ADDENDA TO THE DRAFT SOLID WASTE MANAGEMENT PLAN

Twenty (20) copies of the two-volume Draft Solid Waste Management (SWMP) for the Capital Region Solid Waste Management Partnership Planning Unit were distributed to the Common Council in March, 2010.

In Resolution No.81.72.10R, adopted on July 19,2010, the Council's declared its status as Lead Agency, and also determined that a Draft Generic Environmental Impact Statement (DGEIS) be prepared in connection with the Draft SWMP.

As a result, several additional paragraphs or sub-sections have been developed for inclusion in the Draft SWMP, so that it will also serve as a DGEIS. These additions are being distributed as Addenda to the Draft SWMP of March 2010, for consideration by the Common Council for purposes of determining the DGEIS to be complete under SEQR and commence the public review and comment period.

The addenda include the following additions:

- Revised cover sheet, to reference the lead agency and the dates of DGEIS acceptance and comment period close.
- Supplemental paragraphs for the Executive Summary Section.
- New sub-section 1.5 summarizing SEQR status and where to find the required elements of a DGEIS in the document.
- New sub-section 6.4 addressing the potential environmental impacts of the SWMP

Upon the Council's determination of completeness of the DGEIS, these Addenda will be incorporated into a revised Draft SWMP/DGEIS, which will then be distributed for public review and comment.

Draft Solid Waste Management Plan

& Generic Environmental Impact Statement

for the

Capital Region Solid Waste Management Partnership Planning Unit

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DGEIS Accepted as Complete:

Public Comment Period Ends:

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Potential Environmental Impacts

The elements of the SWMP, along with the preferred administrative structure and implementation schedule are intended to progressively reduce the amount of materials that require disposal through the year 2030. Overall, no significant adverse environmental impacts are anticipated to result from adopting and implementing this SWMP. Beneficial impacts to the community, the environment and the solid waste management system currently in place for the Planning Unit are anticipated.

There are several key beneficial impacts that will result from the successful implementation of this SWMP. This SWMP includes long-range plans and strategies that upon implementation will increase the recovery of the currently designated recyclable materials as well as add additional designated materials for mandatory recycling, among other measures, and is expected to result in an overall waste diversion rate of 65% by the year 2020. The development and operation of a regional solid waste treatment facility for post-recyclable solid waste would reduce the amount of waste requiring disposal at a landfill facility to 13.5% of total waste generation, or a landfill diversion rate of almost 87%.

Overall, the beneficial impacts related to the SWMP include the reduction in the need for new disposal infrastructure and associated impacts related to operations, job creation, the reduction of GHG emissions, and energy conservation. Less land will be necessary for disposal and therefore there will be a reduction in the potential for long-term environmental liabilities from these facilities. Enriched soil quality will result from the use of composting, along with reduced energy demands for manufacturing, as well as decreased demand for virgin materials and natural resources and the associated reduction in environmental impacts.

Alternatives

During the preparation of the SWMP an extensive and detailed analysis of alternatives was conducted which resulted in the determination of the preferred program for solid waste management in the planning unit. This evaluation, which is presented in detail in Section 5, included the no-action alternative, numerous alternative solid waste management methods (including both proven solid waste management methods and emerging solid waste management technologies), and institutional alternatives. Three alternative implementation scenarios were developed and compared relative to cost, facility sizing, financial risk, implementation timeframe, effectiveness, environmental impacts and impacts to surrounding jurisdictions.

All of these alternative implementation scenarios involved the continued advancement of the enhanced waste reduction and recycling initiatives identified in the 2009 SWMP Modification, support New York State's implementation of Product Stewardship Legislation, as well as continued use of the Rapp Road Landfill, until its capacity is exhausted.

Alternative Implementation Scenario #1 is defined as the continued implementation of the enhanced waste reduction and recycling initiatives and other common elements noted above, but without the inclusion of additional mandatory recyclables or the development of source separated organic waste (SSOW) collection and processing infrastructure. Under this alternative, the Planning Unit will remain at its current size, and will continue to utilize its current administrative structure as an affiliation of municipal subdivisions, and there would be no newly established legal mechanism for waste flow control.

Alternative Implementation Scenario #2 includes all of the common elements as in Alternative #1, as well as development of collection and processing infrastructure for SSOW. Under this Alternative additional mandatory recyclable materials would be designated, including SSOW and Plastics #3 through 7. In addition, in this alternative, the Planning Unit would remain at its current size, but would establish a legal mechanism for waste flow control, such as a local solid waste management authority.

Alternative Implementation Scenario #3, which is the preferred alternative, includes maximizing waste reduction and recycling, including support of State implementation of Product Stewardship Legislation, maximizing recovery of currently designated recyclables, designating additional mandatory recyclable materials and developing SSOW processing capacity. Alternative Implementation Scenario #3 also includes expanding the size of the existing Planning Unit, developing a regional solid waste management authority (with flow control), and developing a regional solid waste treatment facility to further minimize landfill disposal requirements for post-recyclable solid waste.

1.5 SEQR Compliance

The development of any major planning document is subject to the requirements of the New York State Environmental Quality Review Act (SEQR). SEQR was established so that environmental factors are taken into consideration in the planning, review, and decision-making processes of state, regional and local governments at the earliest possible time. Projects that are determined to have one or more potentially significant impacts to the environment must generally prepare an Environmental Impact Statement (EIS). In the case of a planning and policy document such as this SWMP, SEQR allows for the preparation of a Generic Environmental Impact Statement (GEIS). A GEIS is an assessment of a broad-based action or a group of related actions, and is more general than a project specific or site-specific EIS.

The City of Albany Common Council initiated lead agency coordination for the SWMP on May 19, 2010 and declared itself Lead Agency for this action under 6 NYCRR Part 617.6 by adopting Resolution No. 81.71.10R on July 19, 2010. Upon acceptance of this SWMP and DGEIS as complete for public review, a public comment period a date set for a public hearing. Substantive comments on the Draft SWMP/DGEIS received during the public comment period will be addressed in the Final SWMP/GEIS. SEQR documentation can be found in Appendix B.

This document is organized as a combined draft SWMP and GEIS. The required components of a GEIS are found in the following sections of this document:

SEQR COMPONENT	SWMP/GEIS SECTION
Executive Summary	Executive Summary
Project Description	Section 6. Solid Waste Management Plan
Environmental Setting	Section 1 Introduction & Background Section 2 Solid Waste Quantities & Characteristics Section 3 Existing Solid Waste Management Practices Section 4 Materials Recovery Analysis Appendix C Appendix D
Potentially Significant Adverse Environmental Impacts	Chapter 6 Solid Waste Management Plan
Mitigation	Chapter 6 Solid Waste Management Plan
Alternatives	Chapter 5 Alternatives Analysis Appendix E Appendix F
Growth Inducing Impacts	Chapter 6 Solid Waste Management Plan
Cumulative Impacts	Chapter 6 Solid Waste Management Plan
Use & Conservation of Energy Resources	Chapter 6 Solid Waste Management Plan

The evaluation of impacts in this type of planning document is different than a typical project specific or site specific environmental impact statement. This document evaluates a broad course of actions and policies in sufficient detail for the required action, which is the adoption of the SWMP by the City and the participating communities. This document does not replace the need for SEQR review as it relates to other specific courses of action recommended in the SWMP, including any specific facilities that are recommended as part of the SWMP. Additionally this plan, and the implementation recommendations outlined, are typically beneficial having been identified after an evaluation of a wide range of alternatives (Section 5, Alternatives Analysis).

6.4 Potential Impacts of the Preferred Solid Waste Management Plan

The elements of the SWMP, along with the preferred administrative structure and implementation schedule are intended to progressively reduce the amount of materials that require disposal through the year 2030. Overall, no significant adverse environmental impacts are anticipated to result from adopting and implementing this SWMP. Beneficial impacts to the community, the environment and the solid waste management system currently in place for the Planning Unit are anticipated. Environmental impacts associated with an SSOW facility, a regional waste treatment facility, or other facilities to be developed as part of the SWMP cannot be quantified because these impacts will be site specific and will require facility design. No specific sites or facility designs have been identified as part of the SWMP. Moreover, the development and operation of any of these solid waste facilities will be subject to extensive regulation by the NYSDEC, which require that any potentially significant environmental impacts be minimized and mitigated. As a result, this section will be limited to a generic discussion of anticipated impacts. Site and facility specific impacts will be fully addressed under the regulatory requirements at the time such actions are proposed.

There are several key beneficial impacts that will result from the successful implementation of this SWMP. This SWMP includes long-range plans and strategies that upon implementation will increase the recovery of the currently designated recyclable materials as well as add additional designated materials for mandatory recycling, among other measures, and is expected to result in an overall waste diversion rate of 65% by the year 2020. The development and operation of a regional solid waste treatment facility for post-recyclable solid waste would reduce the amount of waste requiring disposal at a landfill facility to 13.5% of total waste generation, or a landfill diversion rate of almost 87%. Overall, the beneficial impacts related to the SWMP include the reduction in the need for new disposal infrastructure and associated impacts related to operations, job creation, the reduction of GHG emissions, and energy conservation. Less land will be necessary for disposal and therefore there will be a reduction in the potential for long-term environmental liabilities from these facilities. Enriched soil quality will result from the use of composting, along with reduced energy demands for manufacturing, as well as decreased demand for virgin materials and natural resources and the associated reduction in environmental impacts.

Each of the subsections presented below provide a more detailed discussion of the generic environmental impacts related to the major elements of the SWMP. Overall, no significant adverse environmental impacts that cannot be mitigated are anticipated as a result of the adoption of this SWMP.

6.4.1 Impacts Related to the Reduction and Recovery of Materials

As noted in Section 6.1.1, the continued expansion of existing waste reduction and recycling programs is one of the central themes of this SWMP. The expansion of waste reduction and recycling programs will reduce the potential for adverse environmental impacts by minimizing dependence on landfill disposal. This is particularly important because the SWMP does not provide for any new landfill capacity and after Rapp Road landfill closes, the Planning Unit will rely on disposal capacity located outside of its area, which may require long-distance transport. The continued expansion of waste reduction and recycling programs will also minimize the capacity requirements for the regional solid waste treatment facility for post recyclable waste that is proposed as part of this SWMP and this will reduce future costs related to construction and operation of such a facility.

Programs to reduce waste will primarily rely on government policies, legislative and regulatory actions, economic incentives and public education to achieve their goals. As such there will rarely be any primary environmental impacts that result from these activities. The secondary or indirect impacts that result from these actions are anticipated to be primarily beneficial. For example, product stewardship initiatives resulting in reduced packaging will translate into less materials and energy being consumed in the manufacture and transportation of the product packaging and less resources (including energy) being expended that manage this material as either a solid waste or recyclable material. This will translate into reduced GHG emissions that represent a beneficial cumulative impact. Product stewardship programs are also beginning to shift the end-of-life management responsibility for products, such as electronics and hazardous materials, from local governments to product manufacturers and distributors. This will have a beneficial economic impact on local governments, as it reduces their costs in managing these materials. It is also a significant beneficial impact to the environment in two ways: the amount potentially hazardous products manufactured and distributed are reduced and those products that reach consumers are disposed of properly. This beneficial impact is cumulative. These product stewardship programs will also foster increased consumer participation in reuse, reduction and recycling programs for these materials resulting in beneficial long-term cumulative impacts.
The SWMP calls for the continued promotion and expansion of existing recycling infrastructure and adding new items to the list of mandatory recyclable materials. Many of these activities are institutional in nature and as such do not result in the potential for any direct adverse environmental impacts. The development of one or more drop off facilities to provide residents and businesses with a one-stop location for waste reduction and recycling activities could have the potential to result in some adverse environmental impacts. These potential impacts would be site and facility specific and cannot be evaluated at this time but would be evaluated through future SEQR actions and permitting. Overall, these program elements of the SWMP are expected to result in long-term beneficial impact.

The continued growth of the waste reduction and recycling program elements of the SWMP will require expanded infrastructure and the expenditure of additional capital and operating expenses that will be partially offset by avoided costs of solid waste disposal. The programs will also provide employment opportunities in both the construction of facilities, the implementation of programs and development of new markets for the reuse and new use of materials. Increasing recycling and reducing waste generation are also expected to reduce GHG emissions from the landfill and product and packaging manufacturing while conserving energy. These beneficial impacts are both cumulative and growth inducing.

The SWMP calls for the development of programs and facilities to compost SSOW, and this is expected to have an overall beneficial impact on the environment. For example the successful introduction and operation of SSOW processing could divert nearly 19% by weight from the MSW stream. Aside from the beneficial impact of the diversion of large amounts of waste from landfill disposal, the SSOW composting facility will create a usable product that can be marketed and sold as an environmentally beneficial soil amendment. The increase in organics recovery will require an increase in expenditures for organics collection and processing infrastructure. The development of infrastructure to collect and process SSOW will require new capital and operating expenditures and will be partly offset by avoided collection and disposal cost of waste destined for disposal. The development and operation of a SSOW composting facility will result in employment opportunities as it relates to facility design, construction, and operation. Estimated costs for a SSOW facility are discussed in Section 5.6.1.3 and are shown in Table 5-7. A generic discussion of environmental impacts on land and air resources associated with the SSOW compost facility is included in section 5.6.6, and are summarized in Table 5-14 and 5-15.

The separate collection of SSOW could result in additional truck trips, and associated costs, along with emissions and other impacts related to an increase in truck traffic. Both the economic and environmental impacts are expected to be short-term and minor because over the long-term, the costs and impacts of regular solid waste collection will be reduced by an equivalent amount. The success of this type of program and related infrastructure could be both growth inducing and cumulative as it relates to “green-economy” related employment and the development of additional facilities to serve a growing SSOW market.

The continued growth of recycling, SSOW and other waste reduction programs however, will require the development of new infrastructure to service these programs. These facilities may have impacts related to noise, odors, and visual and increased truck traffic. Mitigation measures are currently available for all of the management and operational practices, environmental impacts resulting from full implementation of the Plan as recommendations can be both mitigated and minimized. Specific impacts related to construction and operation of facilities will also be evaluated individually through SEQR process. In general, the potential adverse impacts related to the implementation of the programs and facilities that are elements of this SWMP are

expected to be less significant than alternative waste management methods evaluated which would include more significant continued reliance on waste disposal.

6.4.2 Impacts Related to the Solid Waste Treatment Facility and Land Disposal

This SWMP calls for the development of a regional solid waste treatment facility to further minimize landfill disposal requirements for post-recyclable solid waste beyond what would be achievable with the implementation of expanded and aggressive waste reduction and recycling programs elements. Such a facility could recover additional materials, energy, bio-fuels and other byproducts from the post-recyclable solid waste stream using one of the treatment technologies described in Section 5.3.1.8 or one of the emerging technologies, described in Section 5.3.2. The SWMP does not endorse conventional WTE over any of the other emerging technologies. A regional solid waste treatment facility would need to be sized according to the size of the regional waste shed.

The development and operation of a regional solid waste treatment facility for post-recyclable solid waste would reduce the amount of waste requiring disposal at a landfill facility to 13.5% of total waste generation, or a landfill diversion rate of almost 87%. Without this element of the SWMP, the maximum landfill diversion rate would be on the order of 65%. In addition to the beneficial impact of the diversion of large amounts of waste from landfill disposal, the solid waste treatment facility will also recover additional materials, energy, bio-fuels and/or other byproducts that will displace the need for virgin materials or energy derived from fossil fuels.

The development and operation of a regional solid waste treatment facility will require new capital and operating expenditures, and will result in employment opportunities in connection with facility design, construction, and operation. Estimated costs for a regional solid waste treatment facility are discussed in Section 5.6.1.4 and are shown in Tables 5-8 and 5-9. A generic discussion of environmental impacts associated with a regional solid waste treatment facility is included in section 5.6.6, and are summarized in Table 5-14 and 5-15.

The development and operation of a regional solid waste treatment facility may have impacts related to noise, odors, and visual and increased truck traffic. These will be facility specific and site specific and, as such cannot be fully examined at this time. Such a facility will be subject to the comprehensive regulations of the NYSDEC and as a result it is expected that any potential adverse environmental impacts associated with the development and operation of such a facility would be minimized and mitigated to the maximum practical extent. Specific impacts related to construction and operation of such a facility will also be evaluated through the SEQR process.

In general, the potential adverse impacts related to the development and operation of a regional solid waste treatment facility are expected to be less significant than alternative waste

management methods evaluated which would include more significant continued reliance on landfill disposal at facilities outside of the planning unit.

6.4.3 Impacts Related to Land Disposal

The SWMP envisions the continued use of the Rapp Road Landfill, until its permitted capacity is exhausted. The environmental impacts associated with the Eastern Expansion of the Rapp Road Landfill have already been fully examined during the SEQR process associated with the issuance of the permits for that facility. Potential adverse environmental impacts associated with that facility have been minimized and mitigated to the maximum practical extent.

No new landfill capacity in the Planning Unit is envisioned by this SWMP. After the closure of the Rapp Road Landfill, post-recyclable waste from the Planning Unit that requires landfill disposal will need to be exported to commercially available disposal facilities located outside of the Planning Unit. A generic discussion of environmental impacts associated with the landfill disposal element of the SWMP is included in the discussion of Alternative Scenario #3 in section 5.6.6, and are summarized in Table 5-14 and 5-15. It shows that annual landfill space consumption under the preferred alternative is the lowest among any of the alternatives examined.

By minimizing land disposal requirements, the SWMP is also minimizing the need to transport solid waste to commercially available landfills located outside of the Planning Unit. Because the SWMP does not include the development of any new landfill disposal capacity, the capital and operating costs associated with a new landfill are avoided. The cost of disposal of non-recyclable and non-processible waste, and residues from the SSOW facility and the regional solid waste treatment facility are included in the costs of those facilities that are presented in section 5.6.1.

The development and operation of the commercially available landfill facilities that may be utilized by the Planning Unit as part of this SWMP have the potential for adverse impacts related to water resources, air resources, and other impacts such as noise, odors, and increased truck traffic. It is assumed that these facilities would be located in New York State and will thus be subject to the comprehensive regulations of the NYSDEC. As a result it is expected that any potential adverse environmental impacts associated with the use of a commercially available landfill facility would be minimized and mitigated to the maximum practical extent. This can be further assured through contractual provisions and through the appropriate due diligence during the future procurement process that will be used to secure disposal capacity.

6.4.4 Impacts Related to the Administrative and Legal Structure

The SWMP identifies the establishment of a Regional Solid Waste Management Authority (RSWMA) as the agency to implement the solid waste management programs for an expanded planning unit. There will be no direct or primary environmental impacts associated with the establishment or operation of the RSWMA. There may be some indirect or secondary impacts due to the creation of the RSWMA and these will generally be beneficial, as it will provide a more efficient mechanism to administer and fund the SWMP elements. It will increase the effectiveness of program delivery and information dissemination, as well as provide the economy of scale necessary to develop a solid waste treatment facility to recover additional materials, energy and/or bio-fuels, and other by-products from the post-recyclable solid waste stream and minimize future reliance on landfills. The implementation of the RSWMA will result in a per capita cost savings on the administration of programs and facilities called for in the SWMP, as noted in Section 5.6.1.2.

6.4.5 Impacts Related the Use and Conservation of Energy Resources and Climate Change

The SWMP will have beneficial impacts on the use and conservation of energy. By prioritizing waste prevention, reuse and recycling, the SWMP eliminates or diverts materials from disposal facilities that may generate methane and other greenhouse gases. Waste reduction, reuse and recycling also play key roles in reducing energy use related to mining of raw materials and the energy consumed in transportation and manufacture of the finished products.

The development of local capacity for composting SSOW will divert significant quantities of waste from disposal and will decrease methane gas production at landfills. In addition, the solid waste treatment facility for post-recyclable solid waste could recover valuable materials for industrial feed stocks, reduce energy needed for other production methods, and produce biofuels, electricity, or other forms of energy which will reduce reliance on fossil fuels. Finally, providing local capacity for processing SSOW and for the treatment of other post-recyclable waste will minimize the amount of waste that must be transported long distances to disposal facilities located outside of the planning unit. This will reduce energy use and greenhouse gas emission associated with long haul transport and waste disposal. The estimated greenhouse gas emissions associated with these elements of the SWMP were presented in Table 5-15.