compatibility with recycling
- Reliability
- Implementation time

Environmental Factors

- Air quality impacts
- Ground and surface water impacts
- Odors and vectors
- Landfill requirements
- Noise levels
- Traffic volume
- Aesthetics

Based on the application of these Phase 1 criteria, the following technologies are identified as acceptable backup technologies for the ANSWERS Wasteshed:

- Thermal Recovery System
  - Waste-to-Energy
    - Mass combustion field-erected
    - Mass combustion field-erected with preprocessing
    - Mass combustion modular
    - Mass combustion modular with preprocessing
  - RDF-to-Energy
    - Spreader stoker
- Landfill
  - New capacity

It should also be noted that the technologies which incorporate, to some degree, composting of the mixed solid waste stream are rapidly gaining prominence in terms of solid waste management planning. It is recommended that the Planning Unit continue to monitor projects including the composting of mixed solid waste and as appropriate, reassess these technologies in terms of the criteria presented herein.

Each of the acceptable backup technologies is evaluated further in Phase 2 with the following 15 technical, economic and environmental criteria:

Technical Factors

- Flexibility
- Redundancy
- Design complexity
- Operational complexity
- Safety record
- Warranties/guarantees
- Land area requirements

Economic Factors

- Material recovery revenue
- Energy recovery revenue
- Capital cost
- Operation and maintenance cost
- Net cost per ton of solid waste processed
- Financing

Environmental Factors

- Number and complexity of permits
- Regulatory agency support

Based on the application of these Phase 2 criteria, the following technologies are identified as preferred backup technologies for the ANSWERS Wasteshed:

- Thermal Recovery System
  - Waste-to-Energy
  - Mass combustion field-erected
  - Mass combustion field-erected with preprocessing
  - RDF-to-Energy
  - Spreader stoker

- Landfill
  - New capacity

Each of the preferred backup technologies is evaluated further in Phase 3 in terms of the potential environmental impacts and economics associated with each.

The results of the environmental analysis indicated that with proper design, construction, and operation, and implementation of mitigating measures, any of the preferred technologies is capable of providing an environmentally acceptable backup technology for the ANSWERS Wasteshed. None of the preferred technologies demonstrate a clearly superior choice based on environmental factors.

Life-cycle cost analyses were performed to compare the likely costs of implementing any of the preferred backup technologies in the ANSWERS Wasteshed. To perform these analysis, a hypothetical situation was constructed in which it was assumed that on July 1, 1991, the ANSWERS RDF Plant ceased to be able to successfully process and market RDF for some unidentified reason. Over the next year the Planning Unit would seek alternative RDF markets. The hypothetical analysis assumes that none are

found. A decision to implement a backup technology is made in 1992, and the evaluation presented herein is reassessed, with a backup technology chosen by the end of 1992. Under this scenario, a backup landfill could be operational in 1994. It is assumed that either a waste-to-energy facility or an RDF-to-energy facility would commence operations in the year 2000, assuming a seven-year implementation schedule for siting evaluations, environmental assessments, vendor procurement, energy contract negotiations, and facility design, construction, start-up and acceptance testing. This comfortable schedule, while not fast-tracked, is not unreasonable, and results in a lower average cost than a more accelerated schedule. The results of the life-cycle cost analysis indicate that over the planning period, the average life-cycle cost of the waste-to-energy alternative is approximately $112 per ton processed in 1990 dollars, the average life-cycle cost of the RDF-to-energy alternative (cost estimate assumes continuation of operation of ANSWERS RDF Plant also) is approximately $126 per ton processed in 1990 dollars, and the average life-cycle cost of the landfill alternative is approximately $78 per ton processed in 1990 dollars.

Based on the technology evaluation, the development of a new landfill is recommended as the backup technology for the ANSWERS Wasteshed solid waste management program. This selection is based on a number of factors, including:

- Landfilling is a proven, technically sound and environmentally acceptable solid waste disposal technology;

- Of all of the technologies considered, landfilling offers the maximum degree of flexibility in terms of quantity and characteristics of waste delivered. Because landfill operations can be readily adjusted to accommodate either increases or decreases in waste deliveries, this technology selection will allow the Planning Unit and others the greatest latitude for aggressive implementation of a wide range of recycling programs;

- Development of a landfill involves a relatively low initial capital investment, in comparison with other solid waste technologies; and

- The development of a new landfill offers a much lower estimated cost than the other preferred technologies identified for the ANSWERS Wasteshed communities.

It should be noted that the solid waste industry is a rapidly changing one, in which the range of available technologies and the

demonstrated records of technologies in terms of technical achievement, environmental impacts, regulatory compliance and system economics also reflect significant changes in relatively short periods of time. Therefore, the analyses presented in the GEIS/SWM Plan, although appropriate for the present (1989), may need to be revisited based on changes in the solid waste industry, when and if it is applied.

In particular, the Planning Unit intends to continue to monitor the progress of MSW composting projects and to reevaluate MSW composting technologies prior to any implementation of a backup technology. A number of recently planned/implemented MSW composting projects show promise for improving the proven reliability of this technology. Such an assessment will also address composting markets available to the ANSWERS Wasteshed.

ENVIRONMENTAL SETTING

The Planning Unit includes approximately 483 square miles in east-central New York near the confluence of the Mohawk and Hudson Rivers. The Helderberg Escarpment, which tends northwest to southeast, divides the Planning Unit into two distinct topographic areas. West of the Escarpment, the topography is deeply dissected and forms a portion of the Appalachian Plateau Physiographic Province. East of the Escarpment, the topography is relatively flat. This area forms a portion of the Hudson-Mohawk Lowlands Physiographic Province.

The geology of the Planning Unit is characterized by relatively thin glacial till over shale bedrock west of the Escarpment. East of the Escarpment, thicker glacial deposits, commonly lake deposits, overlie the bedrock. Also, east of the Escarpment, pre-glacial erosional channels are present in the bedrock. Significant surface water bodies include the Hudson River, Mohawk River and several drinking water supply reservoirs. In addition to these reservoirs, unconsolidated glacial deposits provide a major source of municipal water. Bedrock generally provides relatively low yields.

Over 100 freshwater wetlands occur throughout the ANSWERS Wasteshed. Portions of eight streams are classified as trout streams. The NYSDEC has designated 36 areas in the ANSWERS Wasteshed as significant habitats for wildlife.

The climate of the ANSWERS Wasteshed is characterized as humid continental. The area experiences mild, comfortable summers with cold, and sometimes fairly severe winters. The Wasteshed forms a portion of the Hudson Valley Air Quality Control Region and is currently within the regulatory limits for all criteria pollutants.

The 1988 estimated population of the ANSWERS Wasteshed is approximately 281,000. Major population centers are the City of Albany and associated suburbs, and the Cities of Schenectady and Rensselaer. These densely populated areas are located in the northern and eastern portions of the Wasteshed. The Wasteshed is well served by air, rail, road and water transportation.

SITING APPROACH AND CRITERIA

A three-phased approach is presented to identify potential sites for solid waste management facilities to serve the Planning Unit. The types of facilities which are considered for siting as part of the GEIS/SWM Plan are recycling facilities and landfills. In the siting approach outlined, in each succeeding phase, a more detailed evaluation will occur as the number of potentially available area identified for siting decreases. The three phases of the siting approach are:

- Phase 1. Exclusionary Phase;
- Phase 2. Preferred Area Identification Phase; and
- Phase 3. Evaluation/Recommendation Phase.

Table ES-4 presents the proposed criteria for each phase.

Phase 1, the Exclusionary Phase, will include the application of exclusionary criteria to a base map of the Planning Unit. The exclusionary criteria are primarily environmental and regulatory in nature and result in the exclusion of environmentally sensitive areas as well as areas considered undesirable for particular categories of solid waste management facilities. The remaining areas constitute areas considered as potentially available for siting. These potentially available areas will be subjected to further study during Phase 2, the Preferred Area Identification Phase. However, if the application of exclusionary criteria results in the identification of too limited a number of potential sites, it may be necessary to consider (a) modifying the

exclusionary criteria or (b) modifying the technology selection process presented in Section 5 of this GEIS/SWM Plan.

The objective of Phase 2, the Preferred Area Identification Phase, is to select, for each category of solid waste management facility considered, potential sites from the field of potentially available areas identified in Phase 1. This will be accomplished by the application of preferred criteria to areas that are identified as potentially available by the results of Phase 1. Preferred criteria are used to identify sites with characteristics which are the most desirable for siting a particular type of solid waste management facility. Areas which are not selected by the application of the preferred criteria are not to be necessarily eliminated from further consideration. If application of preferred criteria results in the identification of too limited a number of potentially suitable sites, the proposed criteria may be modified to allow further consideration of a larger number of sites.

The areas remaining after Phase 2 screening will be evaluated during Phase 3, the Evaluation/Recommendation Phases, based on a set of evaluation criteria.

Based on the results of Phase 3, a recommendation will be made identifying sites to be considered for further, more detailed evaluation (e.g., limited hydrogeological and/or geotechnical investigations, traffic studies and biological inventory). Sites which are not recommended for further study are not permanently eliminated. All sites reaching Phase 3 of the siting analysis will have met the exclusionary and preferred criteria for the type of facility under consideration. As necessary, these sites can be further evaluated should the sites recommended for further study prove to be either inaccessible for further study or use, or otherwise unsuitable for development.

Volunteer Sites

As part of the August 30, 1989, public meeting on siting of solid waste facilities, the issue of volunteer sites and the solicitation of volunteer sites was raised. To date, no sites have been volunteered to the Planning Unit. This section discusses the methodology proposed for evaluating a volunteered site. A site may be volunteered by a person or

entity who either owns the site or has the ability to acquire and convey the site.

To be considered as a potential landfill site, a volunteered site must meet all of the Phase 1, Exclusionary Criteria and all of the regulatory requirements applicable to siting. Any volunteered site which met all of the Phase 1 - Exclusionary Criteria as well as all of the regulatory requirements for siting a landfill, would be included in Phase 3, the Evaluation/Recommendation phase of the siting analysis. The relative merit of any volunteered site reaching Phase 3 of the siting evaluation would be assessed in Phase 3.

Attachment 1 to this Executive Summary includes (a) a detailed description of each of the siting criteria presented in Table ES-4 and (b) an example of how the siting criteria is intended to be applied to the Wasteshed to identify potential landfill sites.

EVALUATION OF TRANSFER STATION NEEDS

An evaluation is presented addressing the feasibility of developing a "regional" transfer station in the ANSWERS Wasteshed, to serve the western and southern municipalities served by ANSWERS.

Major technical, economic, environmental and permitting considerations associated with development of a transfer station are presented.

An economic analysis has been performed on the development of an approximately 125 tpd transfer station operating five days per week in one of the following locations:

- the Town of New Scotland, or
- the Town of Bethlehem.

The municipalities assumed to be served by the transfer station are the Towns of Berne, Bethlehem, Coeymans, Knox, New Scotland, Rensselaerville and Westerlo. The economic analysis compared an estimate of the current cost of transportation of residential and commercial waste to the ANSWERS scale house, with an estimate of the potential cost for transport of all residential and commercial waste generated in these municipalities to a "regional" transfer station, with subsequent transport via large transfer vehicles to the ANSWERS scale house.

The results of the economic evaluation indicate that it would be more expensive to implement a "regional" transfer system than to continue with the existing transportation methods (including individual municipal transfer stations).

At this time, it does not appear economically justified to develop a "regional" transfer station to serve the Planning Unit.

ENVIRONMENTAL IMPACTS

Potential environmental impacts associated with the implementation of the proposed solid waste management facilities are described in Section 9.0 of the GEIS/SWM Plan, and include:

- Air quality;
- Health Effects;
- Surface and Ground Water Quality;
- Odors, Vectors, Litter, Fugitive Dust (Nuisance Impacts);
- Explosions and Fire;
- Traffic;
- Land Use and Aesthetics; and
- Ecological resources.

Additional environmental review to be conducted in connection with implementation of this GEIS/SWM Plan will evaluate these impacts in more detail.

IMPLEMENTATION APPROACH

The implementation of a solid waste management program involves a number of institutional issues in addition to technical considerations, including:

- Solid waste stream flow control
  - Waste deliveries to the ANSWERS RDF Plant
  - Source-separated recyclables deliveries to the MRF
  - Individual Municipality Responsibilities
    - Recycling programs for leaf and yard waste to conform with Planning Unit goals as presented in the Recycling Plan
    - Recycling programs for construction and demolition debris to conform with Planning Unit goals presented in the Recycling Plan
    - Disposal of unrecycled leaf and yard waste
    - Disposal of unrecycled construction and demolition debris

  - Monitoring and recordkeeping of municipality recycling/reuse quantities/programs
- Facility procurement
- Facility ownership
- Financing and funding assistance

Control over the waste stream is necessary to ensure that it will be delivered to the appropriate processing or disposal facility. Contractual, legislative, and economic methods are typically available for obtaining such control. The financial community typically requires not only "put-or-pay" provisions, which identify the payment obligation, but also the establishment of a legal authority to control the waste. These needs often cause communities to combine contractual and legislative control of the solid waste stream, an approach being pursued by the Planning Unit.

In 1989, legislation was introduced in the New York State Legislature which would create an ANSWERS Wasteshed Solid Waste Management Authority. This legislation has been endorsed by the members of the Planning Unit, each of which will have the option of electing to become participants in the Authority. However, this legislation was not passed prior to the close of the legislative session. It is expected that this legislation will be reintroduced at the commencement of the next legislative session. The creation of an authority would centralize much of the decision-making regarding solid waste management for the ANSWERS Wasteshed in one body.

Facility Procurement

Facility procurement typically involves one of these procurement methods:

- Conventional architect/engineer (A/E);
- Turnkey; and
- Full service.

Each of these methods involves different approaches and therefore different risks. The conventional architect/engineer approach involves formal bids and the award of the contract to the lowest bidder. Typically, an architect/engineering firm prepares the design and bid documents, contractors bid on the construction of the project, and the operation of the facility is performed by the municipal entity or another private contractor. In a turnkey procurement, one contractor is responsible for design, construction, and testing of the facility, with

operation the responsibility of the municipal entity. A full-service procurement places the responsibility for design, construction, and operation on one contractor.

A full-service procurement approach can be utilized with either public or private ownership of the facility. While private ownership has historically been utilized for related economic benefits to pass back to the municipality, recent changes to the tax code, notably the 1986 Tax Reform Act, have significantly reduced these advantages. Since the community has the ultimate responsibility for disposal of the solid waste, many communities now considering full-service procurement opt for public ownership, to retain a greater degree of control over the facility.

Regardless of the approach selected, the procurement of solid waste management facilities in New York State is regulated by either General Municipal Law Section 101 and 103 or Section 120-w.

The Planning Unit is at this time expecting to procure the proposed MRF as a full-service project, and to procure the long-term landfill by the A/E procurement method.

Facility Ownership

The selection of ownership (public vs. private) should take into account the control over the project, the allocation of risks, and the economic benefits associated with each approach. Public ownership offers a greater degree of control, which is important in long-term projects that address significant environmental issues and involve substantial capital and operating expenditures. Private ownership allocates more of the operating risks to the private vendor, but the community will continue to have the ultimate responsibility for disposal of its solid waste should the vendor be unable to fulfill its obligations. In addition, the economic considerations of ownership should be addressed (i.e., equity contribution from a private owner vs. municipal ownership of the facility after retirement of a bond issue or other project debt). The Planning Unit at this time intends to pursue public ownership of the proposed MRF and the landfill.

Financing and Funding

The construction and operation of solid waste management facilities involves substantial capital expenditures and operating budgets. Generally such facilities can be financed from public sources, private sources, or a combination thereof. Financing sources for solid waste management facilities include:

- General Obligation bonds;
- Industrial Development bonds;
- Municipal Revenue bonds;
- Leveraged Leasing; and
- Private Equity.

These sources can be used alone or in combination to provide the necessary financing to implement the Planning Unit's solid waste management program. A specific financing plan should be developed as part of the implementation of the ANSWERS Wasteshed solid waste management program.

MITIGATION MEASURES

This draft GEIS/SWM Plan identifies recommended technologies and an approach and criteria for selecting sites for the proposed technologies, and presents generic mitigation measures which will be detailed and developed in the site- and technology-specific environmental review process. The following is an overview of mitigation measures which could be implemented to reduce or eliminate impacts associated with the proposed technologies: a MRF; a long-term landfill for disposal of non-processible waste, bypass waste from ANSWERS and OGS incinerator residue; and, if needed, a backup technology, a landfill for disposal of all unrecycled solid waste managed by the Planning Unit.

Air Quality

State-of-the-art methods for reducing emissions such as fugitive dust and controlling releases of landfill gases would be included in the design of the proposed technologies to meet the requirements of applicable regulations.

Water Quality

Impacts on the quality and/or quantity of surface and ground water from the construction and operation of solid waste management facilities are expected to be low. Regulatory requirements related to site selection, and controls mandated for facility construction and operation result in a minimization of potential impacts. Areas to be addressed would include soil erosion controls; drainage patterns; water supply sources and requirements; wastewater collection, treatment, and disposal; and storm water control.

Noise

There are a number of methods to control or reduce noise associated with construction and operation of solid waste management facilities, including vibration reduction, enclosure of the noise source, and absorption of sound by natural and/or man-made barriers. Noise can also be controlled by regular maintenance of equipment and the use of sound bafflers such as mufflers on mobile equipment. Scheduled hours for the acceptance of solid waste deliveries can also reduce noise impacts on residential areas.

Household Hazardous Waste Control

The solid waste management program can mitigate household hazardous waste through public education, household hazardous waste collection and disposal, and operator training. Although removal of hazardous household wastes from the waste stream will be emphasized prior to delivery to the solid waste management facilities, operators there should be trained to identify and remove any suspicious or unacceptable materials.

Loss of Habitat

Habitat loss will depend upon site development and the types of ecological communities present on the site. In the event that valuable habitat were to be significantly impacted or lost through project development, a compensating mitigation plan would be developed.

Traffic

Traffic impacts will be a function of the site selected for development, and subsequent studies would determine any necessary mitigation measures.

Aesthetics

Mitigation measures for aesthetics are also site-specific and would be addressed in a site- and technology-specific environmental assessment. Such measures typically involve the use of buffer, vegetation, and topography to minimize the visual impact of the facilities.

Land Use

While land use mitigation is also a function of the selected sites, precautions such as the development of appropriate siting criteria should be implemented to create compatible land use.

UNAVOIDABLE ENVIRONMENTAL IMPACTS

Based on the impacts described in Section 9 and the mitigation measures described in Section 11 of the GEIS/SWM Plan, the action as proposed would substantially eliminate potential adverse environmental impacts associated with continuing the existing landfills which are under consent order to close. Unavoidable adverse impacts may include increased traffic at the selected sites, engine exhaust fumes during construction and operation of the facilities, noise, fugitive dust, landfill gas generation, aesthetic impacts, soil erosion, and potentially impacts on ecological resources. Additionally, reusable materials and possibly energy would be recovered from solid waste through the proposed recycling facility. The local area will also realize direct and indirect benefits of increased employment from sales and income gains, and other positive effects.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The proposed development would consume or otherwise render unavailable for future use certain natural and man-made resources.

Resources expended in the implementation of the MRF and landfill facilities as well as the backup technology, if appropriate, would include land utilized for site development and energy, materials and financial resources. The proposed action would also potentially use air and water quality resources.

GROWTH INDUCING ASPECTS

The growth of the ANSWERS Wasteshed is not limited by the existing waste disposal infrastructure. The development of the MRF and long-term landfill, as well as continuation of ANSWERS are not expected to have any direct growth inducing aspects. However, implementation of the proposed action will provide for the necessary service of solid waste reduction, recycling, reuse, processing and disposal.

USE AND CONSERVATION OF ENERGY

The recommended Plan includes the development of two new facilities -- a MRF and a long-term landfill -- to complement the existing ANSWERS project. Energy will be consumed by construction and operation of the proposed facilities. Once the MRF becomes operational, resources in the form of recyclables will be conserved, and in some cases, this conservation will result in conservation of energy that would otherwise have been consumed in the production of new materials. In addition, it may be possible to reclaim energy from gases generated by decomposition of solid waste in the long-term landfill.

REGULATORY REQUIREMENTS

The proposed action must comply with all applicable federal, State, county, and local environmental laws and regulations. Table ES-5 lists the major permits, certifications, and reviews that may be required. Permits under 6 NYCRR Part 360 will also be required for the construction and operation of the solid waste management facilities.

TABLE ES-4

ALBANY GEIS/SWM PLAN

SOLID WASTE MANAGEMENT FACILITY SITING CRITERIA

PHASE	CRITERION	RECYCLING	LANDFILL
Exclusionary Phase	- Agricultural Districts with soil groups 1 & 2	X	X
	- Surface Water/ Regulated Wetlands	X	X
	- Floodplains	X	X
	- Endangered/Threatened Species	X	X
	- Primary Water Supplies/ Principal Aquifers		X
	- Community Water Systems		X
	- Depth to Bedrock ≤ 10 Feet		X
	- Potential Karst		X
	- Slopes ≥ 15%	X	X
	- Parks & Preserves	X	X
	- Urban/Suburban	X	X
	- Airports		X
Preferred Area Identification	- Preferred Acreage/ Configuration	X	X
	- Clay/Silt/ Till Soil		X
	- Industrial/Heavy Commercial Areas	X	X
	- Adjacent to ANSWERS (Rapp Road) Site	X	
Evaluation Criteria	- Population Density	X	X

TABLE ES-4

ALBANY GEIS/SWM PLAN

SOLID WASTE MANAGEMENT FACILITY SITING CRITERIA
(Continued)

PHASE	CRITERION	RECYCLING	LANDFILL
Evaluation Criteria (continued)	- Local Land Use	X	X
	- Geology		X
	- Environmental Setting	X	X
	- Site Life		X
	- Transportation Routes/ Site Access	X	X
	- Incompatible Structures	X	X
	- Utility Lines/ Rights-of-Way	X	X
	- Emergency Services	X	X
	- Air Quality/Visual Effects	X	X
	- Cultural Resources	X	X
	- Agricultural Land	X	X
	- Distance From Waste Centroid	X	X
	- Ease of Acquisition	X	X
	- Reservoir Drainage Basin		X
	- Availability of Utilities	X	X
	- Co-Location Potential	X	X

TABLE ES-A3

HYPOTHETICAL LANDFILL SITE COMPARISON: EVALUATION CRITERIA SUMMARY

	Site					
	A*	B*	C	D*	E*	F
Primary Criteria						
Population Density	H	L	M	M	M	M
Local Land Use	H	M	L	M	L	M
Geology	M	H	L	H	M	L
Environmental Setting	M	M	H	M	M	L
Site Life	H	M	L	M	M	M
Secondary Criteria						
Transportation Routes/Site Assess	M	H	M	M	L	M
Incompatible Structures	M	H	M	M	H	L
Utility Lines/Rights-Of-Way	M	M	H	M	L	L
Emergency Services	H	M	L	M	L	H
Air Quality/Visual Effects	L	L	M	H	M	M
Cultural Resources	M	M	H	L	M	L
Agricultural Land	M	H	L	M	M	M
Distance from Waste Centroid	L	M	M	H	M	H
Ease of Acquisition	H	L	M	H	M	M
Reservoir Drainage Basin	H	H	H	L	H	L
Availability of Utilities	M	M	L	L	H	M
Co-Location Potential	H	M	L	H	H	H

*Potential landfill sites recommended for further study.

H = High
M = Medium
L = Low

TABLE ES-A2

HYPOTHETICAL LANDFILL SITE COMPARISON: ENVIRONMENTAL SETTING

	Site					
	A	B	C	D	E	F
Characterization	M	M	H	M	M	L

H = High
M = Medium
L = Low

TABLE ES-A1

HYPOTHETICAL LANDFILL SITE COMPARISON: DISTANCE FROM WASTE CENTROID

	Site					
	A	B	C	D	E	F
Distance (miles)	22	14	12	4	14	6
Characterization	L	M	M	H	M	H

ATTACHMENT 1 TO THE EXECUTIVE SUMMARY

A. Detailed Description of Siting Criteria

1. Phase 1, Exclusionary Phase - Criteria

This section describes the criteria for the Phase 1 - Exclusionary Phase of the siting evaluation. It should be noted that the sources listed herein may be supplemented by updated versions of the same documents, or, if practicable, additional, more detailed information made available to the Planning Unit by individual landowners or other entities.

All solid waste management facilities are prohibited in certain areas as defined in 6 NYCRR Part 360-1.14(b) and (c). The criteria which screen out areas which are prohibited for all solid waste management facilities are the following:

CRITERION:	Agricultural Districts
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-1.14(c)(1). Prohibits siting of a solid waste management facility in an area which (a) consists predominantly of agricultural soil groups 1 or 2, and (b) is within an agricultural district and (c) is taken by eminent domain. This siting prohibition does not apply to land application and composting facilities. For solid waste management facilities considered herein, it is assumed that such land would be acquired by eminent domain. Therefore, soil groups 1 and 2 within Agricultural Districts will be mapped as prohibited areas.
Sources:	USDA, Soil Conservation Service, Albany County Office. Agricultural District Maps, 1974, Scale 1:24,000. General soil map and interpretations, Albany County, New York. USDA, Soil Conservation Service, 1974, 76 pp, 1 sheet, Scale 1:62,500.
CRITERION:	Surface Water and Regulated Wetlands
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-1.14(b)(1) prohibits the deposition of solid waste in surface waters. 6 NYCRR Part 360-1.14(c)(4) prohibits solid waste

management facilities from being located in a regulated wetland.

Sources: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000, with Regulated Wetlands Mapped by the New York State Department of Environmental Conservation.

CRITERION: Floodplains

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-1.14(c)(2) and 360-2.12(e)(3) prohibit siting of a solid waste management facility in a floodplain. Floodplain mapping is currently available for all communities within the ANSWERS Wasteshed with the exception of the Town of Westerlo. The possible existence of floodplains in any candidate areas identified in the Town of Westerlo will be specifically addressed during Phase 3, the Evaluation/Recommendation Phase.

Sources: Federal Emergency Management Agency and Housing and Urban Development. Flood Insurance Rate Maps.

CRITERION: Endangered or Threatened Species

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-1.14(c)(3) prohibits the construction or operation of solid waste management facilities which take endangered or threatened species or adversely affect their critical habitat. This is a difficult criterion to map. For this reason, although this is an exclusionary criterion, it will be applied to candidate areas remaining for evaluation in Phase 3.

Source: NYSDEC, New York Natural Heritage Program, Rare Plants, Animals, and Natural Communities Computer Listing, April 27, 1989.

In addition to the areas in which all solid waste management facilities are prohibited by 6 NYCRR part 360-1.14(b) and (c), landfills are specifically restricted from further areas by 6 NYCRR Part 360-2.12(c). The restricted areas for landfill siting as defined by 6 NYCRR Part 360 have been supplemented herein by the inclusion of additional restrictive criteria for recycling facilities and landfills. These restrictions and the basis for their inclusion as exclusionary criteria are discussed below.

CRITERION: Primary Water Supplies and Principal Aquifers

Facility Category: Landfill

Basis: 6 NYCRR Part 360-2.12(c)(1)(i) prohibits siting landfills over primary water supply aquifers or principal aquifers. Two sources are available for information on primary water supply aquifers and principal aquifers -- Bugliosi, et al., and Kantrowitz and Snavely. Bugliosi, et al., which delineates unconsolidated aquifers, is a more recent, more detailed and larger scale map than the Kantrowitz and Snavely map of unconsolidated aquifers. Based on discussions with NYSDEC staff it was concluded that Bugliosi, et al., represents the more appropriate basis for screening. More area-specific evaluation of soils occurs in Phase 2, the Preferred Area Identification Phase. Bugliosi, et al., also delineates aquifers of "unknown potential". These areas would be considered a principal aquifer by the NYSDEC unless investigation indicated otherwise (Lister, NYSDEC, 1989). Therefore, for the purposes of this siting effort, these areas will be considered to be principal aquifers.

Kantrowitz and Snavely is the only available source for information on bedrock aquifers. The area underlain by the Helderberg Group, Oriskany Formation, and the Onondaga Limestone comprises the bedrock principal aquifer.

In order to eliminate primary water supplies and any potential principal aquifers, any unconsolidated deposits delineated by Bugliosi, et al., and bedrock aquifers identified by Kantrowitz and Snavely will be eliminated.

Sources: Bugliosi, E.F., et al., 1988, Potential Yields of Wells in Unconsolidated Aquifers in Upstate New York - Hudson-Mohawk Sheet, U.S. Geological Survey Water - Resources Investigations Report 87-4275, 1 sheet, Scale 1:250,000.

Kantrowitz, I.H. and Snavely, D.S., 1982, Availability of Ground Water from Aquifers in Upstate New York: U.S. Geological Survey Open-File Report 82-437, 2 sheets, Scale 1:750,000.

Lister, J., 1989, NYSDEC, Personal Communication, April 28.

CRITERION:	Community Water Systems
Facility Category:	Landfill
Basis:	6 NYCRR Part 360-2.12(c)(1)(iii) prohibits siting a landfill within a public water supply wellhead area. "Public water supply wellhead area" is defined in 6 NYCRR Part 360-1.2(b)(114) as "the surface and subsurface area between a public water supply well or wellfield and the 99 percent theoretical maximum extent of the stabilized cone of depression of that well or wellfield considering all flow system boundaries and seasonal fluctuations." Municipal and non-municipal community water supply sources, both surface and ground water, have been identified. While a wellhead can be mapped with little difficulty, the "wellhead area" is specific for each well or wellfield and is not generally available information. The extent of the "wellhead area" is dependent upon the type of well construction, pumping rate, pumping duration, and source aquifer characteristics. The "wellhead area" is typically defined by conducting a pumping test and evaluating the change in water levels in the pumping well and nearby observation wells. The approach used in this siting process will be to map available information (wellhead locations) during the Phase 1, Exclusionary Phase. This will exclude areas directly adjacent to public water supply wellheads. During Phase 3, the Evaluation/ Recommendation Phase, any public water supply wellheads within 5,000 feet of a potential site will be identified. The effect of the presence of the public water supply on the suitability of the potential site will be further investigated subsequent to the draft GEIS/SWM Plan Preparation during any hydrogeologic site specific study of potential sites.
Sources:	New York State Atlas of Community Water Systems, 1982. NYSDOH, Inventory - Community Water Systems, 1984.
CRITERION:	Depth to Bedrock
Facility Category:	Landfill
Basis:	6 NYCRR Part 360-2.13 (a)(2)(e) requires a minimum ten-foot vertical separation between the base of

the constructed liner and bedrock. In addition 6 NYCRR Part 360-2.12(c)(5)(d)(1) and (2) indicate that areas with thick overburden should be preferred in siting.

Bedrock at depths of less than 40 inches has been mapped for Albany County by the Soil Conservation Service. Information on depth to bedrock for a portion of the County has been supplemented by Fickies and Regan (1982). This information is in a format which will allow it to be transferred to maps and will, therefore, be used during the Phase 1, Exclusionary Phase. Additional information on depth to bedrock is available from the New York State Geological Survey in the form of hand-drafted surficial geology maps. Bedrock outcrops and areas where glacial deposits are less than ten feet thick are indicated on these maps. However, due to the detail of these maps and the complex interfingering of some glacial deposits it is not practical to transfer the complex information to a map of the Planning Unit for use in Phase 1, Exclusionary Phase. Therefore, the surficial geology maps will be used to characterize potential areas remaining after the application of Phase 2, Preferred Area Identification Phase. Potential areas which the surficial geology maps indicate are underlain by shallow bedrock will be excluded.

Sources:

General soil map and interpretations, Albany County, New York. USDA, Soil Conservation Service, 1974, 76 pp, 1 sheet, Scale 1:62,500.

Fickies, R.H. and Regan, P.T., 1982, Engineering Geology Classification of the Soils of the Albany, New York 15 Minute Quadrangle, New York State Museum Map and Chart Series, No. 36, Scale 1:24,000.

Dineen, R.J., 1982, Surficial Geology Mapping on U.S. Geological Survey, 7-1/2 Minute Quadrangles, Various Dates, Scale 1:24,000, New York State Geological Survey.

CRITERION: Potential Karst

Facility Category: Landfill

Basis: 6 NYCRR Part 360-2.12(c)(4) and (5) prohibits siting of landfills in unstable areas and unmonitorable or unremediable areas. Karst

features are formed over limestone or dolomite bedrock and are characterized by sinkholes, caves, and solution-enlarged fractures. Ground water flow in karst areas is commonly complex and difficult to predict. These features contribute to making a site for any solid waste management facility which disposes or treats solid waste on the ground surface potentially unstable, unmonitorable or unremediable.

Source: Fickies, R.H. and Regan, P.T., 1982, Engineering Geology Classification of the Soils of the Albany, New York 15 Minute Quadrangle, New York State Museum Map and Chart Series, No. 36, Scale 1:24,000.

CRITERION: Slopes of Greater than or Equal to 15 Percent and Potentially Unstable Slopes

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-2.12 (c)(4) prohibits siting landfills in unstable areas. This criterion is intended to exclude areas where steep slopes are a predominant topographic feature. Under certain conditions slopes can become unstable and fail either gradually or suddenly. One component of a slope's susceptibility to failure is its degree of slope. In addition, topography in which steep slopes predominate is less suited to landfill construction than relatively flat terrain. Areas in which steep slopes predominate are also unsuitable for other types of solid waste management facilities. However, it is possible to design and construct a landfill or other solid waste management facility in an area where a small area of steep slopes exists. For a portion of Albany County, Fickies and Regan have delineated areas which contain potentially unstable slopes. For the entire County, slopes equal to or greater than 15 percent will be mapped from NYSDOT 7-1/2 Minute Quadrangle Maps. Both sources of information will be used for the Phase 1, Exclusionary Phase.

Sources: Fickies, R.H. and Regan, P.T., 1982, Engineering Geology Classification of the Soils of the Albany, New York 15 Minute Quadrangle, New York State Museum Map and Chart Series, No. 36, Scale 1:24,000.

NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

CRITERION: Parks and Preserves

Facility Categories: Recycling and Landfill

Basis: Parks and preserves will be excluded from consideration for all solid waste management facilities in order to promote the preservation of open space. 6 NYCRR Part 360-2.12(e)(8) requires evaluation of proximity to open space when siting a landfill. Public parks, recreational areas and Nature Conservancy holdings will be included in this exclusion.

Sources: Albany County Planning Department, Environmental Management Council, Map of Open Space for Albany County.

NYSDOT, Albany and Schenectady Counties, 1989, 1 Sheet, Scale 1:75,000.

CRITERION: Urban/Suburban Areas

Facility Category: Landfill

Basis: 6 NYCRR Part 360-2.12(e)(1) requires evaluation of population density when siting a landfill. Densely developed and populated areas will be excluded from consideration by delineating areas indicated on 7-1/2 minute quadrangle maps as urban.

Source: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

CRITERION: Airports

Facility Category: Landfill

Basis: 6 NYCRR Part 360-2.12 (c)(3) prohibits locating a landfill which accepts putrescible waste within

5,000 feet of a public-use airport runway used by piston-type aircraft or within 10,000 feet of a public-use airport runway used by turbojet aircraft. Public-use airport runway locations and appropriate set back distances will be identified. Potential sites near small airports will be considered further in Phase 3.

Source: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

2. Phase 2, Preferred Area Identification Phase - Criteria

This section presents the criteria for the Phase 2 - Preferred Area Identification Phase of the siting evaluation. It should be noted that the sources listed herein may be supplemented by updated versions of the same documents, or, if practicable, additional, more detailed information made available to the Planning Unit by individual landowners or other entities.

CRITERION: Preferred Acreage/Configuration

Facility Categories: Recycling and Landfill

Basis: This criterion will establish a preferred area for each specific technology. In addition, it is considered prudent, if feasible, to add an additional acreage requirement as a contingency in the event that a selected site contains some limitations to development not identified during the preliminary evaluation. While many major limitations should be excluded in the Phase 1, Exclusionary Phase, further obstacles may be revealed during the succeeding, more detailed evaluations and studies. These limitations may include biologic or geotechnical factors, public roads, utility lines or archaeologic/historic resources.

Preferred acreage for Recycling will be based on size requirements at similar facilities having approximately the same facility capacity.

The minimum acreage for a landfill will be determined for the area on which solid waste will be deposited plus associated structures and buffer area. It is estimated that approximately 100 to 130 acres of total fill area will be required under the recommended Plan. Minimum acreage requirements and the total site size required including buffer

and administration areas will be dependent upon the number of sites to be utilized and the configuration of the potential sites.

CRITERION: Areas Characterized by Lake Clay and Silt or Till

Facility Category: Landfill

Basis: Siting of landfills in low permeability soils is preferred due to the lower potential for contaminant migration and the potential to utilize on-site soils for components of the landfill liner and cover. The preference for these soil types is indicated in 6 NYCRR Part 360-2.12(d)(1). The New York State Geological Survey has mapped the surficial geology within the ANSWERS Wasteshed. Two of the surficial geology deposits, lake clay and silt and glacial till, commonly contain large clay or silt components, and will be considered preferred areas.

The New York State Geological Survey has compiled subsurface data, from sources such as water well and soil boring logs, and mapped the glacial, or surficial, geology within the ANSWERS Wasteshed.

Source: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000, with Surficial Geology Mapping by Robert Dineen, New York State Geological Survey.

NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000, with Subsurface Data Point Mapping by Robert Dineen, New York State Geological Survey, Open Files.

CRITERION: Industrial or Heavy Commercial Area

Facility Categories: Recycling and Landfill

Basis: The purpose of this criterion is to site a solid waste management facility in an area which is compatible with the industrial nature of solid waste facilities. Areas which are currently industrial or planned industrial, i.e., zoned industrial or heavy commercial, are preferred for siting a solid-waste management facility. In areas where applicable zoning regulations do not exist, existing and/or planned land use will be used to determine the "industrial" or "heavy commercial" character of the area.

Sources: Zoning Maps from Various Municipalities.

CRITERION: Adjacent to ANSWERS

Facility Category: Recycling

Basis: The development of a recycling facility adjacent to the ANSWERS RDF Plant on Rapp Road in the City of Albany would offer the following advantages:

- The recycling facility would be compatible with existing and/or adjacent land use
- Historical use of the area is the operation of solid waste facilities
- Solid waste vehicles could travel along established routes.

Therefore, this location has been identified as a preferred area for a recycling facility.

However, it should be noted that the potential environmental impacts of locating a recycling facility adjacent to the ANSWERS RDF Plant have not yet been evaluated.

3. Phase 3, Evaluation/Recommendation Phase - Criteria

This section presents the criteria for the Phase 3 - Evaluation/ Recommendation Phase of the siting evaluation. It should be noted that the sources listed herein may be supplemented by updated versions of the same documents, or, if practicable, additional, more detailed information made available to the Planning Unit by individual landowners or other entities.

CRITERION: Population Density in the Vicinity of the Site (Population Density)

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-2.12(e)(1) requires population density to be considered when evaluating potential landfill sites. Population density will also be evaluated for recycling facilities. The number of residences within 1,000 feet and within 2,000 feet of the preliminary site outline of a proposed site will be tabulated. Any residences within the

preliminarily delineated outline of a proposed site will also be noted.

Sources: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

Site drive-by.

CRITERION: Local Land Use

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-2.12(e)(5) requires consideration of local land use planning and zoning restrictions when evaluating potential landfill sites. Local land use will also be evaluated for recycling facilities. The intent of this criterion is to consider zoning and land use plans of each candidate area, and to assess the compatibility of facility development with zoning and land use plans. In this respect, zoning is considered a planning tool, not a legal restriction on development. For areas where no zoning exists, current land use will be used in lieu of adopted zoning regulations.

Sources: Municipal Zoning and Land Use Plans.

Site drive-by.

CRITERION: Geology

Facility Category: Landfill

Basis: Geologic information will have been used in screening potential landfill sites during Phases 1 and 2. Due to the importance of geology in affecting a potential landfill site's suitability, geology will be considered again during Phase 3. Geologic information specific to a potential site will be described. This will include available information from geologic maps, publications, and water well logs. Site characteristics such as depth to bedrock, presence of faults, glacial deposits and geomorphology will be described and compared among potential sites. With the exception of a site drive-by, no field investigations will be performed.

Sources: Dineen , R.J., 1982, Surficial Geology Mapping on U.S. Geological Survey, 7-1/2 Minute Quadrangles,

Various Dates, Scale 1:24,000, New York State Geological Survey.

Site drive-by.

CRITERION: Environmental Setting

Facility Categories: Recycling and Landfill

Basis: A general description of each site's topography, surface water bodies receiving site runoff and vegetation will be provided. The classification of surface water bodies which receive runoff from the site will be indicated. Surface water classifications are summarized in Table 7-2. Information on endangered or threatened species will also be included.

Sources: NYSDEC, Surface Water Classification Map, 1981.

New York Natural Heritage Program Rare Plants, Animals, and Natural Communities Print-out, April 27, 1989.

U.S. Geological Survey, 7-1/2 Minute Quadrangle Maps, Various Dates, Scale 1:24,000.

Site drive-by.

CRITERION: Site Life

Facility Category: Landfill

Basis: Siting, permitting, designing and constructing a landfill is a significant undertaking. Thus, it is more desirable to identify a site which can provide long-term disposal capacity. This criterion will evaluate the estimated site life of each potential landfill site. The assumptions are developed as part of Section 5 of this GEIS/SWM Plan, Solid Waste Processing/Disposal Technology Evaluation. These assumptions result in a need for approximately 95 to 115 acres of fill area for solid waste and approximately 10 to 15 acres of fill area for incinerator residue. This estimated area excludes buffer areas and areas for support facilities. (If these areas are included a land parcel of approximately 250 acres would be required if one, optimally shaped site was utilized.) It is assumed that the maximum depth of fill will be

approximately 100 feet for solid waste and approximately 70 feet for incinerator residue.

Because a major objective of the siting process is to identify highly suitable potential landfill sites based on many factors exclusive of site life, sites which cannot individually provide disposal capacity for the entire planning period (1994-2013) may be considered.

Source: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

CRITERION: Transportation Routes/Site Access

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-2.12(e)(2) requires the adequacy of transportation routes to be considered when evaluating potential landfill sites. Transportation routes will be evaluated by describing one possible route to a potential site from the waste centroid and indicating the functional classification of the roads which would be travelled on the identified route. If special weight or height restrictions are known to exist, they will be noted.

New York State issues overweight divisible load permits (R permits) which allow certain vehicles to carry a divisible load that exceeds the weight limits specified in the Vehicle and Traffic Law. As of January 1, 1989, an R permit allows a vehicle to carry up to 135 percent of its legal limit. Certain bridges within the Planning Unit are posted "No Trucks with R Permits". Bridges on state routes, including those with this posting, have a maximum weight limitation of 40 tons. Bridges that have weight limits less than 40 tons are posted with the appropriate weight limit.

Sources: NYSDOT, Functional Classification Maps, 1984 and 1985, Scales 1:63,360 and 1:24,000.

Albany County Department of Public Works, Map of County Bridges, 1989, Scale 1:63,360.

Site drive-by.

CRITERION:	Incompatible Structures
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-2.12(e)(3) requires consideration of proximity to incompatible structures such as schools, houses of worship, nursing homes, hospitals and commercial districts when evaluating potential landfill sites. Incompatible structures within 1,000 and 2,000 feet of the preliminarily delineated outline of a potential site will be identified.
Sources:	NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000. Site drive-by.
CRITERION:	Utility Lines/Rights-of-Way
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-2.12(e)(4) requires consideration of utility lines when evaluating potential landfill sites. The presence of utility lines or rights-of-way within the preliminary site outline will be identified.
Sources:	NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000. Site drive-by.
CRITERION:	Emergency Services
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-2.12(e)(6) requires consideration of risk due to fires and availability of appropriate emergency services when evaluating potential landfill sites. Consideration of availability of appropriate emergency services is appropriate for all types of facilities. The location of the nearest emergency response unit, fire station, and pressurized water line or perennial surface water body will be identified. The accessibility and available capacity of these services will be evaluated following the preparation of the draft GEIS/SWM Plan.

Sources:	NYSDOT 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.
	Local Municipal Water System Maps.
	Site drive-by.
CRITERION:	Air Quality/Visual Effects
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR Part 360-2.12(e)(7) requires consideration of the environmental effects of a landfill including visual effects and effects on air quality. Air quality and visual effects will be evaluated for all types of facilities. Air Quality attainment/non-attainment zones for each of the six ambient air quality standards will be identified. The potential visibility and aesthetics of the site from roads and adjacent areas will be addressed comparatively.
Sources:	NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.
	Site drive-by.
CRITERION:	Cultural Resources
Facility Categories:	Recycling and Landfill
Basis:	6 NYCRR requires consideration of proximity to open space, cultural, historical and recreational resources when evaluating a potential landfill site. During Phase 1, Exclusionary Phase, public parks, recreational areas and Nature Conservancy Holdings will have been eliminated from further consideration. Other open space and recreational resources such as camping facilities and golf courses will be considered under this Phase 3 evaluation criterion.
Sources:	NYS Office of Parks, Recreation and Historic Preservation, State Historic Preservation Maps and preliminary literature search.
	County of Albany, Historic Scenic Sites Map, Albany County Tricentennial Commission, 1983.

Albany County Planning Department, Environmental Management Council, Map of Open Space for Albany County.

NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

NYSDOT, Albany and Schenectady Counties, 1989, 1 Sheet, Scale .1;75,000.

Site drive-by.

CRITERION: Agricultural Land

Facility Categories: Recycling and Landfill

Basis: 6 NYCRR Part 360-2.12(e)(9) requires consideration of effects on agriculture and agricultural land when evaluating potential sites. In Phase 1, Exclusionary Phase, areas within agricultural districts which contain soil groups 1 or 2 will have been eliminated from further consideration. Under this criterion remaining agricultural areas will be addressed. Potential sites will be evaluated with regard to (a) whether they are located within agricultural districts, and (b) current level of cultivation, if any.

Sources: USDA, Soil Conservation Service, Albany County Office. Agricultural District Maps, 1974, Scale 1:24,000.

Site drive-by.

CRITERION: Distance From Waste Centroid

Facility Categories: Recycling and Landfill

Basis: This criterion will consider the incremental financial and environmental cost of transporting solid waste by evaluating the proximity of each potential site to the center of solid waste generation (waste-centroid) within the Planning Unit. It is assumed that for each municipality within the Planning Unit, the center of waste generation can be approximated by the population center. The waste centroid for the Wasteshed is located in the City of Albany in the northeast portion of the Wasteshed as shown in Figure 7-1. The location of the waste centroid coincides

approximately with the location of the ANSWERS RDF Plant on Rapp Road.

Sources: Capital District Regional Planning Commission, A Profile of the Capital District, Second Edition, 1986.

City of Albany, ANSWERS Scale House Data, 1988.

Short-Term Waste Identification Study, May/June 1989.

CRITERION: Ease of Acquisition

Facility Categories: Recycling and Landfill

Basis: Although it is expected that a Solid Waste Authority will be formed for the Planning Unit and that the Authority will have the power of eminent domain, site acquisition difficulties may remain. In general, it should be less difficult to acquire sites which contain no utility rights-of-way and are held by a single or only several land owners. In addition, it would be easier to require sites which are volunteered by a person or entity who either owns the site or has the ability to acquire and convey the site. Available information on rights-of-way and the number of parcels will be identified. In addition, volunteered sites will be identified.

Sources: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

Albany County Hall of Records, Tax Maps.

Site Drive-by.

CRITERION: Reservoir Drainage Basin

Facility Category: Landfill

Basis: The purpose of this criterion is to minimize the risk of contamination to reservoirs which are used for public water supplies. The risk of significant environmental impact (or contamination of) ground water or surface water quality from a state-of-the-art landfill is very low. However, if a potential site is in a reservoir drainage basin it will be indicated and further evaluated subsequent

to the preparation of the draft GEIS/SWM Plan as part of a final site selection process.

Sources: NYSDOT, 7-1/2 Minute Quadrangle Maps, 1983, Scale 1:24,000.

New York State Atlas of Community Water Systems, 1982.

CRITERION: Availability of Utilities

Facility Categories: Recycling and Landfill

Basis: All solid waste management facilities require water supply, wastewater disposal and electrical service. In some instances these services can be provided by on-site systems. In other cases, access to municipal services is important. The proximity of potential sites to these types of existing utilities will be indicated. The accessibility and available capacity of these services will be evaluated following the preparation of the draft GEIS/SWM Plan.

Sources: Utility Maps from Municipalities.

Site drive-by.

CRITERION: Co-Location Potential

Facility Categories: Recycling and Landfill

Basis: Locating more than one solid waste management facility at the same site may offer numerous advantages. The potential co-location of more than one recommended technology will be indicated for each potential site.

B. Application of Siting Criteria to a Hypothetical Wasteshed

1. Introduction

Through the use of a hypothetical wasteshed, Wasteshed X, (see Figure ES-A1) this section illustrates the manner in which the process described in Section 7 of the ANSWERS Wasteshed draft GEIS/SWM Plan, Siting Approach and Criteria, will be applied to identify potential sites for solid waste management facilities in the ANSWERS Wasteshed. While it is not possible to present all aspects of the siting process by example, the application of some of the landfill siting criteria to a hypothetical wasteshed is presented here illustrate the general approach which will be used in the siting of the MRF and landfill facility(ies) recommended in this Plan. The criteria to be used in identifying potential sites in the ANSWERS Wasteshed, however, will be the full set of criteria presented in Table ES-A4, not the abbreviated set of criteria used in this example.

2. Phase 1, Exclusionary Criteria-Illustration

Application of the exclusionary criteria will result in the identification of areas potentially available for a landfill in the wasteshed. Figures ES-A2 through ES-A4 in this example represent the total listing of the map-based exclusionary criteria for the hypothetical Wasteshed X. (For visual clarity, a number of exclusionary criteria applicable to the ANSWERS Wasteshed including some exclusionary criteria which are small map features, for example floodplains, are not used in this example.) By compiling the information contained in Figures ES-A2 through ES-A4, a composite map, Figure ES-A5, results which depicts the potentially available areas for landfill siting in the hypothetical wasteshed. (For the ANSWERS Wasteshed, maps which are similar to those which will be used for some of the exclusionary criteria, are included in Section 6 of this GEIS/SWM Plan, Environmental Setting, as Figures 6-3, 6-4 and 6-5.)

3. Phase 2, Preferred Area Identification Phase - Illustration

Through the application of preferred criteria, Phase 2 of the siting process is intended to identify sites with the most desirable characteristics. Preferred criteria will be applied to areas that were previously identified as potentially available by the application of exclusionary criteria. Figures ES-A6 through ES-A8 present information on geology,

criteria. Figures ES-A6 through ES-A8 present information on geology, zoning, and public roads for the hypothetical Wasteshed which, for this example, are intended to represent all of the Phase 2 criteria for the hypothetical wasteshed. This information will be used to identify preferred areas based on soil type, zoning type, acreage and configuration. In this example, application of the preferred criteria to the hypothetical Wasteshed X results in only one preferred area, Area A, which is shown in Figure ES-9. Figure ES-9 also shows other potential sites which result from modifying the preferred criteria as discussed below.

It is desirable to have a number of sites under consideration at this stage of the siting process, since site-specific information which could result in the elimination of sites has not yet been incorporated. Therefore, it becomes necessary to modify the preferred criteria to allow for the identification of additional potential sites. In this hypothetical case, at this point in the evaluation, it is determined that the Phase 2 criteria should be modified to include as preferred areas, areas which are zoned other than industrial or heavy commercial and areas which are smaller than the originally preferred size. The application of the modified Phase 2 criteria results in the identification of five additional sites identified as Sites B through F as shown in Figure ES-9.

4. Phase 3, Evaluation/Recommendation Phase - Illustration

During the Evaluation/Recommendation Phase, each candidate area, or potential site, identified as a result of applying the preferred criteria, is further characterized. As potential sites progress from Phase 2 to Phase 3, no distinction is made as to whether a potential site was identified by the initial preferred criteria or the modified preferred criteria. However, the site characteristics which are considered in the original preferred criteria are reconsidered in the evaluation criteria, so that any differences between potential sites should be identified in Phase 3.

For each site, a factual summary will be prepared. The factual summary will present information, and the source of information, for each evaluation criteria. Based on the site summaries, each potential site will be designated as either high, medium, or low with respect to each evaluation criteria, based on a comparison with the other potential sites. (A characterization as "High" will indicate more desirable conditions.)

To provide an example, two of the Phase 3 criteria are evaluated in detail for the hypothetical sites. One criteria, distance to the waste centroid, is readily quantifiable, whereas the other criteria, environmental setting, is not.

The characterization of sites for the distance from the waste centroid criterion is presented in Table ES-A1. This characterization is based on a straightforward comparison of the distance of the sites from the waste centroid. For the environmental setting criteria, sites will be characterized based on the local topography, vegetation, surface water bodies, and wildlife habitat. Potential sites which provide little or no habitat for aquatic or terrestrial species, due to existing land use, are likely to be characterized as "High". Potential sites which may provide habitat for an endangered or threatened species are likely to be characterized as "Low". Potential sites which are intermediate to these conditions are likely to be characterized as "Medium". Table ES-A2 presents the characterization of the hypothetical sites for assumed environmental settings, the specifics of which have not been fabricated.

In a similar manner, all potential sites will be characterized for all evaluation criteria. A summary table, similar to Table ES-A3, will be prepared. Because all evaluation criteria are not equally important in characterizing the suitability of a site for implementing a particular type of solid waste facility, Phase 3 criteria are characterized as primary and secondary criteria. These criteria are categorized in Table ES-A3. As discussed in Section 7 of the ANSWERS Wasteshed draft GEIS/SWM Plan, Siting Approach and Criteria, primary criteria will be given more weight than secondary criteria in evaluating the suitability of potential sites.

Based on the characteristics of the potential sites, four sites from the hypothetical Wasteshed X have been selected for further study. It is desirable that a minimum of three sites, and no more than five sites will be recommended for further study. The guiding factor in the number of sites recommended for further study is identifying a reasonable grouping of all Phase 3 sites into two groups - a "more favorable" group and a "less favorable" group. The sites recommended for further study in this hypothetical example, A, B, D and F, compare favorably with respect to the

primary evaluation criteria. All sites meet the exclusionary and preferred criteria; sites A, B, D and F appear to be more suitable. Sites C and E, which are not recommended for further study, are not permanently eliminated from consideration. These sites may be recommended for further study should sites A, B, D and F prove to be either inaccessible for further study or use, or otherwise unsuitable for development.

3. Study of Cancer Incidences Surrounding Municipal Solid Waste Landfills, New York State

See Appendix C - http://www.atsdr.cdc.gov/HAC/landfill/html/appc.html

from ASTDR site http://www.atsdr.cdc.gov/HAC/landfill/html/toc.html

Landfill Gas Primer

An Overview for Environmental Health Professionals

Appendix C: Health Studies Related to Landfill Gas Exposures

This appendix summarizes five studies that were undertaken to assess the potential health effects of landfill gas exposure over the long term:

1. Study of Reproductive Effects from Exposure to Landfill Gas, Montreal, Canada

Goldberg MS, Goulet L, Riberdy H, and Bonvalot Y. Low birth weight and preterm births among infants born to women living near a municipal solid waste landfill site in Montreal, Quebec. Environ Res.: 1995. 69(1): 37-50.

Researchers in Montreal conducted a study of landfill gas emissions to evaluate potential reproductive impacts from living near a municipal solid waste landfill. The study design

included comparing instances of low birth weight, very low birth weight, premature birth, and smallness for gestational age for populations living near the landfill and assumed to be exposed to landfill gases versus reference populations living beyond the area where exposure was assumed. Control or reference areas were selected based on sociodemographic factors. Potential exposures to landfill gas were defined by exposure zones around the landfill site. Sampling data, however, were not available to quantify exposures. Information was gathered from the Quebec birth registration file.

Researchers found that there were elevated instances of low birth weight and smallness for gestational age in the areas where exposure was assumed. No increase in instances of very low birth weight or premature birth was found. The researchers could not definitively conclude whether low birth weight and smallness for gestational age are associated with exposure to landfill gas. The effects of all potentially important confounding factors could not be addressed, and detailed environmental exposure assessments were not available. Researchers recommended that additional studies be conducted to support or refute their evidence.

2. Study of Cancer Incidences Surrounding a Municipal Solid Waste Landfill, Montreal, Canada

Goldberg MS, Al-Homsi N, Goulet L, and Riberdy H. Incidence of cancer among persons living near a municipal solid waste landfill site in Montreal, Quebec. Archives of Environmental Health. 50(6): 416-424. Nov/ Dec 1995.

Goldberg MS, Seimiatyck J, DeWar R, Desy M, and Riberdy H. Risks of Developing Cancer Relative to Living Near a Municipal Solid Waste Landfill in Montreal, Quebec, Canada. Archives of Environmental Health. 54(4): 291-296. July/August 1999.

The Miron Quarry municipal solid waste landfill is located in a heavily populated area. Approximately 100,000 people live within 2 kilometers (1.5 miles). This landfill, which operated between 1968 and the late 1990s, is also the third largest landfill in North America. Because of its proximity to a large residential population, there has been concern that landfill gases released into the air may have impacted public health. Beginning in 1980, landfill gases were collected and flared; however, the collection system was inefficient and combustion was likely incomplete. Therefore, some landfill gases were still entering the ambient air. Sampling from the gas collection system detected 35 chemicals, including the recognized human carcinogens benzene and vinyl chloride and the suspected human carcinogens methylene chloride, chloroform, 1,2-dichloroethane, bromodichloromethane, tetrachloroethylene, 1,4-dichlorobenzene, 1,2-dibromoethane, and carbon tetrachloride.

Because of health concerns, researchers conducted a study to evaluate cancer incidences in populations living near the Miron Quarry landfill. This study was the first of its kind. The researchers established four exposure zones based on distance from the landfill boundary and prevailing wind direction. The researchers also selected four reference zones based on socioeconomic factors where people were not expected to have been exposed to the landfill

gas. Researchers used the Quebec Tumor Registry, a population-based cancer registry, to evaluate whether cancer incidence among persons who lived near the site was higher than the incidence in the reference zones during the period 1981 to 1988.

A statistical analysis found that among men living in the exposure zone closest to the site, elevated risks were observed for cancers of the prostate, stomach, liver, and lungs. Among women, rates of stomach cancer and cervix uteri cancer were elevated, but breast cancer incidence was less than expected. The researchers concluded, however, that there are limits to these findings. Quebec residents who were treated outside of Quebec were not included in the tumor registry. To the researchers' knowledge, the reliability of the data retained in the registry has not been investigated. Although monitoring data for gas in the collection system were available, no data regarding contaminant concentrations in ambient air were available. The researchers, therefore, were unable to assess cancer incidence directly in relation to landfill gas concentrations. No information was available regarding residential history, specifically the duration of residence. The researchers also noted that the landfill began operation in 1968, and the study time encompassed 1981 to 1988. Therefore, the maximum latency period was only 20 years, considered a short latency period for solid tumors. Because of the lack of environmental data and other limiting factors, the researchers stated that they were unable to conclude whether the excess cancer risks found in this study represent true associations with exposure to landfill gas or other factors. The researchers recommended additional study.

An additional study was conducted to further evaluate the cancer incidence in the vicinity of the Miron Quarry landfill. Investigators used face-to-face interviews to obtain information about key risk factors. The main limitations of the study were the absence of complete lifetime residential histories, the relatively short period from the first exposure (1968) to cancer onset, and the use of distance measurements to define "exposure" in lieu of actual measurements of exposure. The results of the analyses suggest possible associations between living near the landfill and liver cancer, kidney cancer, pancreatic cancer, and non-Hodgkin's lymphomas. The statistical evidence is not persuasive, however, according to investigators. This study did not show an excess of stomach cancer. The finding most consistent with the earlier study was the excess risk of liver cancers in high-exposure zones. Without actual exposure data, no strong conclusions can be drawn, but investigators controlled for other risk factors (e. g., alcohol consumption, hepatitis-B virus) and noted the presence of vinyl chloride (a recognized liver carcinogen) in the landfill gas collection system.

3. Study of Cancer Incidences Surrounding Municipal Solid Waste Landfills, New York State

ATSDR. Agency for Toxic Substances and Disease Registry. U. S. Department of Health and Human Services. Investigation of cancer incidence and residence near 38 landfills with soil gas migration conditions, New York State, 1980-1989. Prepared by the New York State Department of Health, Division of Occupational Health and Environmental Epidemiology, Bureau of Environmental and Occupational Epidemiology. PB98-142144. June 1998.

Continuing public concern about cancer rates and exposure to toxic substances, specifically those in landfill gases, prompted the New York Department of Health (NYSDOH) to conduct a study of cancer incidence among people living near landfills.

From the hundreds of landfills located in New York State, NYSDOH selected 38 landfills for inclusion in this study. These landfills were selected because information indicated that gas production and movement could create conditions for possible exposures. Of these landfills, 30 began operation before 1970. These landfills were not lined or capped as they would be if constructed today because New York State and the federal governments did not begin regulating landfills until 1973 and 1976, respectively. Gas collection systems had been installed in 22 of the study landfills at the time of the NYSDOH study. By the end of the 1980s, only three of the study landfills were operating; currently none are active.

At each of the 38 landfills selected for study, NYSDOH identified potential exposure areas and reference areas where no exposure was expected. The potential exposure areas were identified as a ring around the landfill boundary where landfill gas was migrating according to sampling data. For most of the landfills, this area extended 250 feet from the landfill boundary. At four landfills, sampling data indicated that the area of potential exposure should extend 500 feet from the landfill boundary, and at one landfill the area extended 1,000 feet from the landfill boundary. The reference areas were identified as the area within the same zip code as the landfill, but beyond the ring that defined the potential exposure areas.

Data from the New York State Cancer Registry were used to identify leukemia, non-Hodgkin's lymphoma; liver, lung, kidney, bladder, and brain cancer cases diagnosed during the 10-year period between 1980 to 1989. Using death certificates files, NYSDOH also identified non-cancer deaths which occurred in the potential exposure areas and reference areas during the same 10-year period. The residential address for each cancer case and each non-cancer death was used to pinpoint the resident locations in relation to the potential exposure areas and reference areas. To determine if higher than expected cancer cases were occurring within the potential exposure areas, NYSDOH compared the proportion of cancer cases to non-cancer deaths in the potential exposure areas to the proportion of cancer cases to non-cancer deaths in the reference areas. Of the 9,020 cancer cases identified, 49 were within the potential exposure areas. Of the 9,169 noncancer deaths identified, 36 were within the potential exposure areas.

Using a statistical comparison of these results, this study found a statistically significant fourfold elevation of risk for bladder cancer and leukemia for women living in the areas of potential exposure. This means that the statistical tests show that it is very unlikely, but not impossible, that the higher-than-expected number of cases of these two types of cancer in the area of potential exposure occurred just by chance. For the other five cancers examined in females and the seven cancers examined in males, no statistically significant increase in cancer incidence was found.

These results should be viewed with consideration of the study's limitations, including the lack of exposure (type and duration of exposure) and possible confounding factors. It is possible

that unidentified personal risk factors, such as smoking or occupation, could have played a role in the findings. In addition, no data were available to confirm that individuals were exposed to landfill gas or what the chemicals were in the landfill gas. Only a person's address at the time of diagnosis was used for mapping his or her location. The length of time people lived at their homes before being diagnosed with cancer was unknown; a person in the study could have recently moved. This is important because of the latency period between the beginning of the cancer's growth and its later appearance and diagnosis. For most cancers, the period of latency is thought to be between 10 and 20 years.

NYDOH concluded that this study does not prove that there is a relationship between living very close to the landfill and female bladder cancer and leukemia. But the study does suggest that there may be an increased risk for these cancers for women who lived within 250 feet of the landfills during the 1960s and 1970s, based on the reporting dates of cancer incidence and the expected latency period. Since the 1960s and 1970s, when individuals may have been exposed, cleanup efforts have changed the conditions at New York State landfills. As a result, this study does not provide information about health risks related to living near landfills today.

To further assess potential cancer effects from living near landfills, NYDOH is conducting additional review of medical records for leukemia and bladder cancer cases for people who lived in the area of potential exposure. A second study is planned using a different group of controls to see if the initial study findings can be verified. The initial study will be updated to include cancers diagnosed through 1994 and will include additional review of data that are relevant to past landfill conditions. Sampling will be conducted at selected landfills to assess current conditions.

4. A Panel Study of Respiratory Outcomes, Staten Island, New York

ATSDR. Agency for Toxic Substances and Disease Registry. A Panel Study of Acute Respiratory Outcomes, Staten Island, New York. Draft Final Report for Public Comment. August 20, 1999.

In the early 1990s, a community member living near the Fresh Kills Municipal Landfill in Staten Island, New York— one of the largest MSW landfills in North America—requested that ATSDR conduct a public health assessment to address health concerns about living near this landfill. Residents questioned if odors and gas emissions from the landfill might be the cause of asthma and other breathing illnesses in the area. To address these concerns, ATSDR conducted a health study of the nearby communities. The study was undertaken to gain a better understanding of the possible health risks posed by the landfill to area residents. ATSDR designed the study to focus on asthma sufferers and assess how hydrogen sulfide concentrations, odors, and proximity of residence to the landfill might affect respiratory function.

A group of more than 150 community residents, ranging in age from 15 through 65 years, reported as having asthma volunteered to participate in the study. Over 80% of the study

participants had lived on Staten Island for at least 5 years. For a 6-week period from July through September 1997, when annual landfill emissions tend to be at their peak, study participants completed a daily diary to record perceived odors, measures of respiratory symptoms, and daily activities. Participants also measured their lung function each morning and evening with a peak flow meter. During this same period, ATSDR conducted continuous air monitoring in the study area to assess ambient air concentrations of hydrogen sulfide (a common source of the rotten egg odor), ozone, and particulate matter. Pollen and fungi counts and meteorologic data, which are confounding factors that can influence study results, were also sampled. ATSDR also conducted a separate odor impact survey to provide an independent odor assessment.

ATSDR concluded that the measured levels of hydrogen sulfide and other parameters were not high enough to cause health problems. When study participants reported that they smelled rotten eggs or garbage, they also reported that they were more likely to wheeze or experience difficulties in breathing. A moderate decline in lung function was also documented on days when participants reported these odors. Results varied throughout the study group by factors such as the participant's age and how long he or she had suffered from asthma. Laboratory measurements of hydrogen sulfide, however, did not correlate increased hydrogen sulfide concentrations with increased respiratory symptoms or peak flow.

ATSDR concluded that the results of this study suggest that the perception of odors is associated with worsening of respiratory symptoms of some people in the study group. Future investigations of potential health effects associated with the landfill should consider odor issues.

5. Risk of Congenital Anomalies Near Hazardous Waste Landfill Sites in Europe: The EUROHAZCON Study

Dolk H, Vrijheid M, Armstrong B, Abramsky L, Bianchi F, Garne E, et al. Risk of congenital anomalies near hazardous waste landfill sites in Europe: the EUROHAZCON Study. Lancet. 1998; 352: 423-27.

In 1998, researchers in Europe published the results of a study conducted to assess the relationship between residence near a hazardous waste landfill and birth defects. Several research centers in Europe maintain regional-population based registers of congential anomalies (birth defects). These registers also included data on live births, stillbirths, and pregnancy termination after prenatal diagnosis.

To assess the relationship between birth defects and residence near a hazardous waste landfill, the researchers identified 21 landfills in five countries (Belgium, Denmark, France, Italy, and the United Kingdom) that were located in areas covered by the registers. The landfill and an area within a 7-kilometer (km) radius was identified as the study area. The area within a 3-km radius of the landfill was designated as the "proximate" zone and the area between a 3-and 7-km radius of the landfill served as the control zone.

Researchers reviewed the congential anomaly registers for a time period extending from when the register began to at least 5 years after operation of the nearby landfill began to identify study and control cases. Study cases in the proximate zone and control cases in the control zone were identified geographically by the mother's address or postcode at the time of birth. Once data were collected, researchers conducted statistical analyses to evaluate the expected number of birth defect occurrences and the actual number of birth defect occurrences in both the study and control areas.

The study concluded that there was a small, but significant, increased risk of birth defects to babies whose mothers lived within 3-km of a hazardous waste landfill. Neural-tube defects, malformations of the cardiac septa, and malformation of the great arteries and veins had an increased risk of occurrence. Researchers noted that socioeconomic status is a potential, but unlikely, confounding factor in this study. Another, potentially more important confounding factor is the presence of other industrial sites or toxic exposures near landfill sites. This study did not, however, measure actual chemical exposures of women residing near the landfill sites. Researchers felt that direct measure of exposures and birth defects would better establish a causal relationship. Researchers suggested that further study is needed.

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US Department of Health and Human Services

City Mitigates Odor Problem and Establishes Odor Complaint Hotline.

The City of Albany has taken a systemic approach to determine the cause and eliminate odors at the landfill. This approach was taken due to the number of potential odor sources at the landfill site. Potential odor sources included: incoming wastes, emissions from the leachate collection system, emissions from combustion of landfill gas at the flare unit, emissions for the internal combustion engines at the site and landfill gas generated by older waste within the landfill mass.

An investigation was performed to determine the odors generated by each potential source and the impact of these odors off the landfill site. To determine the impact of the incoming wastes, an assessment of filling and daily cover operations was performed. The assessment revealed that the deposition of the incoming waste in the landfill had little impact on off site odors, however, placement of additional daily cover at the end of each workday was determined to be required to reduce odors generated in the area of the recently placed waste. The use of additional daily cover has resulted in a reduction of odors off site that may have been contributed to by incoming placed waste.

An investigation of the leachate collection system included an odor survey along the collection system piping alignment and manholes to determine any sources of odors that may migrate off site. The survey revealed that although several points of the system may generate odors, they are likely not having an impact off site, however, these points have been sealed or connected to the landfill gas collection system.

Emissions from the combustion of the landfill gas at the flare system and internal combustion engines was evaluated to determine if the exhaust from the combustion of the landfill gas was attributing to odors detected off site. The evaluation included analysis of the landfill gas before combustion, review of the combustion efficiency and analysis of the exhaust. The evaluation determined that exhaust from the flare system and internal combustion engines have a slight odor associated with them, however, this odor is generally dissipated before having an impact off site. Investigation of remedial alternatives to reduce exhaust odors generated through combustion are currently be evaluated.

Based on the overall investigations conducted, the largest source of off site odors was determined to be from fugitive emissions of landfill gas generated by older waste in the landfill mass. Scans performed over the landfill surface indicated that landfill gas was escaping through the soil cover and migrating off site. In addition, efficiently calculations of the landfill gas collection system indicated that landfill gas was not completely collected and escaping through the landfill soil cover. To mitigate the fugitive emissions migrating off the landfill site, and not negatively impact the quality of the gas being utilized to produce energy, an interim cap system was constructed over the landfill slopes and areas with gas escaping to capture and collect the landfill gas prior to migrating off site. The interim cap consisted of a shallow gas collection system and impermeable plastic membrane and associated drainage features. The City has also

installed additional collection points within the waste mass to collect more landfill gas. These measures have increased the collection system efficiency.

To keep the surrounding community informed about operations and the investigations performed, the City hosted Odor Control Update Meetings on April 3, 2007 and July 11, 2007. These meetings were attended by local municipal representatives, residents immediately impacted by the landfill odors and representatives of the NYSDEC. In addition, to assist with determining the probable source of odors from the landfill, the City established an Odor Complaint Hotline at 453-8288. The hotline allowed for the community surrounding the landfill to call in odor complaints at the time of detection so the City could immediately investigate the source of the odor.

Since completion of the investigation and remedial actions summarized above, odors detected off the landfill property have been significantly reduced and the number of odor complaints regarding the landfill has declined as well.

INFORMATION BULLETIN

CITY OF ALBANY
RAPP ROAD LANDFILL EXPANSION
January 2006

The City of Albany is proposing to expand the existing Rapp Road 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 regional solid waste planning unit. The following questions and answers provide some basic information about solid waste management in the Capital Region and the landfill expansion project.

1) Who is responsible for waste disposal in the Capital Region?

During the early 1980's most individual municipal landfills were closed. Municipalities within the Capital Region joined state mandated solid waste planning units that became responsible for the development of a Solid Waste Management Plan for each planning unit. The City of Albany and 10 other municipalities joined together to form a planning unit known as the ANSWERS Solid Waste Planning Unit that is comprised of 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.

Other municipalities joined other planning units that became responsible for waste management for those municipalities, primarily in other counties. The only two solid waste landfills now operating in the four county region are the municipally owned and operated landfills in the City of Albany and Town of Colonie.

2) What is a Solid Waste Management Plan?

A Solid Waste Management Plan is a document prepared by the regional planning unit that analyzes the waste stream of the planning unit and determines appropriate ways to handle, recycle and ultimately dispose of solid waste. These plans are required by State Environmental Conservation Law. The Answers Plan for the Albany Region communities is a State approved Plan.

3) What does the ANSWERS Solid Waste Management Plan say?

The ANSWERS Solid Waste Management Plan identified materials to be recycled and determined that the most cost effective, environmentally sound method for the disposal of residual wastes was landfilling. Following the preparation of the Plan, a landfill siting study was prepared that identified a number of locations for the development of a new landfill once the existing Rapp Road Landfill was closed. This siting study was conducted based on rigorous criteria and screening methods established by the NYSDEC for siting any new landfill in New York State. Ultimately, a site known as Site C-2 in the Town of Coeymans was identified as the most appropriate site for a new landfill facility.

4) Why do we need another expansion of the Rapp Road Landfill if Site C-2

has been selected?

The permitting and design of a new landfill facility can take many years. Decisions made early in the process can have long lasting impacts with respect to the cost and life of the new facility. During the continued investigations of Site C-2 as required by State law, certain previously unmapped federally regulated wetlands were discovered in an area where future phases of the landfill would be developed. To develop the site to meet the needs of the Planning Unit for 20 years, a mitigation plan off-setting the impacts to these federal wetlands will need to be approved by the U.S. Army Corps of Engineers. The implementation of a mitigation plan can be expensive and take a number of years. While initial phases of the landfill can be developed without disturbing these federal wetlands, the costs of developing the infrastructure for the site would be excessively high without the benefit of developing the site for 20 years of service. As a result, it is prudent to apply for an expansion of the Rapp Road Landfill while the mitigation plan is prepared, approved and implemented. The investigation at Site C-2 has been further delayed by repeated litigation challenging the City's actions regarding the site.

5) Isn't the Rapp Road Landfill in an environmentally sensitive area?

The Rapp Road Landfill is located in an area adjacent to Exit 24 of the New York State Thruway known as the Pine Bush Preserve. The name Pine Bush is taken from its dominant and unique pitch pine and scrub oak vegetative community. Areas within the Pine Bush that have not been previously disturbed harbor several rare and endangered species. The City looked at several possible expansion alternatives at the Rapp Road facilities, and is proceeding with the alternative that appears to have the least impact on the Pine Bush Preserve. This alternative is entirely within the City of Albany on land that was purchased by the City of Albany in the 1970's for public purposes. Much of it is part of the existing landfill parcel itself. The land is owned by the City of Albany, but had been dedicated to the Pine Bush Commission in the early 1990's for the purposes of management. At that time, it was dedicated as part of a concerted effort to achieve 2000 acres of protected Pine Bush habitat. As a result of the success of the Pine Bush Commission since that time, over 3000 acres are now in Preserve.

6) Are steps being taken to protect the Pine Bush from any adverse impacts related to landfill operations?

The City of Albany has been an active participant in the preservation activities regarding the Pine Bush. When the permit for the Albany Interim Landfill was granted in 1990, the City agreed to fund certain start-up costs of the Albany Pine Bush Preserve Commission, and to create an endowment of approximately $1 million dollars. Additionally, the City has spent approximately $6 million to acquire parcels of land necessary to establish a viable preserve. Since 1995, the City has contributed over $1.5 million dollars to the Albany Pine Bush Preserve Commission through the imposition of a "tip fee surcharge" on all waste handled at the landfill. In addition, as part of the closure of previously filled sections of the Rapp Road Landfill, the City is utilizing appropriate vegetative species that are consistent with the native vegetation found in the Pine Bush. The City is committed to the continued use of native vegetative species as part of the closure of sections of the landfill as they are filled so that once the entire facility is closed, native Pine Bush species will return to the landfill area. For the

proposed expansion, the City will continue to work with the Pine Bush Commission through the permitting process, proposing additional mitigation measures, in an effort to offset the loss of the ten acres needed for the expansion, and to further advance the preservation of the Pine Bush.

7) What is being done with the methane gas that is generated in the landfill?

Methane gas, a greenhouse gas that is generated as waste decomposes in a landfill, is collected and utilized to produce energy at the Rapp Road Landfill. The City currently holds a contract with a private entity that utilizes the gas to operate an engine/generator to produce electricity that is directed into the NIMO power grid. In 2003, the parent company of the private firm went into bankruptcy and the company stopped investing the funds needed to up grade the gas collection and management equipment. The City of Albany had to step in and begin the process of gas field improvements itself. After two years of legal negotiations, the City has renegotiated the contract and will be taking over management of the gas collection infrastructure. The last major equipment upgrade will be installed in early February 2006 and the City will begin to manage the entire gas field system. In addition, the City is currently negotiating a contract with another private entity that will utilize the methane from a newer area to produce compressed natural gas suitable to be used as an alternative to gasoline and diesel fuel in vehicles. This will help to reduce dependence in foreign oil.

8) What would occur if the City could no longer use the Rapp Road Landfill?

If the Rapp Road Landfill was no longer available for waste disposal, and Site C-2 in Coeymans was not yet developed, the City would be forced to develop a transfer station so waste could be exported. While at the moment, there are a few large privately operated landfills in the western part of New York State that might be able to provide capacity for the City and other planning unit members via a waste disposal contract. However, there is no assurance these facilities would be available to the City long term. Assuming adequate capacity were available, the waste would need to be loaded onto large trailers for transport. The long hauling of waste can be an expensive operation given the cost of fuel and the manpower necessary to transport the waste. In addition, the City would have to pay tipping fees at these facilities on a per ton basis. As a result, should the City be required to export waste, it is anticipated the costs of that operation would far exceed the costs associated with continued operation of a local landfill. The cost of waste disposal would then increase for residents and businesses within the Capital Region, and the Region would no longer control decisions about where its waste is disposed. This would result in higher waste disposal fees for residents, businesses, and institutions alike throughout the region. City of Albany residents and businesses would be particularly hard hit due to the loss of landfill revenue to the City. Significant tax increases and/or layoffs combined with service cuts would be the only recourse to the City.

9) Is a Waste-to-Energy facility a viable option?

There are a number of waste-to-energy facilities in operation within New York State. While the technology regarding the pollution control systems associated with these facilities has improved over

the years, these types of facilities are very expensive to construct and operate. In general, tipping fees associated with waste-to-energy facilities are 3 to 4 times higher than permitted landfill facilities. In addition, changes in air pollution control regulations, and subsequent required modifications to control systems utilized at waste-to-energy facilities, can significantly affect the long-term economic viability of these facilities. Given the construction and operational costs of these facilities, waste-to-energy plants must operate at near capacity so that maximum revenue can be generated. This greatly differs from a landfill facility where landfill space not utilized in a given day is still available for use in the future. Finally, even with a waste to energy plant, you would still need a landfill for the disposal of ash. For all these reasons, the ANSWERS Solid Waste Management Plan recommended a regional landfill, not a waste-to-energy facility following an exhaustive evaluation of the various treatment and disposal options reviewed as part of the planning process.

10) What is being done through recycling programs and other means to reduce the need for landfill disposal space?

The City has an aggressive recycling program that collects newspapers, phonebooks, magazines, paperboard, cardboard, glass and plastic jars and bottles, and metal cans. The City also collects yard waste including grass clippings, leaves and tree branches. In addition, the City also collects bulky items such as tires and white goods (refrigerators, washing machines, etc.), and household hazardous waste. When all of the individual achievements of the distinct programs are tallied, the program yields an approximately 31% diversion rate (based on weight from 2002 totals). This diversion rate is accomplished at ‘the curb’. Department of General Services (DGS) staff completes 30,000 collection stops weekly collecting over 13,000 tons of recycled material annually. This diversion rate is a ‘solid’ number based on actual tonnages and scale data that is derived from weight measurements of DGS collection activity.

The goals of the program are defined by two basic paradigms; the micro or local level and the macro or global level. The goal of the program in the micro paradigm is to decrease the volume of waste disposed at the landfill in order to extend the capacity of the landfill for as long a period as feasible

In terms of the global or macro impacts of the program, the program not only diverts global waste inputs but also provides a supply of materials that replace virgin materials in various manufacturing processes. This supply allows manufacturers to reuse plastics, metals, paper, etc thus limiting the global harvesting of fossil fuels, metals and wood products. Minimizing the extraction of virgin materials not only serves to expand the reserves of these materials but also mitigates the emissions of greenhouse gas pollutants that result from the extraction of the virgin materials.

11) What is the tentative timeline on this proposed expansion and what opportunities will exist for public comment or participation?

The City anticipates submitting an application to DEC in early 2006 . As part of the permitting process, DEC will solicit public input as to what the City should include in the documents reviewing the environmental impacts of the project. Once DEC accepts the City’s application, it will hold a public

hearing for the public to comment on the application. This will likely occur towards the end of next year. The City's existing landfill will reach capacity some time in 2009, so the City will need permission from DEC to construct the landfill in 2008 in order to avoid any gap in landfill capacity.

Information Bulletin

Long Range Landfill Siting Process
ANSWERS Solid Waste Management Planning Unit
January, 2006

During late 1991, the City of Albany received a permit from the NYS Department of Environmental Conservation, (DEC), for an “interim” landfill on Rapp Rd. in the City of Albany. One of the specific conditions of approval was that the City, on behalf of the ANSWERS solid waste management planning unit, proceed with the siting process for a long range landfill that would serve the disposal needs of the planning unit once the Rapp Rd. facility was closed. The planning unit includes most of Albany County and the City of Rensselaer. The ANSWERS Solid Waste Management Plan (SWMP), previously prepared and adopted in accordance with State law, and approved by the DEC, proposed a long range landfill as the preferred disposal option for the planning unit. The first siting study, titled: Potential Landfill Sites Identification Report, was completed in May of 1991 and identified 15 potential sites (see attachment A), in the towns of Bethlehem, Coeymans, and Guilderland. The siting criteria that resulted in the selection of the 15 sites were based on DEC permitting requirements and included in the ANSWERS SWMP that was adopted in 1991. During the summer of 1991, public hearings were held in the three towns that contained the potential sites, in order to solicit specific input and comment on the proposed sites. A report issued in June of 1992, titled: Sites for Preliminary Investigation, narrowed the field to three sites that were chosen for on site survey work and soil/groundwater testing. These three sites are identified on attachment A as sites B 6, C-1, and C-2. Finally, the preferred site, located in the northeast section of the Town of Coeymans and known as site C-2, was chosen, based on a number of considerations. The site is fully described, along with the reasons for the selection, in a report issued in August of 1994 titled: ANSWERS Final Site Selection Report.

An initial landfill permit application for site C-2 was submitted to the DEC in late 1994. This submission triggered the start of a lengthy review process that will involve substantial opportunity for public participation by town officials, residents, and other interested parties. As part of this process, a public hearing on the scope of the Draft Environmental Impact Statement (DEIS) was held on May 31, 1995. Since that time a proposed scope has been submitted to, and approved by, the DEC.

A legal action was commenced by the Town to halt the permitting process. The lawsuit was dismissed in its entirety in a Court decision dated January 7, 1996, and later affirmed in appellate courts in 1997-98, thereby allowing the siting process to proceed. A later legal action was commenced by the Town to prevent the City from issuing bonds to acquire the property until review had been completed under the State Environmental Quality Review Act. That action was successful, and the City is prevented from acquiring the property until review of the acquisition has been completed under SEQR. The City has continued to retain control over Site C-2 through extensions to the option agreements with the landowners. However, local residents recently brought another lawsuit challenging the ability of the City to enter into the last option extension agreement, and a decision is pending in that case.

Not all of the site specific engineering, design and other detailed information is currently available for public distribution, however, the following information can be provided at this time:

- The City of Albany is acting on behalf of the ANSWERS planning unit and, in this capacity, is required by the New York State Department of Environmental Conservation to proceed with the permitting process for Site C-2 pursuant to provisions contained in the Rapp Rd. Landfill operating permit.

- The facility is needed to provide solid waste disposal capacity for the planning unit as a whole and would satisfy a critical public need providing an essential public service. The proposal constitutes a regional solution to the common problem of solid waste management and disposal, that is facing local governments throughout the region.

- The proposed site contains about 363 acres of land, located west of the NYS Thruway, north of the Lafarge Cement plant, south of the Niagara Mohawk power line easement and east of Pictuary Rd. in an area zoned Industrial. See attachment B.

- Of the 363 acres only about 80 acres would actually be used for the landfill cell and accessory work areas. The vast majority of the site would remain wooded buffer, surrounding the site to insure that the facility is not visible from any home, roadway, or developed area.

- The site, being west of the NYS Thruway, is entirely outside of the Hudson River valley viewshed. No portion of the site would be visible from the river itself, from any vantage point from across the river, or from within the river valley. The design of the facility would be in accordance with all DEC requirements to avoid any impacts on the water quality of Coeymans Creek, (a tributary of the Hudson), which borders the western boundary of the site.

- The siting of a waste management facility such as this will involve substantial host community benefits that might include: free waste disposal for town residents, financial incentives to the town which could result in substantial property tax decreases, and other forms of mitigation to offset any impacts identified in the environmental review process. These host community benefits and mitigation measures will be negotiated and spelled out in detail during the DEC permit review process when substantive issues will need to be addressed.

- The site is characterized by uniform, clay soils, up to 200 feet thick, which makes the site a very desirable location based on the landfill siting criteria contained in the DEC's Part 360 regulations for permitting solid waste management facilities. These same desirable soils, however, also mean the presence of regulated wetlands.

- Only local waste collection vehicles would be traveling directly to the site. All other waste would be processed at the Rapp Rd. processing center and transferred into covered trailers so as to minimize the number of vehicles and vehicle trips involved in transporting waste to the site.

- The transport vehicles would travel via the Thruway to the Selkirk exit, and then down NYS route 144 to the site entrance through an underpass beneath the Thruway. As a consequence, traffic impacts would be limited to a 2±-mile stretch of NYS Rt. 144.

- Limited hours of operation and other operating procedures, combined with the remote location and substantial wooded buffers, will dramatically reduce any impacts to the residents of the Town.

- Only two homes exist within 2000 feet of the proposed landfill cell area. Both are separated by wooded areas that would remain as buffer. The nearest home is approximately 1400 ft., or a quarter of a mile away on the other side of the Thruway.

- The landfill would be fully compatible with all local waste reduction and recycling programs. Only processed waste, remaining after recyclables are removed from the waste stream, would be disposed of at the facility.

More detailed information will be made available once the permit application and draft environmental impact statement are complete and submitted to the DEC for review.

Information Bulletin
Long Range Landfill Siting Process
ANSWERS Solid Waste Management Planning Unit
Preferred Site Identification
May 1995

During late 1991, the City of Albany received a permit from the NYS Department of Environmental Conservation (DEC), for an "interim" landfill on Rapp Road in the City of Albany. One of the specific conditions of approval was that the City, on behalf of the ANSWERS solid waste management planning unit, proceed with the siting process for a long range landfill that would serve the disposal needs of the planning unit once the Rapp Road facility was closed. The planning unit includes most of Albany County and the City of Rensselaer. The ANSWERS solid waste management plan, (SWMP), prepared and adopted in accordance with State law, and approved by the DEC, also proposed a long range landfill as the preferred disposal option for the planning unit. The first siting study, titled: Potential Landfill Sites Identification Report, was completed in May of 1991 and identified 15 potential sites (see attachment A), in the towns of Bethlehem, Coeymans, and Guilderland. The siting criteria that resulted in the 15 sites were based on DEC permitting requirements and included in the ANSWERS SWMP that was adopted in 1991. During the summer of 1991, public hearings were held in the three towns that contained the potential sites, in order to solicit site specific input and comment on the proposed sites. A report issued in June of 1992, titled: Sites for Preliminary Investigation, narrowed the field to three sites that were chosen for on site survey work and soil/groundwater testing. These three sites are identified on attachment A as sites B-6, C-1 and C-2. Finally, the preferred site, located in the northeast section of the town of Coeymans and known as site C-2, was chosen, based on a number of considerations. The site is fully described, along with the reasons for it's selection, in a report issued in August of 1994 titled: ANSWERS Final Site Selection Report.

The landfill permit application is now being developed. An initial application was submitted to the DEC in late 1994, this triggered the start of a lengthy review process that will involve substantial opportunity for public participation by town officials, residents, and other interested parties. Although not all of the site specific engineering, design and other detailed information is currently available, the following information can be provided at this time.

- The City of Albany is acting on behalf of the ANSWERS planning unit and, in this capacity, is required by the NYS DEC to proceed with the siting process under a timetable that is contained in the Rapp Road landfill operating permit.

- The facility is needed to provide solid waste disposal capacity for the planning unit as a whole and would satisfy a critical public need providing an essential public service. The proposal constitutes a regional solution to a common problem of solid waste management and disposal, that is facing local governments throughout the region.

- The proposed site contains about 363 acres of land, located west of the NYS Thruway, north of the Blue Circle Cement plant, south of the Niagara Mohawk power line easement and east of Pictuary Road, in an area zoned Industrial. See attachment B.

- Of the 363 acres only about 50 would actually be used for the landfill cell and accessory work areas. The vast majority of the site would remain wooded buffer, surrounding the site to insure that the facility is not visible from any home, roadway, or developed area.

- The siting of a waste management facility such as this will involve substantial host community benefits that might include: free waste disposal for town residents, financial incentives to the town which could result in substantial property tax decreases, and other forms of mitigation to offset any impacts identified in the environmental review process. These host-community benefits and mitigation measures will be negotiated and spelled out in detail during the DEC permit review process when substantive issues will need to be addressed.

- The site is characterized by uniform, clay soils, up to 200 feet thick, which makes the site a very desirable location based on the landfill siting criteria contained in the DEC's Part 360 regulations for permitting solid waste management facilities.

- No waste collection vehicles would be traveling directly to the site. All waste would be processed at the Rapp Road processing center and transferred into sealed trailers so as to minimize the number of vehicles and vehicle trips involved in transporting waste to the site.

- The transport vehicles would travel via the Thruway to the Selkirk exit, and then down NYS route 144 to the site entrance through an underpass beneath the Thruway. As a consequence, traffic impacts would be limited to a 1.5+/- mile stretch of NYS Rt. 144.

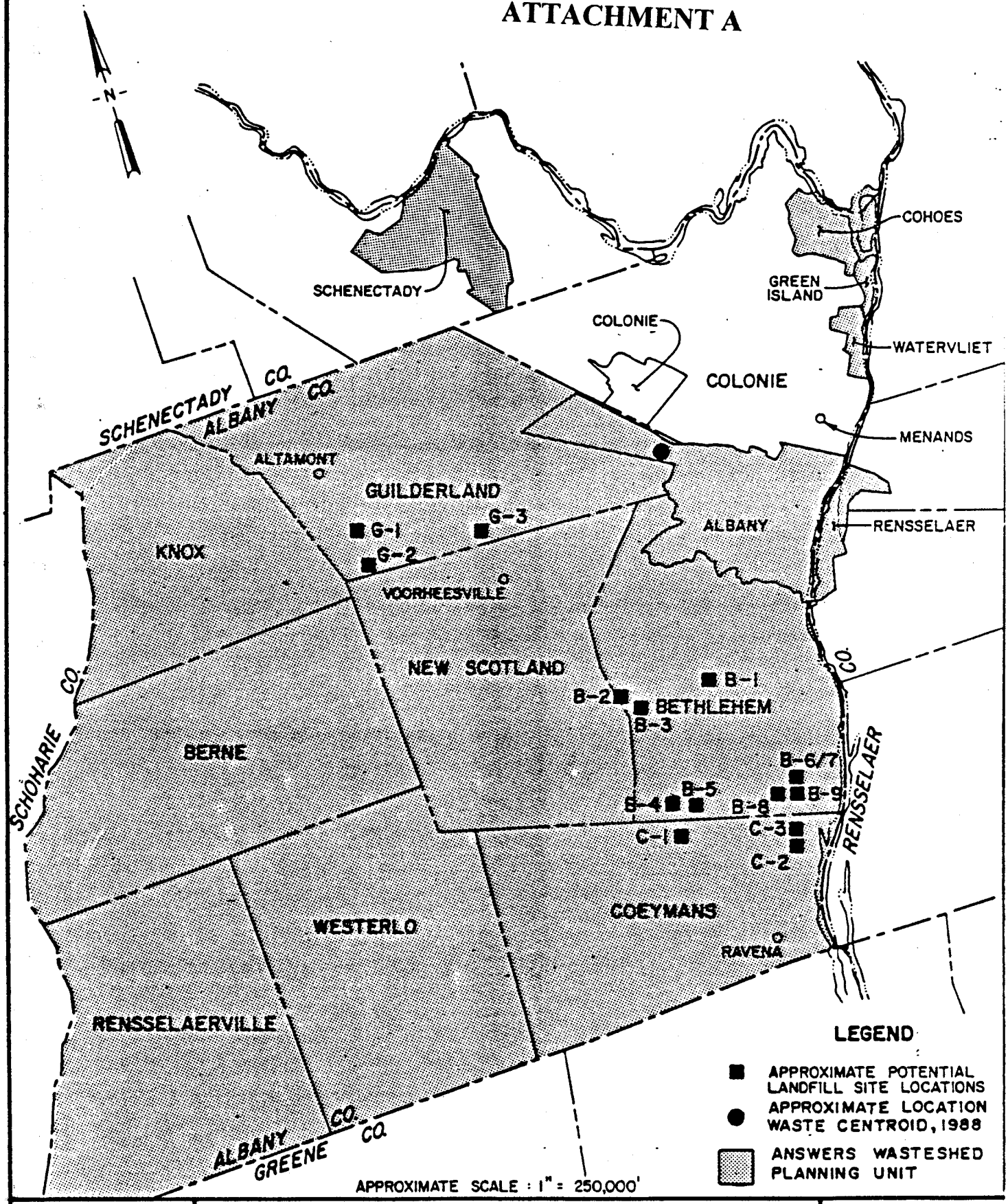
- Limited hours of operation and other operating procedures, combined with the remote location and substantial wooded buffer, will dramatically reduce any impacts to the residents of the Town.

- Only two homes exist within 2000 ft. of the proposed landfill cell area. Both are separated by wooded areas that would remain as buffer. The nearest home is approximately 1400 ft., or a quarter of a mile away and on the other side of the Thruway.

- The landfill would be fully compatible with all local waste reduction and recycling programs. Only processed waste, remaining after recyclables are removed from the waste stream, would be disposed of at the facility.

Further information will be made available once the permit application and draft environmental impact statement are complete and submitted to the DEC for review.

ATTACHMENT A



MALCOLM PIRNIE

ANSWERS WASTESHED
ALBANY, NEW YORK
POTENTIAL LANDFILL SITE LOCATIONS

MALCOLM PIRNIE, INC.

FIGURE 1-8

Keeping landfill option open

Saratoga County to seek renewal of state permit for empty facility despite concerns raised by some

By LEIGH HORNBECK, Staff writer
First published: Friday, January 18, 2008

NORTHUMBERLAND -- By now, the Saratoga County landfill could hold more than 1 million tons of garbage. Instead, 10 years after it was built, not even a banana peel has landed in it.

The Board of Supervisors do not plan to open it, but the county will apply to the state Department of Environmental Conservation this year to renew its permit.

"The county has a history of looking at issues globally; it's one of the few counties that has a countywide sewer and will have a countywide water system. The board looks at it as what's best for the entire county," said Alan Grattidge, R-Charlton, the supervisor who will oversee the renewal application as the chairman of the board's Public Works Committee.

Grattidge said the renewal process protects a county asset, adding that the landfill's presence -- it could take in 108,000 tons of trash a year -- could hold down prices charged by private waste haulers in the area.

But that assertion draws laughter from Edgar King, a Democrat and former supervisor of Northumberland who fought the landfill.

"It's like saying cars are too expensive, we're going to build a car dealership but not run it, just let it sit there -- or a supermarket, the analogies go on and on," King said.

The empty landfill, which looks much like the farm field it once was -- except for the empty leachate tanks nearby -- is a rare exception in the region. Albany County is struggling to handle its trash flow and odor; the Clinton County landfill to the north takes in 175,000 tons of trash a year; and to the west, Fulton County accepted 105,000 tons last year on a budget of $4.2 million a year. The solid waste budget supports itself.

Joseph Miranda, who oversees the county recycling program, also monitors the landfill and the northern harrier, a threatened species of hawk that lives next to it. He said the county spends about $12,000 annually for the landfill's utilities -- about the only operational expense.

He's heard every joke about the empty landfill and keeps his sense of humor about it. A political cartoon mocking the issue is tacked to a wall outside an empty lunchroom built for a dozen workers.

John Carl D'annibale / Times Union

Joseph Miranda, Saratoga County's recycling coordinator, points out leachate storage tanks at the vacant site.

It's hard to track where trash collected around the county is going because it is largely collected by private haulers, but it's safe to say residents and businesses are paying more for trash disposal because higher gasoline prices influence costs for hauling. Miranda estimates about a third -- 48,000 tons -- goes to the Hudson Falls burn plant; a third goes to Hiram Hollow in Wilton, a transfer station managed by Casella Waste Systems that takes 75,000 tons a year; and a third is driven to the Albany or Colonie landfills.

The county will be paying for a study of the landfill, in the northeastern corner of the county overlooking the Hudson River, to ensure it complies with environmental safeguards. Grattidge estimated the study's cost at $10,000.

"The assessment will be used to determine what changes, if any, need to be made from the 1997 permit," said DEC spokeswoman Maureen Wren.

It cost $6.4 million to construct the landfill, Miranda said. Engineering and lawyers' fees pushed the cost to more than $10 million, said Barbara Weed of Schuylerville, the leader of the Farms First movement that sued to stop the project in the mid-1990s. By comparison, the county spends about $1 million a year on its recycling program. The budget has stayed fairly flat although recycling brings in more money each year. In 2007, the county collected 6,581 tons of recyclables and made $847,000 on sales to businesses that use the material.

Weed said she's tried to walk away from the issue and will not participate in the renewal process.

"I am offended as a taxpayer that they will put money toward renewing the permit. I wish they would look at other options and put more money into recycling," Weed said.

John Carl D'Annibale / Times Union

Pumping station manholes stand out amid the empty space at the as-yet-unused Saratoga County landfill site in Northumberland.

Leigh Hornbeck can be reached at 581-8438 or by e-mail at lhornbeck@timesunion.com.

TIMES UNION July 25, 1995

Albany has dim view of Rensselaer dump

Mayor Jennings thinks reopened construction and demolition landfill would ruin capital city's view

BY YANCEY ROY
Staff writer

EAST GREENBUSH — Activists and government officials on the east side of the Hudson River fighting the reopening of a dump have found allies on the west side.

Albany Mayor Jerry Jennings thinks that the landfill, which would take refuse from construction and demolition sites, would not be an appealing sight from downtown Albany. Rensselaer County activists said the dump, if permitted by the state, could grow to nearly 250 feet high.

The scenario does not sit well with Albany.

The mayor objects to the potential affects on the Albany "view shed" as people look east from the area of the Capitol. His office has requested legal standing on the permit application by 4-C's Development Corp. and recently asked the state to extend the public comment on the matter.

"We have to start looking at the regional impacts" of such projects, Jennings said recently.

Albany's interest is welcomed by residents in East Greenbush and Rensselaer and government officials there who have vowed to block 4-C's.

"This would be a large, ugly blight on the vista," East Greenbush Supervisor Michael Van Voris said Monday. "As people go across the bridge (into Rensselaer County), that's what they'll remember."

The Cristo family, which operates 4-C's, declined comment and its lawyer could not be reached.

The dispute, which has been broiling since the summer of 1993, involves a 12-acre landfill off Partition Street in Rensselaer near Plaza View, a 110-unit upscale development. The Cristo family had run the dump since 1989, but its permit expired in December 1993 and operations ceased.

Neighbors, worried about the dump's proximity to a residential area, say it should stay closed. The Cristo family contends that the dump has been located on the same parcel for decades and it is only receiving flak now, as the town evolved from a rural to a suburban community.

Van Voris would rather see the Cristos use the area for residential development.

Last summer, the state Department of Environmental Conservation determined that resuming operations at the landfill could have significant environmental effects on the community. The agency cited potential increased truck traffic through Rensselaer, changes in waste collection and management by 4-C's and neighbors' complaints of noise, dust and odors in making its decision.

DEC regional permit administrator William Clarke said 4-C's has offered to build berms to reduce noise. But the company also wants to expand the size of the landfill (currently only four of the 12 acres are used) and accept loads from outside companies.

From: John Wolcott <beverwyck1@nycap.rr.com>
To: <aamarcuc@gw.dec.state.ny.us>
Date: 12/15/2008 4:55 PM
Subject: Albany Landfill expansion

Dear Mr. Marcuccio :

I oppose yet another expansion of the Albany Landfill. Your agency has unwisely approved to many and too destructive expansions of this landfill already.
The City of Albany should go into a program of xero waste management with a recycling center and completely abandon their landfill in the Pine Bush. The responsibility of waste management should, for now, be returned to the local municipalities as it formerly was. and taking waste from outside the City should cease.

As for the restoration offered by the City through Clough Harbour, it is not so much in comparison to the irreparable damage done already, I wish to point out in this res[ect. that the original landfill destroyed a good portion to " The Kings Highway" the main road westerly for access to the Great Lakes from the English seaboard colonies in the 17th. and 18th centuries. The last expansion of the landfill bisected the best example of an echeloned line of parabolic sand dunes to be found in the Pine Bush. Echeloned dunes are a major attraction of the Provinceland Dunes on Cape Cod. As for the restoration proposed, it only involves one dune, a part of a cluster the rest of which was north of the railroad tracks and that part was completely destroyed a few years ago when developments in the Village of Colonie were approved there. That one dune restoration would be kind of nice but only so so compared to the echeloned line which I have pointed out. The proposed restoration is too costly in terms of what the proposed expansion will take away and what it will itself cost. Furthermore I have not seen where the Pine Commission has asked for this particular restoration, at least not as a trade off. So I don';t fine the pro\posed restoration to be a very solid selling point for approving the new landfill expansiion. Please see the map which I will momentarily scan to eye to help illustrate these points.

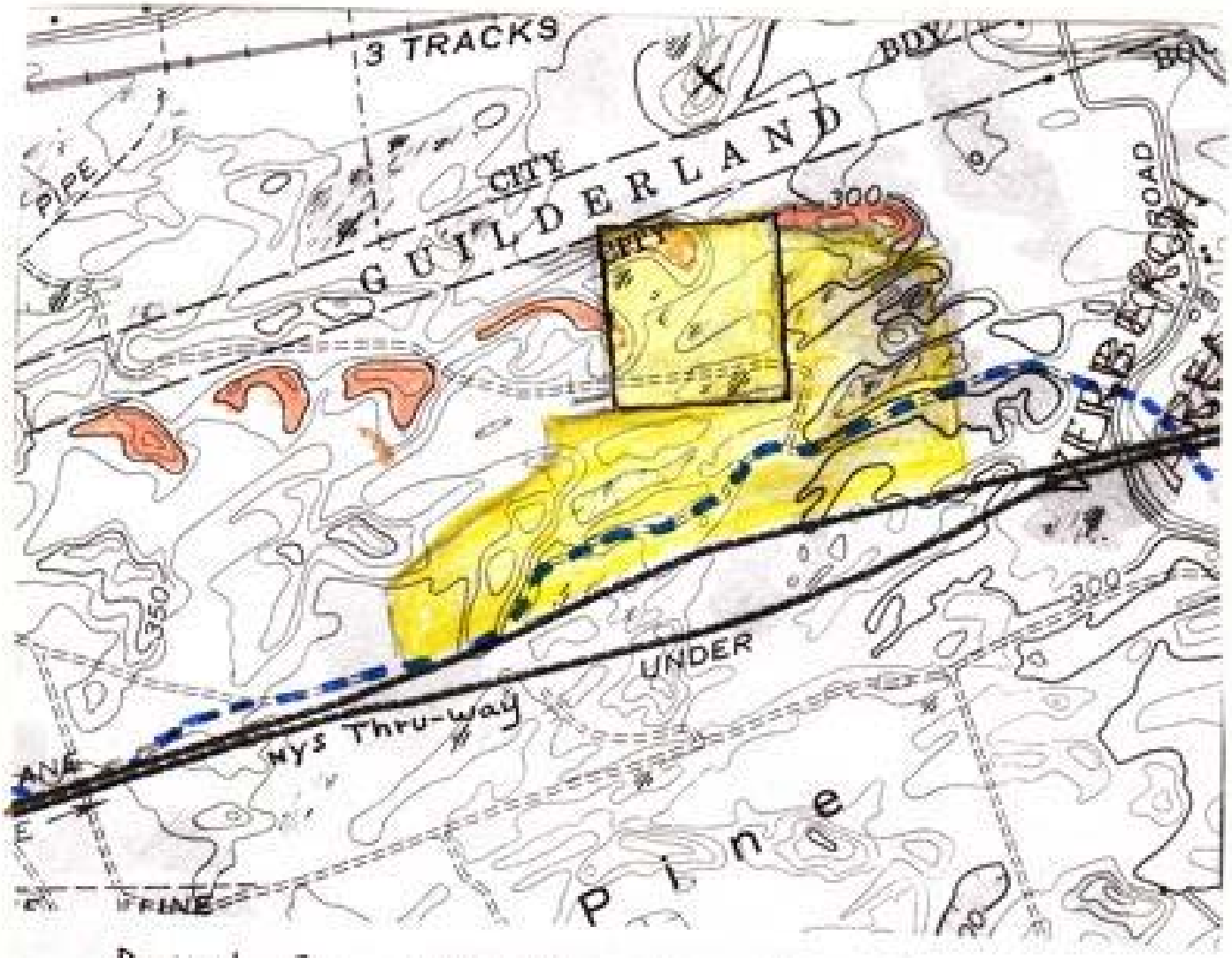
Very truly,

John Wolcott

Member Save the Pine Bush

344 Sheridan Avenue

Albany, New York 12206



Detail from 1953 Topo Map USGS 1:24000
Albany Quadrangle 7½'
enlarged to 1:12000 1 inch = 1000 feet
orange echeloned dune line interrupted by Landfill
yellow: Albany Landfill
bright yellow in square: Ca. 2000 expansion
blue: Historic Colonial King's Highway
X dune at Trailer Park proposed for restoration

S Wolcott
15 Dec 2008

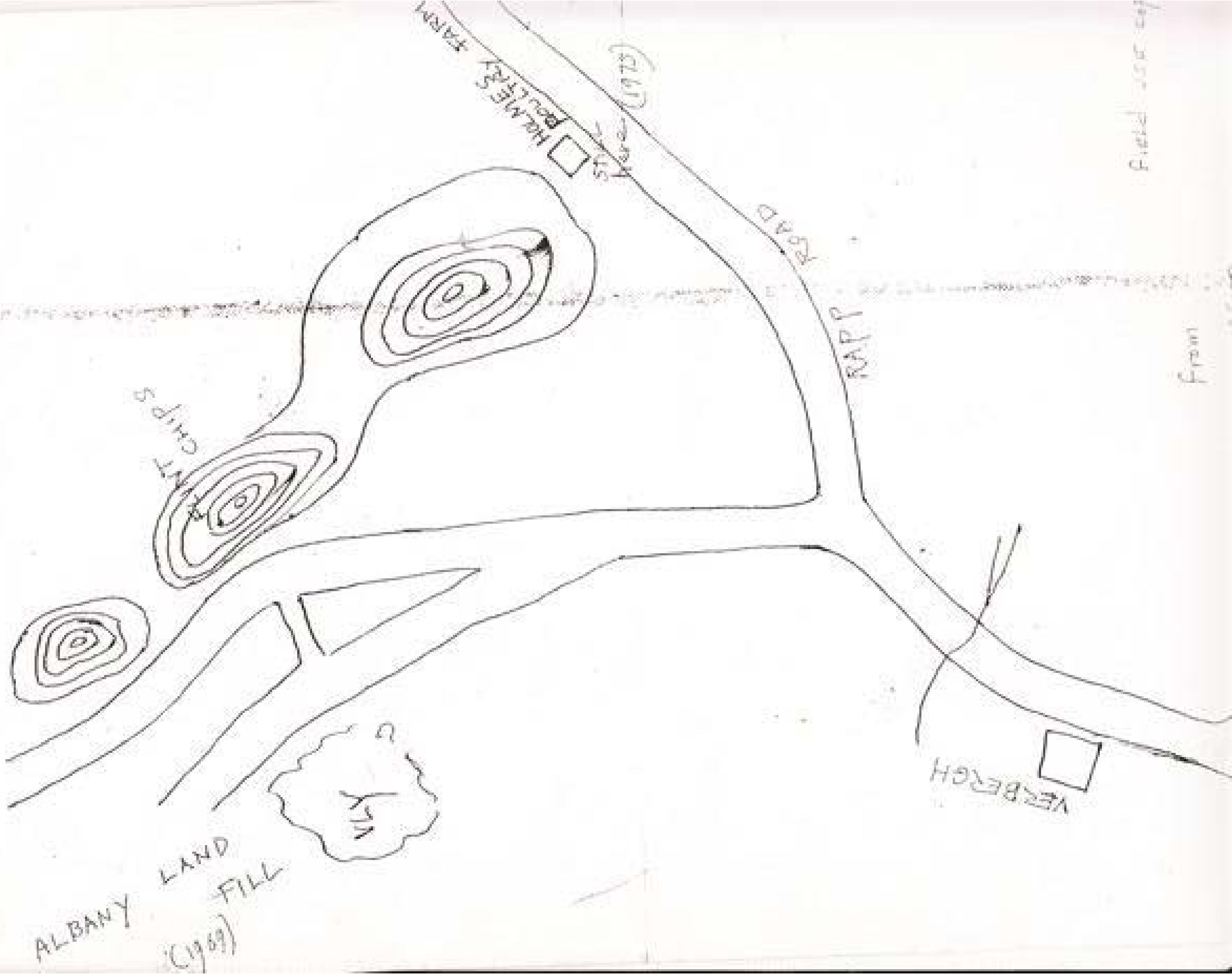
From: John Wolcott <beverwyck1@nycap.rr.com>
To: <aamarcuc@gw.dec.state.ny.us>
Date: 12/19/2008 4:43 PM
Subject: Additional Comments: Landfill Expansion

Dear Mr. Marcuccio :

For the first additional comment please refer to my map transmission to you of 15 Dec. Look at the last dune at the east end of the line of echeloned dunes which I marked in orange It lies just under the D in Guilderland and under the number 300 on that contour elevation line. This is the major portion of this dune remaining there. It shoud not be destroyed. This dune the home of many turkery vultures and other wildlife is ideal for restorastion on it's sout side if the landfill isn't expanded. Who knows ? Perhaps in the future the missing dune this line with removal of a portion of the last expansion here.

Another main concern is the archaelogical potential of where the utility and processing buildings are planned. Gus Corrine showed me a portion of what he said is the Kings
Highway in the woods at the south side of his lot and just north of the City Dump access road. In 1973 he loaned me some artifacts he said he dug up in his garden for tor the Earth Week exhibit at SUNYA. Later ; Gus donated these artifacts to Save the Pine Bush. A ca. 1938 report on this location known in Colonial times as the Verbergh or Verre Bergh from the William Effner Collection at Schenectady City History Center, shows an area in back of Gus 'x trailer with lots of flint chips. Although this was since mined for sand the chips plus the Indian artifacts we have, plus proximity to streams and the Colonial road which is likely pre-historic in origin sugeest a high archaeological potential here. I think that testing here should be at frequent inntervals and deeper than the first " sterile sub-soil " encountered because of the wind blown sand depositons. Furthermore two early 18th. century taverns were located nearby. The well of one was unearthed in highway work in in 1086 See; : Cultural Survey Report Pin1528.30 Rapp Road Monitoring Project nove. 1986. Will now scan a tracing of Effner map sketch showing location of flint chips and site of one of the Verbergh Taverns (the one that the well found was for)
I will also try to scan some of the flatter thinner artifacts.

John Wolcott


HOLMES POULTRY FARM
RAPP ROAD
CHIPS
VERBERGH
VLY
ALBANY LAND FILL
(1969)