State Environmental Quality Review

FINDINGS STATEMENT
Division of Materials Management
Regulatory Changes

Pursuant to Article 8 (State Environmental Quality Review Act or "SEQR") of the Environmental Conservation Law and Title 6 of the official compilation of Codes, Rules, and Regulations (NYCRR) Part 617, the Department of Environmental Conservation (Department) as the lead agency makes the following findings.

Table of Contents

I. Name of Action

Amendments to:
6 NYCRR Part 360 Solid Waste Management Facilities
6 NYCRR Part 364 Waste Transporter Permits
6 NYCRR Part 369 Municipal Waste Reduction and Recycling Projects

With minor amendments to:
6 NYCRR Part 621 Uniform Procedures
6 NYCRR Part 361 Siting of Industrial Hazardous Waste Facilities
6 NYCRR Part 362 State Aid to Municipalities for Planning the Construction or Improvement of Solid Waste Disposal Facilities
6 NYCRR Part 363 State Aid for Planning for Collection, Treatment and Disposal of Refuse
6 NYCRR Part 370 Hazardous Waste Management System-General
6 NYCRR Part 371 Identification and Listing of Hazardous Wastes
6 NYCRR Part 372 Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities
6 NYCRR Part 373 Hazardous Waste Management Facilities
6 NYCRR Part 374 Management of Specific Hazardous Waste

II. Location

Statewide

III. Description of Action

The Department is amending the regulations that implement the solid waste management program in New York State. This includes amendments to existing regulations on Solid Waste Management Facilities (6 NYCRR Part 360), Waste Transporters (6 NYCRR Part 364) and Municipal Waste Reduction and Recycling Projects (6 NYCRR Part 369). In December of 2010, the Department adopted a new State Solid Waste Management Plan, titled *Beyond Waste: A Sustainable Materials Management Strategy for New York State (Beyond Waste)* (http://www.dec.ny.gov/chemical/41831.html). *Beyond Waste* was supported by a generic environmental impact statement that was accepted on December 15, 2010. *Beyond Waste* sets forth multiple strategies to reduce the reliance on disposal facilities, increase waste reduction and recycling and mitigating the impacts of climate change. One of the means to satisfy some of the recommendations of *Beyond Waste* is to update the regulations governing solid waste management. The revisions to regulations are in part intended to promote the goals of *Beyond Waste* by reducing the regulatory burden on organics recycling facilities where justified, encouraging planning units to consider organics recycling, providing the opportunity to add materials or focus areas such as organics as a potential separate category for State assistance funding, and prohibiting the disposal of source separated organics. These targeted actions to enhance organics recycling are part of the efforts to implement policies that favor reduction of greenhouse gases from landfills. In addition, enhancements in landfill gas collection and management at landfills including a new requirement for horizontal collection systems that will increase the efficiency of gas removal from the landfill as well as a new requirement for a greenhouse gas reductions plan as part of a landfill's permit application will enhance greenhouse gas emission goals.

In addition to the amendments to existing Parts 360, 364, and 369, this rulemaking incorporates amendments to the regulations that implement the Uniform Procedures Act (6 NYCRR Part 621). These amendments specifically address paragraph 621.4(m)(2), which sets forth a list of solid waste management facility projects classified as "minor." This list has been revised to reflect the criteria in the revisions concerning permitting thresholds for certain facilities and includes a new provision that is intended to foster the development of anaerobic digestion facilities proposed to be located at the site of an existing solid waste landfill.

Due to significant reorganization of the existing Part 360 into the series format described below, minor revisions addressing renumbering were also made to existing Parts 370, 371, 372, 373, and 374 to ensure appropriate cross references. Additionally, revisions to existing Part 360 include the removal of existing Subpart 360-14, the regulatory criteria for used oil. The regulatory criteria for used oil will now be contained solely in Subpart 374-2, Standards for the Management of Used Oil. However, permits for used oil handling facilities will still be issued pursuant to Part 360. Revisions to Subpart 374-2 are included in this rulemaking to address this change. Used oil collection center requirements are amended to more closely parallel federal requirements. There are no other changes to the technical standards associated with this revision.

This rulemaking also includes specific amendments to 6 NYCRR Subpart 373-4, Facility Standards for the Collection of Household Hazardous Waste and Hazardous Waste from Conditionally Exempt Small Quantity Generators. Currently, household hazardous waste collection facilities are regulated as Part 360 non-specific facilities, using the requirements of 6 NYCRR Subpart 373-4, though no permits are issued under Subpart 373-4. Under this action, existing Subpart 373-4 is repealed and the requirements of that Subpart are incorporated into the new Subpart 362-4.

IV. Background and Public Need

The last comprehensive revision to the regulations governing solid waste management in New York State occurred nearly 25 years ago. Many changes in law and technology have occurred in that period that dictate the need for a comprehensive revision to the regulations. The Department has gained significant knowledge and expertise regarding the proper technical criteria for the construction and operation of landfills. The landfill as an open pit, a dump, where garbage is piled is a distant memory. Today's landfills are complex engineered facilities, with double-lined containment systems that prevent leachate from reaching groundwater and provide means to collect and remove that leachate effectively. In addition to leachate, landfills also generate gas, primarily methane, which must be effectively collected and managed both during and after their active life. There are also routine issues during operation – odor, dust, litter, and traffic among them – which require proper controls and management. Once a landfill is full, it must be appropriately capped with a final cover system that is designed to minimize any additional leachate generation and facilitate the capture and removal of gas. In the last two decades, the Department has gained significant knowledge on the proper design and construction of these facilities and this knowledge needs to be reflected in the regulations to ensure these modern waste disposal facilities benefit from the latest evolution of improved design, construction materials and methods to best provide long-term protection of groundwater resources and the environment.

Although landfills may be the most obvious solid waste management facility to the public when the subject of solid waste management is broached, there are many other types of facilities that also manage solid waste, from combustors and transfer facilities to commercial medical waste autoclaves and used cooking oil processing facilities. Some of these facilities did not even exist 25 years ago when the regulations were last revised or were much different than they are today. Therefore, new or revised regulations are needed to keep pace with changes in technology and methods of handling waste. The types of facilities regulated under these regulations include: recyclables handling and recovery; land application; composting and other organics processing; mulch processing; construction and demolition debris handling and recovery; waste tire handling and recovery; metal processing and vehicle dismantling; used cooking oil and yellow grease processing; navigational dredged material handling and recovery; combustion and other thermal treatment; municipal solid waste processing; transfer; household hazardous waste collection; landfills; and regulated medical waste and other infectious waste management. Each type of facility has its own environmental characteristics and concerns that need to be addressed. To complete the regulatory package, the Department has updated three related regulations – those governing waste transporters, local solid waste management planning, and State assistance grants

to municipalities.

Since promulgation in 1988, the Part 360 regulations have been modified no less than 11 times. Each of those modifications added necessary and useful language to the regulations. However, none of those modifications involved a wholesale review and modification of the regulation in their entirety. Because of this, internal inconsistencies and ambiguities have developed. Unlike previous revisions, these revised regulations have been modified in its entirety to eliminate those inconsistencies and ambiguities.

Currently, municipalities in New York State are meeting their solid waste management needs through a combination of reuse and recycling (including composting), combustion, landfilling, and exporting solid waste to out-of-state facilities. The methods for managing solid waste in New York State have changed significantly since 1988. This can be attributed to a stronger emphasis being placed on waste reduction/reuse/recycling, including significant investment in recycling-related capital costs and municipal waste reduction and recycling education staff; a major investment in local solid waste management planning and a concerted effort made to close unlined landfills which posed a threat to the environment. In December of 2010, the Department adopted a new State Solid Waste Management Plan, titled *Beyond Waste: A Sustainable Materials Management Strategy for New York State.* This rulemaking incorporates the pertinent recommendations outlined in the State Solid Waste Management Plan as well as other relevant issues.

The revised regulations include the addition of solid waste management facilities, activities, and waste streams that are not currently addressed within the existing Part 360, in order to institute a level of control necessary to ensure protection of public health, safety, natural resources and the environment. Likewise, the amendments have relaxed or eliminated existing Part 360 requirements that have proven to be burdensome to the regulated community and have provided little or no benefit of environmental protection or are just outdated and no longer applicable based on the current solid waste management needs and practice. The revisions also incorporate recommendations of task forces that were convened to analyze specific solid waste issues encountered by the Department and found to be problematic.

V. Statutory Authority

Environmental Conservation Law (ECL) Section 27-0703, allows the Department to:

"Adopt and promulgate, amend and repeal rules and regulations governing the operation of solid waste management facilities. Such rules and regulations shall be directed at the prevention or reduction of (a) water pollution, (b) air pollution, (c) noise pollution, (d) obnoxious odors, (e) unsightly conditions, caused by uncontrolled release of litter, and (f) infestation of flies and vermin, and other conditions inimical to the public health, safety, and welfare. In promulgating such rules and regulations, the department shall give due regard to the economic and technological feasibility of compliance therewith. Any rule or regulation promulgated pursuant hereto may differ in its terms and provisions as between particular types of solid waste management facilities and as between particular areas of the state."

ECL Section 27-0301 outlines the intent and purpose as it relates specifically to the transport of waste:

"… to protect the environment from mishandling and mismanagement of all regulated wastes transported from the site of generation to the site of ultimate treatment, storage or disposal and to prevent a discharge of wastes into the environment, whether accidental or intentional, except at a site approved for the treatment, storage or disposal of such wastes."

Revision of these regulations falls under the Department's authority and is needed periodically to ensure the ECL mandates are met. In addition, changes to the ECL addressing waste tires, mercury-added consumer products, and vehicle dismantlers have been incorporated into these regulations.

The Department's statutory authority to undertake amendments to Part 360 is set out in Environmental Conservation Law Sections: 1-0101, 3-0301, 8-0113, Titles 3, 5, 7 and 8 of Article 17, 19-0301,19-0303,19-0306, Title 23 of Article 23, Titles 1, 3, 5, 7, 9, 10, 13, 15, 18, 21, 23, 25, 26, 27, 29 of Article 27, 27-1901, 27-1903, 27-1911, 54-0103, Titles 5 and 7 of Article 54, Title 1 of Article 70, 71-2201, Titles 27, 35,40 and 44 of Article 71, and 72-0502.

VI. Date Final GEIS Filed

The final GEIS was accepted by the Department on August 23, 2017.

VII. Summary of Facts and Conclusions in the GEIS Relied Upon to Support the Decision

In preparing a findings statement, SEQR requires that the Department consider the relevant environmental impacts, facts and conclusions disclosed in the final EIS. 6 NYCRR §617.11. The following is a statement of the facts and conclusions from the Final GEIS that the Department used to support its decision on promulgating the revised regulations:

SEQR requires that — in making findings — the Department selects the alternative that minimizes or avoids environmental impacts to the maximum extent practicable consistent with social, economic and other essential considerations (6 NYCRR §617.11). At the same time, ECL Section 27-0703 requires that the Department establish rules directed at prevention or reduction of the following specific environmental impacts: water pollution, air pollution, noise pollution, obnoxious odors, unsightly conditions caused by uncontrolled release of litter, and infestation of flies and vermin. The revised regulations prevent or reduce these impacts in the following ways:

A. Water pollution:
   - All solid waste management facilities are prohibited from allowing waste or leachate to enter surface water or groundwater.
   - Design requirements and construction quality assurance/quality control requirements for solid waste landfill liners have been improved. Double composite liners remain the design standard for municipal solid waste landfills.
   - Landfills are prohibited from accepting fluids produced from oil and gas production wells.
   - Transfer facilities are required to manage waste on concrete or asphalt pavement with drainage structures to either tanks or sanitary sewers.

- Storage of leachate at new solid waste management facilities must be stored in tanks instead of surface impoundments, and existing facilities must replace surface impoundments at the end of their useful life with tanks.
- Registered composting facilities are required to develop and implement runoff control plans.
- Standards for mulch processing facilities that include required separation from surface waters and runoff protection plans.

B. Air pollution and obnoxious odors:
- All solid waste management facilities are required to control dust, and to undertake measures as required by the Department to control dust at the facility and to keep it from emanating from the facility.
- All solid wastes management facilities are required to control odors so that they do not constitute a nuisance as determined by the Department.
- Transfer facilities are required to manage solid waste in enclosed buildings with measures in place to control off-site nuisance odors.
- Newly constructed construction and demolition (C&D) debris handling and recover facilities that receive and process mixed C&D debris are required to manage the material in enclosed buildings with measures in place to control dust and off-site nuisance odors.
- Landfills which receive putrescible waste are required to install horizontal gas collection lines within the waste mass at regular intervals.
- Decomposition gases must be controlled at landfills to prevent unsafe conditions and off-site odors.
- Operating cover that can control off-site odors must be applied to the working face of a landfill at the end of each working day, and thicker layers of operating cover must be applied to landfill surfaces where no waste has been placed for 30 days. If odor problems are not controlled, additional measures must be implemented.
- A final cover system must be installed on any filled landfill cell which not only protects waste mass and limits infiltration of rain but also is an integral component of the landfill gas collection system which manages the gas produced during the inactive life of the landfill.
- In general, wastes must be removed from a solid waste management facility, other than a landfill, within a reasonable period of time which helps to minimize odor from waste material.
- Mulch processing facilities must comply with pile size criteria which are critical in proper operation and management to minimize the generation of odors and the potential for fire.

C. Noise pollution:
- Every solid waste management facility must ensure that noise resulting from operation of the facility does not exceed noise limits established in Part 360
- Certain permitted solid waste management facilities must conduct a noise assessment to be included in the facility's permit application, as well as a noise monitoring and control plan if the noise assessment indicates that Part 360 noise limits will be exceeded.

D. Uncontrolled release of litter
   - Every solid waste management facility must ensure that waste is confined to an area where it can be controlled, and that blowing litter is confined by use of buildings, fencing or other suitable means.

E. Infestation of flies and vermin:
   - In general, every solid waste management facility is required to control on-site populations of vectors.
   - Transfer facilities are required to manage solid waste in enclosed buildings.
   - Operating cover that controls vectors, including flies and vermin, must be applied to the working face of a landfill at the end of each working day, and thicker layers of operating cover must be applied to landfill surfaces where no wastes has been placed for 30 days.

ECL Section 27-0301 requires that the Department protect the environment from mishandling and mismanagement of all regulated wastes transported from the site of generation to the site of ultimate treatment, storage or disposal and to prevent a discharge of wastes into the environment, whether accidental or intentional, except at a site approved for the treatment, storage or disposal of those wastes. The revised regulations implement these requirements in the following ways:

- Transporters must be issued an authorization from the Department for the transport of any regulated wastes which have the potential to impact public health or the environment.
- Transporters may only transport regulated waste to a destination facility authorized to accept the waste.
- Wastes must be covered or enclosed and secured during transport.
- Tracking documents identifying the source of the waste and the authorized destination facility must accompany loads of specific regulated waste, which include regulated medical waste, non-exempt drilling and production wastes, restricted-use fill, limited-use fill, and contaminated fill material. This requirement also applies to C&D debris, including general fill, generated in the City of New York.

The Department has not identified any significant adverse environmental impacts as part of the rulemaking process that may result from adoption of the revised regulations. The Department carefully reviewed all public comments received during the two comment periods and these comments did not reveal any adverse impacts. As mentioned above, one of the primary intentions of this rulemaking is to reorganize and re-promulgate the Department's existing solid waste management regulations into a more user-friendly format. To the extent that the revised regulations re-adopt a current standard, the revised regulations will not result in a significant adverse environmental impact since no change is proposed.

To the extent the revised rules impose new standards or criteria on solid waste management facilities and implement the recommendations of *Beyond Waste*, the revised regulations have a positive impact on the environment. Overall, the Department expects the revised regulations will lead to a more sustainable way of handling waste which is a primary goal of *Beyond Waste*. One example is the requirement for certain facilities to install radiation detectors. While some facilities are currently required to utilize radiation detectors by permit condition, the installation of radiation detectors at facilities which receive municipal solid waste will assist the facility in

identifying and diverting unauthorized wastes which would not otherwise be detectable.

As mentioned above, proposed revisions to Part 360 were subject to public review and comment in 2016 and 2017. Although comments received helped the Department to develop revised regulations that are more appropriate and clear, the comments did not reveal significant potential negative environmental impacts from the rulemaking. To the contrary, the Department expects that the revised regulations will improve the management of solid waste in New York State and therefore have a positive impact on the environment. The Department has chosen to use the GEIS format, as it has done in the past, as the means to describe the changes to the regulations, examine alternatives and facilitate a public discussion as to the impacts of each of the changes. Through the GEIS, the Department: 1) discusses the objectives and the rationale for the amendments; 2) discusses alternatives (including the no action alternative) and presents why alternative measures were not considered; and 3) provides the maximum opportunity for public participation.

In developing the revisions to the Part 360, Part 364 and Part 369 regulations, the Department evaluated and identified solid waste management facilities, activities, and waste streams that are not clearly addressed in the current regulations. These include navigational dredged materials, oil and gas brine, excavated soil and other materials defined as fill material in the revised regulations, end-of-life vehicle dismantlers, mulch, used cooking oil, and infectious wastes. The revisions have also relaxed or eliminated requirements that have proven to be burdensome to the regulated community while providing little or no incremental benefit of environmental protection, such as landfill siting study requirements, certain outdated landfill construction quality assurance/construction quality control testing requirements, and the extent of groundwater monitoring at landfills. For other facilities, the applicable technical criteria have been updated to current industry standards.

The regulations also contain enhanced requirements for facilities or waste streams which have proven to be problematic in the past. The addition of requirements for these waste streams may be perceived as burdensome to those affected by the enhanced requirements, due to potential increased cost in complying with the regulation. One type of facility that will be subject to enhanced regulation in this rulemaking is mulch processing facilities. These facilities, which shred or grind wood debris and yard trimmings into mulch, have become more prevalent in the state and some of the larger facilities have caused problems associated with odors, dust, runoff and fires. The addition of regulatory restrictions on pile size and other criteria to control odor and fire is necessary to protect public health and the environment. Another example of enhanced regulation is for waste tire storage facilities. The revised regulations eliminate permitting provisions for waste tire storage facilities, thereby limiting management of waste tires to processing and recovery.

Another waste stream that has been problematic is material excavated during construction projects that is in excess to the needs of the project. In some parts of the state, this material is, or includes “historic fill,” a mixture of soil, dredged materials, municipal or residential incinerator ash, and ash from wood or coal stoves, with other debris that historically were dumped and compacted to create new usable land by filling water bodies, wetlands, and topographical depressions. These materials are most closely associated with urban areas, most prominently the

greater New York City metropolitan area. As these areas have been developed or redeveloped, excavated historic fill has illegally been accepted at registered C&D debris processing facilities, where it has ended up in the fines fraction of the processed material. This fines fraction containing historic fill has at times been marketed as topsoil and placed in new development projects, especially in suburban areas of the state. Historic fill has also been delivered directly from construction projects to unauthorized disposal locations, with most historic fill coming from the New York City area. These unauthorized disposal locations tend to be north and east of New York City. Historic fill is a solid waste and its use and placement needs to be more closely regulated due to the contaminants contained in it. Elsewhere in the state, excess fill material from construction may not be "historic fill," but due to various impacts from development or historical land use are potentially contaminated and, also require scrutiny. Because of the varying circumstances associated with the management of fill material in different parts of the state, the revised regulations establish different requirements for fill material management in the City of New York than in other parts of the state. ECL Section 27-0703 authorizes the Department to promulgate regulations that differentiate between particular types of solid waste management facilities and between particular areas of the state.

In recognition that fill material from urban areas may consist of many different materials that may or may not constitute "historic fill" and that the movement of potentially contaminated fill occurs statewide, the revised regulations provide, in section 360.13, a voluntary pathway for both on-site and off-site beneficial use of various grades of fill material without the need for case-specific Department approval. Under section 360.13, the revised regulations describe sampling and analysis, where necessary, and documentation to allow contractors to self-evaluate excavated fill material for reuse or disposal, without the need for Department review or approval. Case-specific beneficial use determinations or directing fill material to authorized Part 360 facilities remain acceptable alternatives for management of fill material when self-evaluation protocols under section 360.13 are either not appropriate or not desired to be pursued by the generator.

In addition, revisions to Part 364 include registration requirements for the transport of commercially-generated C&D debris in quantities greater than 10 cubic yards, including restricted-use, limited-use, and contaminated fill material throughout New York State and includes all fill material generated in the City of New York. The revised Part 364 regulations also include requirements for waste tracking forms for C&D debris, including all fill material generated in the City of New York, restricted-use, limited-use, and contaminated fill material throughout New York State, drilling and production waste and regulated medical waste. The addition of these new provisions for fill material should result in more appropriate and consistent management of this material.

Improper disposal of C&D debris has created instances of environmental harm and adverse impacts to residents and communities in the state, resulting in significant costs for clean-up. The Department has evaluated these sensitive issues many times over the last two decades and has implemented several targeted enforcement strategies with limited long-term success. The impediments encountered in these efforts are addressed by several revisions related to C&D debris management in the revised regulations. New provisions have been added for C&D debris, including fill material, as discussed above, which will provide additional enforcement tools for program staff, legal staff and law enforcement staff. The revised regulations also place size

limitations on exempt C&D debris disposal facilities, restrict storage based on site characteristics identified in the facility's permit or registration, and require separate processing of asphalt pavement and fill material to enhance the recycling opportunities for asphalt, fill material and the remaining C&D debris streams. The revised regulations also expand the BUDs for select types of C&D debris, which will provide for environmentally safe reuse of certain materials. The revisions are expected to reduce the number of illegal C&D debris disposal cases and improve the Department's enforcement capabilities.

VIII. Impacts and Alternatives and Balancing Analysis

The final GEIS looks at impacts and alternatives (that would avoid or mitigate significant, adverse impacts identified in the EIS process) to each of the major revisions in the regulations including no action (no revision to the exiting regulatory criteria), the revision as proposed, and revisions that are either more or less restrictive than the current regulations.

A summary and discussion of the issues related to the major revisions and alternatives considered (based on public comment and the Department's own evaluation) include the following.

A. Part 360 Solid Waste Management Facilities- General Requirements

Section 360.4 Transition

Issue: Fair and reasoned transition requirements need to be incorporated to address facilities which may be regulated under a different regulatory mechanism in the revised regulations. For example, certain facilities that may now operate by registering with the Department will need to have a permit to operate under the revised regulations.

Discussion and Findings: Many of the time frames proposed for transition in the draft regulations were revised based on comments received from the public. Alternative time frames were considered based on facility type which may be expected to have the most adjustment necessary in facility operation such as, C&D debris handling and recovery facilities, now have 545 days to comply with the new requirements. While there are myriad possibilities for shorter or longer time frames that could be considered for transition, the proposed transition requirements provide reasonable, clear timeframes for facilities currently subject to existing Part 360 and those facilities currently not subject to existing Part 360, but subject to the proposed Part 360, to come into full compliance with the proposal's requirements. The transition requirements will ensure that all solid waste management facilities will continue to be regulated via an appropriate regulatory mechanism and at the same time will have sufficient time to move into compliance with the proposed regulations. Alternative time frames for transition purposes will have no environmental impact, however the time frames in the revised regulations were chosen to give additional time to facilities that will be required to adjust their operations to comply with the new requirements.

Section 360.11 Comprehensive recycling analyses

Issue: For the last 27 years, applications submitted by or on behalf of municipalities for initial permits to construct and operate, or to renew a permit for most types of solid waste management facilities, needed to include a comprehensive recycling analysis (CRA), or be covered under a previously approved CRA or Local Solid Waste Management Plan (LSWMP). In addition, Part 360 has required that most facility permits contain a condition that precluded the permittee from accepting waste from a municipality that had not completed a CRA (or been included in another municipality's CRA) and had not implemented the recyclables recovery program determined feasible by the analysis. A CRA has also been a required component in a LSWMP.

Discussion and Findings: The CRA requirements have been a mainstay in the regulations since 1988 and have helped drive the development of local recycling programs across the state. The CRA requirements were incorporated by reference in the requirements for the contents of LSWMPs in Subpart 360-15 in 1989 when that Subpart was added to the regulations to ensure these important elements were included in each LSWMP. The incorporation by reference has led to confusion over the years as to the requirements for formatting and whether the CRA was required to be a stand-alone document incorporated into the LSWMP or if the elements of the CRA could be embedded in the LSWMP. The Department's direction to planning units has been to directly incorporate the components of the CRA in the base LSWMP as opposed to a stand-alone document. As an alternative the Department considered replacing the requirements of the CRA with the requirements of LSWMP. However, since not all municipalities are required to have a LSWMP, the separate CRA requirements were left in place to ensure that all facilities consider recycling as part of their solid waste management programs. The overall requirements of a CRA have been directly incorporated in the LSWMP requirements of Part 366 to make a more cohesive LSWMP document and to avoid the previous confusion of the required components of an LSWMP. An independent CRA can still be developed by those municipalities that are not included in a LSWMP. Additionally, the proposed CRA regulations implement the recommendation of *Beyond Waste* to change the way the Department measures reductions in waste by focusing on the amount of waste generated. This will improve the Department's ability to assess the impact of waste prevention and reuse. Proper planning for solid waste management by localities continues to be a part of the regulations, with revisions that will ultimately provide less burdensome procedures for the municipalities and will ultimately maintain the implementation of the overall goals of *Beyond Waste*, to reduce the amount of waste combusted or disposed in a landfill.

Section 360.12 Beneficial use

Issue: A beneficial use determination (BUD) is a mechanism for the Department to determine that a material is no longer a solid waste when used in a specified beneficial manner. The approval of a case-specific BUD petition depends on a demonstration that the material does not contain pollutants that will cause environmental harm when used in compliance with the petition and that the material has the properties to be an effective substitute for a material already in commerce. The current regulations contain both "pre-determined" BUDs that do not require approval, such as the use of woodchips for mulch, and a process to obtain a case-specific BUD for other wastes and uses. *Beyond Waste* recommends that the BUD program regulations be

revised and updated to remove certain pre-determined BUDs to address waste material and uses that should not be eligible for beneficial use and to establish additional pre-determined BUDs to address common, acceptable uses. The duration of the approval of a case-specific BUD also needed to be reviewed as the current case-specific BUDs have no regulatory expiration date.

Discussion and Findings: The Department has implemented the BUD provisions for many years and, while the provisions have provided a structure and path for useful material to be put to valuable use instead of requiring unnecessary disposal, the program has been presented with some challenges in consistent implementation. Additionally, new information is routinely developed and aggregated over time related to various materials and this information needs to be considered as part of appropriate materials management decision-making.

- With respect to pre-determined BUDs, new pre-determined BUDs have been added to address common, acceptable uses including: wood pallets reused as pallets; use of street sweepings as fill; materials approved by the Department for remedial projects; the use of tires to hold down tarps; the use of up to 150 tires as planters and other similar uses, sandy dredged materials as aggregate, etc.; and materials emanating from facilities regulated by Part 361 (recyclables, compost, etc.). The revised regulations in the BUD section also include a list of materials and uses that are not eligible for a BUD such as the use of large quantities of flowable fill. The revisions to the pre-determined BUDs were based on a review of the existing BUD records. Other alternatives that were considered were to adopt additional pre-determined BUDs such as the use of water treatment residuals as a component in topsoil, but those included in the proposed revisions were deemed appropriate based on the information currently available to the Department. Other uses may also be appropriate for a BUD but the need to evaluate the quality and use of the material dictates the need for a case-specific BUD.

- With respect to case-specific BUDs, the revised regulations include a 5-year term on BUD approvals. An alternative considered was to leave the BUD approvals without a term. This would be less of a workload for the Department and for the regulated community since the BUD would not expire. However, this alternative was rejected because a 5-year term allows the Department to remove inactive BUDs from the database and allows the Department another look at BUD petitions every 5 years to determine if any modifications are warranted. This renewal process will give the Department an opportunity to re-evaluate BUDs for compliance with potentially revised standards. Under the transition provisions in the proposed section 360.4, old BUDs (those without an expiration date) will expire if a petition to renew the BUD is not received by the Department. The revised regulations also codify the long-standing practice to require annual reporting for all case-specific BUDs.

Enhancement of the BUD program will provide more consistent and uniform procedures and regulatory criteria which will reduce the potential for materials to be mismanaged through the BUD program. These changes will also increase recycling and beneficial use of materials, a recommendation found in *Beyond Waste*.

Section 360.12 Beneficial use of navigational dredged material

Issue: To assist those entities seeking to use navigational dredged material (NDM), specific provisions are needed in the regulations to address the requirements for the upland use of NDM. *Beyond Waste* includes a recommendation to revise and update the BUD program, specifically with respect to the use of clean dredged materials as aggregate. Also, there has been interest in the New York City area for clarification of these requirements due to significant amounts of NDM routinely generated in the area. Under the current regulations, the use of NDM may be authorized under the BUD program.

Discussion and Findings: Providing clear, concise criteria for the use of NDM will result in more effective management of this material. Navigational dredging is considered critical to commerce and national security through the maintenance of shipping channels, but concerns have increased over the potential environmental harm from use of ocean and other submerged, or shoreline, disposal sites. Increased upland use of NDM and reducing the need for in-water and shoreline (riparian) disposal is environmentally preferred as use of the material in a productive manner as fill eliminates the need for use of other land-based fill materials and maintains the environmental integrity of the water resource from which it was removed and the shoreline. NDM could continue to be handled under the general case-specific BUD criteria but it would simply continue the current confusion concerning approval of NDM without specific regulatory criteria. Instead, the preferred alternative is to specify additional criteria to determine if the NDM is suitable for use as fill in the revised regulation that outlines the Department's standards and expectations for the beneficial use of NDM material intending to lead to more consistent implementation of the program and a better understanding by the regulated community of the requirements that must be met. Additionally, there will be a decreased risk of environmental impacts associated with the improper use of NDM as fill. Specific provisions have been included in section 360.12 of the revised regulations to address the beneficial use of NDM, including the testing protocol required to determine if the NDM is acceptable for use as fill. Provisions for both pre-determined BUDs and case-specific BUDs for the use of NDM have been added. Addition of BUD provisions for NDM will provide uniform standards that apply to the reuse of this material thereby reducing the potential for misuse.

Section 360.12 Beneficial use of oil and gas brine

Issue: Under the current regulations, a case-specific BUD is required for brine use but the specific criteria for approval and use are not specified in the regulations.

Discussion and Findings: The alternative of continuing to handle brine under the general case-specific BUD criteria as staff applies a set of standard criteria as part of current case-specific BUD petition for road-application of brine was considered. However, this alternative can lead to inconsistent implementation of the program and confusion on the part of a petitioner in the absence of specific requirements. The specific provisions in the revised regulations, including maximum pollutant levels and the prohibition on drilling fluids, flowback water and Marcellus Shale-derived brine, are needed for the use of oil and gas brine for dust control on unpaved roads and for snow and ice control in winter conditions. The revised regulations provide additional protections by setting maximum concentrations for metals, as well as BTEX and other

compounds. The revised regulations also set minimum concentrations of total dissolved solids, chloride, sodium and calcium to ensure that the brine is an effective anti-icing agent. Sampling and analysis must be repeated annually after the initial BUD approval. In addition to minimum setbacks of 50 feet from surface waters for any road use, the revised regulations include other specific provisions to control how brine must be spread for proper dust control. These provisions prohibit brine application on wet or frozen roads or when rain is imminent, on steeply graded roads, on paved roads of any kind, or within 12 feet of water crossings or drainage ditches. Spreading vehicles must utilize spreader bars or similar devices, have shut-off controls inside the cab of the vehicle, move at a speed of five miles per hour or greater when applying, and stop application when the vehicle stops. Personnel applying the brine must be trained on use of the equipment, application rates, and use restrictions. Providing clear criteria on the beneficial use of brine will result in more uniform, acceptable use of the material and lead to more consistent implementation of the program and a better understanding by the regulated community of the requirements that must be met. The addition of BUD provisions for brine, including operational criteria and pollutant standards, will reduce the potential of environmental harm due to poor road spreading practices.

Section 360.12 Beneficial use of C&D debris

Issue: The regulations should provide acceptable beneficial uses of C&D debris and C&D debris residues to reduce illegal disposal.

Discussion and Findings: Establishing explicit acceptable uses for C&D debris and C&D debris residues will foster proper management of these materials and reduce illegal disposal. This is a critical component of the over-arching effort to better manage and track C&D debris. Restricting use of C&D debris residues to landfill applications such as alternative operating cover was considered but found to be overly restrictive and when considering transportation impacts and the need for replacement materials would in totality provide little or no gain in environmental protection. The intention behind the revised regulations is to provide for as many appropriate environmentally protective uses of C&D debris-sourced material as possible to put this material to its best and highest use instead of disposal. The revised regulations establish acceptable pre-determined BUDs for C&D debris and C&D debris residues, which can be used without additional department approval. The pre-determined BUDs have been established in the revised regulations to apply to uses which meet a specification established by a governmental authority. The provision will promote proper management of certain C&D materials and reduce the negative impacts of illegal disposal.

Section 360.13 Special requirements for beneficial use of fill material

Issue: *Beyond Waste* included a recommendation for adding new requirements for the management of historic fill, including additional operational conditions for its use that protect neighboring areas, particularly in communities of disproportionate impact. Excavated material from construction projects in areas where many years of human habitation, commerce and industry have taken place often contain physical and chemical contamination that may adversely affect public health and the environment when these materials are used as fill in residential

developments or disposed on agricultural or undeveloped land. This excavated material, termed in the revised regulation as "fill material," includes but is not limited to historic fill.

Discussion and Findings: Improper disposal of C&D debris has created instances of environmental harm and adverse impacts to residents and communities in the State, resulting in significant costs for clean-up. One of the prime areas of concern is fill material. Fill material is material excavated during construction projects that is in excess to the needs of the project. In some parts of the state, this material is or includes "historic fill," a mixture of soil, dredged materials, municipal or residential incinerator ash, and ash from wood or coal stoves, with other debris that historically was dumped and compacted to create new usable land by filling water bodies, wetlands, and topographical depressions. These materials are most closely associated with urban areas, most prominently the greater New York City metropolitan area. Historic fill is a solid waste and its use and placement needs to be more closely regulated due to the contaminants contained in it. Elsewhere in the state, excess fill material from construction may not be "historic fill," but due to various impacts from development or historical land use are potentially contaminated and require scrutiny. There are currently no specific requirements in the existing regulations addressing management of historic fill and other potentially contaminated fill materials. Addition of requirements for this material are part of the revised regulations. Numerous alternatives were considered as part of the rulemaking process and comments received on this area of the regulations as part of the first comment period, and subsequent revisions, was the primary reason the regulations were released for a second comment period. This is a challenging waste stream that can vary considerably across the state. Because of the varying circumstances associated with the management of fill material in different parts of the state, the revised regulations establish different requirements for fill material management in the City of New York than in other parts of the state. ECL Section 27-0703 authorizes the Department to promulgate regulations that differentiate between particular types of solid waste management facilities and between particular areas of the state. In recognition that fill material from urban areas may consist of many different materials that may or may not constitute "historic fill" and that the movement of potentially contaminated fill occurs statewide, the revised regulations provide in section 360.13 a voluntary pathway for both on-site and off-site beneficial use of various grades of fill material without the need for case-specific Department approval. Under section 360.13, the revised regulations describe sampling and analysis, where necessary, and documentation to allow contractors to self-evaluate excavated fill material for reuse or disposal, without the need for Department review or approval. Case-specific beneficial use determinations (BUDs) or directing fill material to authorized Part 360 facilities remain acceptable alternatives for management of fill material when self-evaluation protocols under section 360.13 are either not appropriate or not desired to be pursued by the generator. This new section 360.13 establishes criteria for the on-site use, off-site use, and disposal of fill material. These criteria allow for the self-evaluation of material and exempt the reuse of fill material known to be clean by site history and observable characteristics for areas outside New York City. Sampling and analysis procedures for suspect contaminated fill material allow for self-implementation, wherein contractors can follow the protocol in the revised regulations and reuse material without case-specific Department approval. Previously in the March 2016 proposed revision to the regulations, this section addressed only historic fill; it now addresses all material excavated during construction or maintenance projects. The addition of criteria for the management and use or disposal of fill material will reduce the potential for using this material in a manner which

could negatively impact to surface and groundwater resources and should result in appropriate and consistent management of this material which has created problem disposal sites, especially in Long Island and the Lower Hudson Valley. These revisions can also increase recycling and beneficial use of materials as recommended in *Beyond Waste*.

Section 360.15 Registered facilities, transporters, and events

Issue: The current Part 360 places no expiration on registrations, which has been problematic in certain circumstances in trying to ascertain the operational status of a registered facility. Additionally, the registration provisions in the existing regulations do not provide the Department a consistent mechanism to determine whether the impacts of having one or more registered facilities on a site warrants further evaluation and environmental control via the Part 360 permitting process.

Discussion and Findings: The Department evaluated the current registration provisions which, as mentioned above, have been problematic in certain circumstances. Maintaining the current system of no expiration of registrations was considered as an alternative (no action) but it was determined that making the change in the revised regulations is necessary to close this regulatory gap and avoid or reduce the chance of any potential adverse impacts from registered facilities. The revised regulations limit the duration of registrations to 5 years and will assist the Department in ascertaining the operational status of registered facilities. The revision will allow the Department to evaluate an applicant's compliance history when reviewing a registration application. With respect to the evaluation of multiple registered activities allowed to be conducted at the same site, the Department considered restricting the number of registered activities at the same site to no more than two as an alternative. However, to allow flexibility in applying the regulations and to ensure that acceptable activities were not stymied, the revised regulations allow the Department to require a permit rather than a registration where two or more registrations are located at the same site where the activities have the potential to cause a significant adverse impact to the environment. The revisions to the registration provisions will have a positive impact to the environment by giving the Department greater authority to restrict operations at registered facilities by enhancing our ability to evaluate an applicant's compliance history when reviewing a registration application.

Section 360.22 Financial assurance

Issue: Financial assurance regulations ensure that sufficient funds are available for the Department to hire a third party to perform closure activities at a facility, or closure, post-closure, or corrective measures activities at a landfill, if the owner or operator fails to perform those required activities. Under current regulations, financial assurance requirements are in sections 360-1.12, 360-2.19, and 373-2.8. The current financial assurance regulations are challenging to understand and implement and there are number of criteria that requires updating to better address actual current practice.

Discussion and Findings: The Department considered continuing the existing requirements as an alternative but determined that the current structure needed to be changed to assist with the understanding and implementation of the regulations. In the revised regulations, the financial

assurance requirements have been consolidated in one location with the intent to aid the regulated community in the understanding of and improve compliance with the requirements as well as to better ensure that funds will be available for closure, post-closure care, and/or custodial care activities. The revised regulations will include the specific acceptable language that must be used in financial assurance instruments. Previously, portions of this language were incorporated by reference from Part 373-2.8. In addition to the consolidation of financial assurance language, there are certain circumstances where the requirements have been eased to assist facilities and municipalities and certain areas where the requirements have been strengthened to provide the Department with the intended protections of financial surety. Adjustments include:

- Current regulations require municipalities which no longer qualify for the local government financial test to immediately fund an alternative mechanism. Maintaining this requirement was rejected as burdensome on municipal finances and detrimental to the proper funding of post-closure care and custodial care activities. The revised regulations allow a municipality that no longer meets the standards for a local government financial test to begin a 10-year payment period toward another acceptable financial assurance mechanism. This revision will provide regulatory relief to a municipality in difficult financial circumstances while helping ensure that sufficient financial assurance funds would be available, if required.

- Another adjustment in the revised regulations which will provide support for municipally-owned facilities requires that, if a financial assurance mechanism is provided by the private operator of a municipally-owned facility, the fully funded financial assurance mechanism must be transferred to the municipality upon return of the facility to municipal operation or control. This change will help ensure that municipalities are not left with the requirement to generate the full cost of post-closure care and custodial care at the end of the active life of a landfill previously operated on their behalf by a private entity.

- The Department considered requiring custodial care financial assurance to be required in addition to post-closure care financial assurance. This alternative was rejected as burdensome and unnecessary.

- The revised regulations have been adjusted to allow financial assurance mechanisms provided under other municipal requirements to take the place of mechanisms required under the Part 360 regulations. This change was included to reduce duplicate financial assurance requirements associated with the same solid waste management activity.

- Solid waste management facilities have described great difficulty in obtaining standby trust agreements associated with letters or credit or bonds which have a value of less than $50,000. The Department considered continuing to require standby trust agreements for instruments less than $50,000 in value. This alternative was rejected as burdensome, and availability of those agreements are minimal in the industry. Therefore, the revised regulations exclude those letters or credit or bonds from the standby trust agreement requirements. Alternative methods to maintaining and allocating those funds will be used.

- The revised regulations clarify that closure cost estimates must include the cost to close the greatest number of landfill cells which, at any given point during the lifetime of the facility, have received waste but have not undergone final closure. This is substantially the same requirement as currently exists, but it has been reworded to lessen confusion that has existed within the regulated community.

- The revised regulations clarify that the owner or operator of a landfill must include a custodial care cost estimate as part of its financial assurance calculations upon closure of the facility and a custodial care financial assurance mechanism must be in effect after the post-closure care period is complete. This change builds on the current requirement that landfills must calculate post-closure cost estimates for at least 30 years, and each subsequent year's estimates must be for 30 years until the owner or operator can demonstrate that the landfill no longer poses a threat to public health or the environment. The revised regulations relating to custodial care are a clarification of the current post-closure requirements for long-term care of the landfill.

- The revised regulations eliminate surety bonds guaranteeing performance, insurance policies, corporate guarantees, and corporate financial tests as acceptable financial assurance mechanisms. The Department has concluded that these mechanisms do not assure that the basic requirements for financial assurance mechanisms will be met, which include: that funds must be sufficient to cover the costs of closure, post-closure, custodial care, or corrective measures; that funds must be available when needed; and that mechanisms must be legally valid, binding, and enforceable under state and federal law. The Department is confident that the remaining mechanisms, which include trust funds, surety bonds guaranteeing payment, letters of credit with standby trust funds, local government financial tests, local government guarantees, and reserve funds meet these requirements and will provide statewide consistency regarding acceptable financial assurance mechanisms. While the Department acknowledges that the remaining mechanisms may marginally increase costs for facilities that must change mechanisms, currently 237 facilities, more than three quarters of the facilities that are required to maintain financial assurance, utilize one of the remaining mechanisms. Further, transition requirements will provide registered facilities that must change mechanisms five years to obtain an approved mechanism. Permitted facilities which have valid financial assurance mechanisms in place but must change mechanisms under this revision will have until their permit renewal date to obtain an approved mechanism.

B. Multi-Facility Issues

Multi-Facility Issues - Source-Separated Waste

Issue: A list of source-separated waste streams which are restricted from being processed at any solid waste management facility other than a recycling facility should be added to the regulations to reflect recycling and product stewardship efforts and to further the goals outlined in *Beyond Waste* to increase recycling these waste streams.

Discussion and Findings: Materials which have been diverted from the MSW stream for reuse, recovery or other proper management should not be returned to the waste stream for combustion, thermal treatment, or disposal. A broad restriction for these source-separated waste streams from processing at any solid waste management facility was considered as an alternative and rejected as being too restrictive and would provide little environmental gain. The revised regulations add a list of source-separated materials that cannot be processed at a combustor or thermal treatment facility, processed through a MSW processing facility, or disposed in a landfill. These materials include source-separated recyclables, source-separated household hazardous waste, source-separated electronics, source-separated rechargeable batteries, source-separated mercury-containing products, and other source-separated items that are subject to legislatively enacted product stewardship programs. This provision will ensure that materials not suited for thermal treatment are prohibited from acceptance, thereby increasing recycling of these materials. This will reduce potential air pollutants, improve ash quality and further the goals of *Beyond Waste*.

Multi-Facility Issues – Radiation Detectors

Issue: The existing regulations prohibit certain radioactive waste from being treated or disposed at a solid waste management facility. However, there is no current regulatory requirement for installation and operation of fixed radiation detectors to be installed at these facilities.

Discussion and Findings: Radiation detectors will ensure that radioactive waste is detected and evaluated prior to acceptance at a solid waste management facility. Continuing with only administrative prohibition of radioactive waste was considered but rejected as radiation detector technology is readily available and relatively inexpensive. Radiation detectors have been voluntarily installed by many solid waste management facilities across the state and others have been required to install them as a condition of their permit. Most facilities that have installed radiation detectors to date have been municipal waste combustors and MSW landfills but also include several transfer facilities. As an alternative, the Department considered requiring all the MSW landfills and municipal waste combustors to install radiation detectors with the intention of using these tools to ensure that radioactive waste is detected prior to processing or disposal in New York State. This alternative was rejected as incomplete as this would not address all the solid waste management facility types that process material as an end-point and would not address waste that is sent out-of-state for disposal. As an alternative the Department considered requiring all permitted transfer facilities to install and utilize fixed radiation detectors. However, since the minimum intent of any changes would include fixed radiation detectors to be installed at all MSW landfills and municipal waste combustors in the state, it was determined that it would not be necessary to require detectors at transfer facilities that were sending all their waste to in-state facilities as those waste loads would be monitored at those final destination facilities. The revised regulations require the following facilities to install and operate fixed radiation detectors to monitor all incoming waste loads: landfills that accept MSW or drilling and production waste; municipal waste combustors; thermal treatment facilities that process MSW; MSW compost facilities; MSW processing facilities; and transfer facilities that send waste directly out-of-state. Waste loads which exhibit radioactivity above 25 pCi/g may not be accepted at the facility. No regulated radioactive wastes, including naturally occurring radioactive material (NORM) which has been processed and concentrated (i.e., technologically enhanced naturally occurring radioactive materials or TENORM) may be accepted at the facility. The addition of monitoring

equipment for the detection of radioactive waste at these facilities will result in a positive environmental impact by ensuring that these wastes are not processed at these facilities which could end up in the resultant ash, residue, product and/or air emissions.

C. Part 361- Material Recovery Facilities

Subpart 361-1 Recyclables Handling and Recovery Facilities (RHRF)

Issue: Current regulations do not require permits for any RHRFs and concerns exist related to the ability for the Department and public to appropriately evaluate and address the potential for impacts to the surrounding community and environment.

Discussion and Findings: There have been concerns expressed related to noise, truck traffic, and other nuisance impacts resulting from large RHRFs that are currently operating under registration. Requiring a permit for of these facilities would allow these environmental issues to be addressed on a site-specific basis through the permitting process. Continuing the current requirements of registrations for all sized facilities was evaluated but rejected as non-responsive to the concerns of neighbors to large RHRFs that experience high levels of truck traffic. Facilities with high waste-acceptance rates are more likely to cause impacts to the surrounding community and the environment. Staff evaluated various throughput rates to determine anticipated impact to determine an appropriate threshold where the full facility review the permitting process provides was appropriate. After evaluation, a throughput value of 250 tons per day averaged based on a weekly average was selected as an appropriate threshold. This threshold was chosen based on the amounts of recyclables received at RHRFs under the current regulations. The Department concluded that facilities which receive greater than 250 tons per day on a weekly average may impact the surrounding community by increased truck traffic. Recyclables are typically lighter than other types of solid waste, which would lead to more truck traffic per ton than for other types of solid wastes. The Part 360 registration process does not include a SEQR evaluation of impacts such as truck traffic, but the Part 360 permitting process does include this evaluation. Staff estimates that a RHRF which receives 250 tons per day of recyclables will receive 32 or more trucks per day, which could cause an adverse impact to the surrounding community and environment. Based on annual reports from RHRFs, this change is likely to affect 11 of the 86 facilities (13%) operating in the state. These 11 facilities managed approximately 44% of the recyclables stream. They are primarily located in the New York City area, with several others in Long Island and the Hudson Valley. The addition of permitting standards for large RHRFs is expected to reduce environmental impacts due to greater Department oversight of these facilities and therefore have a potentially positive impact on the environment.

Subpart 361-2 Land Application and Associated Storage Facilities

Issue: Elimination of the ability to use lagoons for septage disposal and the elimination of the cumulative loading limits for heavy metals are needed to address outdated and inappropriate practices in land application and septage management.

Discussion and Findings: Septage disposal lagoons have been essentially eliminated in the state due to potential for groundwater impacts. Continuing to allow the disposal of septage in lagoons was determined to be an unacceptable alternative due to the potential for groundwater impacts. The revised regulations codify this prohibition. The tracking of cumulative metal loading for biosolids is a vestige of the 1980s and is not required by federal regulations or necessary for environmental protection. The pollutant standards that apply in Subpart 361-2 are low enough that the material can be applied without concern for a build-up of metals over time. The elimination of septage disposal lagoons will result in a positive environmental impact due to the reduction in the potential for groundwater contamination from these facilities. No significant environmental impact is anticipated in connection with the elimination of cumulative loading limits for heavy metals.

Subpart 361-3 Composting and Other Organics Processing Facilities

Issue: *Beyond Waste* recommends reviewing existing regulations to remove or address contradictory regulatory requirements that limit the creation or expansion of composting and other organics recycling facilities. To that end, the regulations need to be revised to facilitate composting at small-scale facilities.

Discussion and Findings: Under the current regulations, the addition of any amount of food scraps to a community garden that are generated by a resident requires a registration. This is burdensome to small-scale composting operations and not needed. The Department promotes the recycling of organic waste through composting and other means (as furthering its goal of reducing the amount of organic material entering landfills or being combusted) but recognizes that environmental impacts can occur if the operations are not managed properly. The alternatives considered relate to the size and character of the facilities that will be allowed under an exemption or under a registration. The revised criteria allow a small amount (1000 pounds per week) of food scraps to be composted under an exemption. The registration provision for food scraps has also been increased from 1000 cubic yards to 5000 cubic yards per year. The chosen alternatives are based on the Department's experience with these operations over the last two decades. The exemption allows the Department to provide limited oversight of these operations but promotes this small-scale composting by dispensing with the requirement to obtain a permit. No environmental impacts are anticipated since the revisions exclude very small composting facilities that have a very low potential for runoff and other impacts, and increasing the registration requirement from 1000 cubic yards to 5000 cubic yards maintains the operating condition requirements for these facilities.

Subpart 361-4 Mulch Processing Facilities

Issue: Under the current regulations, the production of mulch from the processing and storage of clean wood is exempt from regulation. With the increase in popularity of the use of mulch, especially in urban and suburban areas, the number of facilities producing mulch has grown, and

in some cases, the facilities are very large. Odor problems, leachate concerns, and fires have become a common problem at some of these facilities.

Discussion and Findings: The Department considered the no action alternative, but due to the significant concerns that have been raised related to these facilities including odors, leachate and fire, it was determined that regulation of these facilities is necessary. There is no guarantee that a pile of wood will not catch fire. However, the proper management of the pile will reduce the potential for adverse environmental impacts such as fire, dust, and odor concerns. Proper site management will also facilitate emergency personnel access and response, if needed. Therefore, a new Subpart has been established in the revised regulations to address mulch processing facilities. This Subpart contains an exemption for smaller facilities (containing less than 10,000 cubic yards) that process wood debris and yard trimmings, provided specific pile size restrictions are followed. For facilities between 10,000 and 30,000 cubic yards, a registration will be required, and those larger than 30,000 cubic yards will require a permit. For both registered and permitted facilities, criteria relating to pile size, temperature monitoring, and other management methods to minimize environmental concerns have been specified in the regulations. This Subpart also includes restrictions on pile size, buffers between piles, and other criteria to control environmental concerns. There is no universally accepted pile size requirement. The Department considered various pile sizes and, based on the research currently available and comments received through the rulemaking process, determined the appropriate size restrictions in the revised regulations. Enhanced regulatory requirements will reduce the potential for negative environmental impacts including dust, fires and groundwater impacts that have plagued many of these larger facilities that are currently unregulated.

Subpart 361-5 Construction and Demolition Debris Handling and Recovery Facilities – Tracking

Issue: Many areas of the state, especially Long Island and Hudson Valley, have experienced significant illegal disposal of C&D debris. Additional criteria are needed in the regulation to specify proper C&D debris management.

Discussion and Findings: Expanding C&D debris tracking requirements will enable the Department to more easily investigate and enforce against those who illegally dispose of C&D debris. Due to the significant concerns with groundwater impacts, etc. that have been raised related to management of C&D debris, the no action alternative was rejected. It was determined that enhanced tracking was necessary to bring about change in the management of this material. The current requirements of tracking C&D debris residue from only permitted C&D debris handling and recovery facilities was the base system all alternatives were compared against. Many tracking alternatives were evaluated ranging from adding tracking of only residues from registered C&D debris handling and recovery facilities to tracking all waste materials received by and all residues and products leaving permitted and registered C&D debris handling and recovery facilities. The evaluation also included a range of tracking documents or tools ranging from a basic paper-based tracking document that is carried by the transporter to the destination with no copies distributed for verification to a full electronic manifest system. The revised regulations expand the existing tracking form requirements for C&D debris and fill material or other material that does not qualify for a beneficial use determination leaving permitted C&D

debris handling and recovery facilities to also include material leaving registered C&D debris handling and recovery facilities. Expanded tracking requirements for C&D debris will result in reduced illegal dumping of this material, especially for large urban areas.

Subpart 361-5 Construction and Demolition Debris Handling and Recovery Facilities – Permitting Threshold

Issue: Numerous complaints regarding negative impacts such as noise and dust have been received over the years related to facilities that receive only recognizable uncontaminated concrete, asphalt, rock, brick, and soil. Current regulations require these facilities to register and do not designate a throughput threshold at which a permit is required for processing these types of waste. Accordingly, permitting thresholds needed to be reevaluated.

Discussion and Findings: Processing of C&D debris can generate noise, dust, and odors. Requiring permitting of these facilities would allow these environmental issues to be addressed on a site-specific basis through the permitting process. The revised regulations address both the throughput threshold and the materials to be accepted at the facility. The revised regulations require asphalt to be handled separately from concrete, brick, rock and soil meeting the criterial of general fill. Facilities with high waste-acceptance rates are more likely to cause impacts to the surrounding community and the environment. Staff evaluated various throughput rates to determine anticipated impact. After evaluation and review of public comments received as part of the rulemaking process, a throughput value of 500 tons per day based on a weekly average was selected as an appropriate threshold. The draft regulations originally set the threshold for a permit at 250 tons per day. Comments received by the Department argued that the limit was inappropriately low and that an averaging period should be used to allow occasional large loads of material, a circumstance which is typical in the industry. The revised regulations have been adjusted based on those comments. The revised regulations will require a registration for a facility that receives less than 500 tons per day based on a weekly average of only concrete, brick, rock and general fill, only limited-use and restricted-use fill material, only asphalt, only asphalt roofing shingles or only uncontaminated gypsum wallboard. A facility may receive more than one of the waste types, except for restricted-use and limited-use fill, so long as they are processed, received, and stored separately. A permit will be required for the receipt of 500 tons per day or greater of these materials. In addition, larger facilities are typically located in urban areas which increases the potential for impacts to surrounding communities related to truck traffic, noise, etc. Based on annual reports from this portion of the current C&D debris processing industry, the change is likely to affect 22 of the 143 facilities operating in the state. Sixteen of these facilities are in Long Island and New York City, with the remainder located in various other areas of the state. The additional requirements should result in reduced processing of petroleum based asphalt materials in sensitive environmental settings. It also will reduce the potential negative impacts from processing of painted or otherwise contaminated wallboard. The Department will have greater control over facilities that process more than 500 tons per day based on a weekly average and can create permit conditions on case-by-case basis to minimize environmental impacts of larger operations.

Subpart 361-5 Construction and Demolition Debris Handling and Recovery Facilities – Operation

Issue: Based on concern relating to odor and noise impacts to surrounding communities, the operational requirements for receiving, processing, and sorting mixed C&D debris were revisited as part of the rulemaking.

Discussion and Findings: The processing and handling of mixed C&D debris has been found to create dust and odors, depending on the mix of material processed at the facility. Enclosure for facilities that accept any C&D debris, including concrete, rock, brick and fill material, was considered as an alternative but determined to be unnecessary. However, the revised regulations will require the receiving, processing, and sorting of mixed C&D debris to be performed within an enclosed building in order to minimize potential impacts on the surrounding community. The transition provisions of Part 360 will not require retrofitting of existing facilities which do not meet this enclosure requirement. However, many C&D debris processing facilities that currently handle mixed C&D debris already comply with this requirement through special permit conditions. Newly constructed facilities which process mixed C&D debris will have to meet the enclosure requirement. The addition of an enclosure requirement can be expected to reduce the potential for negative environmental impacts on surrounding neighborhoods such as dust, odors, and noise. Under these circumstances, the no action alternative is unacceptable.

Subpart 361-5 Construction and Demolition Debris Handling and Recovery Facilities – Registered Facilities

Issue: Current Part 360 regulations for C&D debris processing facilities that handle only concrete, asphalt, rock, brick and soil or similar material have no restriction on the storage volume of unprocessed or processed material. This has led to facilities storing vast quantities of processed C&D debris for extended periods of time, which may adversely impact surrounding communities.

Discussion and Findings: The impact of this unlimited and unregulated storage of vast quantities was evaluated and determined to be an issue for several downstate facilities and an unintended result of the current regulations. As part of the evaluation process, various size, volume, and dimensional limits were considered. A specific state-wide storage limit was initially proposed, but it was determined that the storage limits based on the reasonable storage volumes and capacity available at each facility is most appropriate and will adequately address potential adverse environmental impacts. Under the revised regulations, each facility in its permit application or registration submission must identify the daily tonnage it intends to receive as well as the maximum storage volume to be utilized at the facility. As part of the required submissions, the facility must also submit a site plan which shows storage and waste processing locations. Storage restrictions are expected to significantly reduce the potential for adverse impacts that surrounding communities have experienced from C&D debris handling and recovery facilities. New storage limitation requirements will reduce negative environmental impacts including odors and dust.

Subpart 361-5 Construction and Demolition Debris Handling and Recovery Facilities – Fill Material

Issue: Fill material can be received, processed, and stored by C&D debris handling and recovery facilities. Concern has been expressed that if the fill material contains contaminants it should only be used at locations which comply with the requirements of section 360.13 of the revised regulations.

Discussion and Findings: Restricting any fill material from being managed at a C&D debris handling and recovery facility was considered as an alternative. However this alternative was rejected as unreasonable and unworkable. Large construction projects often require large quantities of fill material as part of the project. The Department wants to encourage the use of appropriately graded fill material in the correspondingly appropriate locations and uses. To help foster that system, the Department concluded that these facilities should be allowed to manage fill material in order for sufficient volumes of material to be accumulated to meet the needs of those large projects. The various grades of fill material and their appropriate uses and locations are identified in Section 360.13 of the revised regulations. The Department evaluated numerous alternatives and combinations of which types of fills should be allowed to be accepted at both registered C&D debris handling recovery facilities and permitted C&D debris handling and recovery facilities in order to balance the need to have large quantities of the various grades of fill material available for construction projects with the concern for fill material containing contaminants when the various grades of fill material can be difficult to visually distinguish from one another. The revised regulations require that fill material or residues leaving a C&D debris handling and recovery facility must be analyzed for contaminants identified in Section 360.13. If the fill material cannot meet the standards, it must be handled appropriately as a solid or hazardous waste, as applicable. The provisions will allow for large quantities of fill material which has been screened for contaminants to be utilized for construction projects in place of virgin material. The provisions also reduce the potential for contaminated fill material being placed in locations that are not appropriate (such as playgrounds, etc.).

Subpart 361-6 Waste Tire Handling and Recovery Facilities

Issue: The significant investment by the state in abating waste tire stockpiles and developing markets for waste tire recycling since 2003 through the administration of the Waste Tire Management and Recycling Act has necessitated a change in the focus of the regulations from storage of waste tires to handling and recycling of waste tires.

Discussion and Findings: The current regulations allow a facility to process waste tires into a product, feedstock, or fuel under a registration. Many of these facilities have experienced significant operational issues, including fires and marketing difficulties. Maintaining registration requirements for waste tire processors was considered but found to be insufficiently protective of public health and the environment. Facility types such as tire services were considered to be identified as exempt facilities under this Part; however, it was determined that the exemption should be limited to the storage of less than 1000 waste tires at any one time. The revised regulations will require facilities that process tires into products, feedstocks, etc. to obtain a permit. The revisions will also limit the storage of waste tires at tire services or tire recovery facilities and will provide an exemption for the storage of less than 1000 waste tires at any one time. The provision will eliminate the generation of new waste tire stockpiles in the state and

reduce the significant adverse environmental impacts associated with stockpiling waste tires, including fire and vector issues. The no action alternative is unacceptable, in light of the above.

Subpart 361-7 Metal Processing and Vehicle Dismantling Facilities – Vehicle Dismantling Facilities

Issue: The regulations need to incorporate the requirements of Article 27, Title 23 Vehicle Dismantling Facilities, which was promulgated and went into effect in 2006, establishing operating and annual reporting requirements for vehicle dismantling facilities.

Discussion and Findings: Article 27, Title 23 created explicit reporting and operating requirements for vehicle dismantling facilities. The requirements protect groundwater and surface waters by requiring waste fluid removal prior to crushing or shredding of vehicles and proper waste fluid storage. Air emissions are also addressed through requirements to remove mercury switches prior to crushing or shredding of vehicles and subsequent recycling at steel furnaces. Requiring full registration of facilities which handle end-of-life vehicles of any number was considered but rejected as unnecessary and burdensome when measured against additional environmental benefits. Instead, facilities which store less than 50 end-of-life vehicles are either exempt or will be allowed to operate under minimal registration requirements. These facilities are most appropriately included as registered facilities under Part 361. Because of issues related to potential release of petroleum products to the environment associated with mobile vehicle crushers and the need to tie operating requirements to mobile vehicle crushing operations which will reduce impacts to the environment, operations which crush vehicles using mobile vehicle crushing equipment will be required to register with the Department. Incorporation of the requirements of Article 27, Title 23 Vehicle Dismantling Facilities into Part 361 requirements will help clarify the requirements of vehicle dismantling for the regulated community.

Subpart 361-7 Metal Processing and Vehicle Dismantling Facilities – Scrap Metal Processors

Issue: Because operations at large scrap metal processors may have potential adverse environmental impacts on the surrounding community, the current exemption for all scrap metal processing facilities is untenable and operating requirements need to be considered for those facilities to address potential adverse impacts.

Discussion and Findings: Scrap metal processors can generate significant amounts of waste and can create dust and noise impacts on surrounding communities. Requiring these facilities to be registered will reduce their potential environmental impact and their impact on surrounding communities. No exemption threshold from the registration requirement for scrap metal processors was considered as an alternative but it was determined to be unduly burdensome on facilities with small potential impacts. The draft revisions proposed registration for scrap metal processors that store more than 500 cubic yards of metal, but based on comments received as part of the rulemaking process, the revised regulations have been amended to exclude indoor storage from this volume. This change will not alter the impact analysis, since indoor storage is not anticipated to have any additional dust, noise, or similar environmental impacts. These new registration provisions will reduce the potential impact that these facilities can have on surrounding communities including dust and noise issues.

Subpart 361-8 Used Cooking Oil and Yellow Grease Processing Facilities

Issue: Used cooking oil and yellow grease is a potential alternative fuel. In order to produce a higher grade fuel, the oil must be processed to remove food particles, water, and other contaminants. Because facilities that perform this processing are not explicitly addressed under the current regulations, a permit as a non-specific facility is required. A permit does not seem to be appropriate for some of the facilities that are smaller in scale.

Discussion and Findings: The use of alternate fuels is growing in importance in the state. The proper management of this potential fuel is necessary to limit the potential for environmental harm from spills or leaks. An alternative evaluated by the Department was to continue to require a permit for all used cooking oil and yellow grease processing facilities but rejected as unnecessary and burdensome when measured against additional environmental benefits. Many of these operations are limited in size and can be appropriately managed under registration provisions. After evaluation of the circumstances, a new Subpart has been added to specifically address the processing of used cooking oil and yellow grease. Under the revised regulations, small operations (no more than 1,000 gallons per year) are exempt, those greater than 500,000 gallons per year will be subject to permit, and those falling between those thresholds will be required to register and will be subject to basic operating requirements. The criteria address the proper storage and processing of these putrescent liquid wastes. These provisions will improve the management of used cooking oil and yellow grease to prevent potential spills and no adverse environmental impacts are anticipated.

Subpart 361-9 Navigational Dredged Material Handling and Recovery Facilities

Issue: Under current regulations, a facility which receives navigational dredge material (NDM) for solidification or dewatering must operate under a Part 360 non-specific facility permit, which may hamper the reuse of NDM. Reuse is also hampered by restrictions on storage of NDM to permitted facilities. A more flexible system is needed to allow the full reuse of NDM and to avoid unnecessary disposal.

Discussion and Findings: One of the Department's objectives is to increase the appropriate recycling and reuse of materials that would otherwise be disposed as outlined in *Beyond Waste*. In many cases, NDM is appropriate for reuse but is restricted by regulatory requirements which make it difficult to solidify or dewater the material sufficiently for appropriate reuse. Allowing the amendment or dewatering of NDM under an exemption was considered. However, it was concluded that a Part 360 registration was the preferable alternative as the registration provides annual reporting, operating, and recordkeeping requirements which increase the likelihood that the activity will be conducted in an environmentally safe matter. The revised regulations include a new Subpart 361-9 "Navigational Dredged Material Handling and Recovery Facilities." The new Subpart allows facilities which receive NDM for amendment with Portland cement or for dewatering to operate under a Part 360 registration rather than a permit. This provision will create more flexibility and allow for increased ease in siting and operating these facilities while maintaining sufficient regulatory oversight through the registration. Additionally, these provisions will improve the management of NDM and will allow for increased reuse of the

material, avoiding unnecessary disposal and providing an environmental benefit. The revised regulations will ensure the facilities do not cause groundwater impacts or nuisance impacts (dust, etc.).

D. Part 362 Combustion, Thermal Treatment, Transfer and Collection Facilities

Subpart 362-4 Household Hazardous Waste Collection Facilities and Events

Issue: Currently, household hazardous waste collection events require submittal of a collection day plan 60 days prior to each collection event and approval by the Department prior to holding the event. This has created significant work for municipalities sponsoring events as well as Department staff for activities that have become quite routine and held multiple times a year by many municipalities across the state.

Discussion and Findings: The current collection day approval process was considered but rejected because it has evolved into a cumbersome process for both municipalities and the Department with little or no additional environmental protection. Requiring municipalities to seek full permits for all activities related to household hazardous waste collection was also considered as an alternative but rejected as overly restrictive and unnecessary. The registration process was determined to be a good fit for the circumstances to relieve some of the burden on municipalities in managing household hazardous waste through collection events. This revision will streamline the application and approval process for municipalities, especially for those that sponsor frequent and ongoing programs.

E. Part 363 Landfills

Subpart 363-2 Exempt Disposal Facilities

Issue: Adjustments to regulations related to exempt disposal facilities are necessary.

Discussion and Findings: Exempt facilities are a valuable component of the solid waste management system because the waste streams that they manage does not consume capacity in registered and permitted solid waste management facilities. Experience with managing certain components of the waste stream have led the Department to adjust these exemptions, as necessary. The Department considered each of the current exemptions and whether or not each should be made more restrictive, more expansive or remain the same. Also, the addition of new exemptions based on issues that have arisen in the past was considered. The revised regulations represent the results of that evaluation and the Department's determination of what exemptions are appropriate for facilities or activities that have little potential environmental impact. Revisions to existing exemptions which narrow an exemption, such as the on-site disposal exemption for homeowners, have been made in the revised regulations to be more protective of the environment. The revisions include exemptions for facilities or activities that will have little potential environmental impact. These exemptions include the following:

- The current exemption for on-site disposal by a homeowner has been modified to exclude manufactured homes that are not the owner's primary residence, friable asbestos-

containing waste, pesticides, pesticide containers, waste tires, septage, raw sewage, used oil, mercury-added consumer products, e-waste and syringes.

- The revised exemption for on-site disposal of solid waste generated by a farm will exclude C&D debris and the same materials identified above.

- The current exemption for burial of animal mortalities at pet cemeteries has been modified to address the burial of animal cremains as well.

- A new exemption has been added for the disposal of overburden, tailings, drill cuttings generated by air- or water-based drilling methods, and other similar mining waste when generation and disposal occur at the same mine location subject to regulation under 6 NYCRR Parts 421-425.

- A new exemption has been added for disposal facilities for the burial of religious items.

Overall, the Department expects these revisions will have a positive impact on the environment.

Subpart 363-2 Exempt Disposal of C&D debris

Issue: Current regulations exempt disposal of concrete, rock, asphalt, brick and soil but include no volume or size restrictions associated with this exemption.

Discussion and Findings: Several areas of the state, especially Long Island, New York City and the Hudson Valley, have experienced significant problems with large-volume disposal of C&D debris at exempt sites which have adversely impacted surrounding communities. In addition, non-exempt wastes such as C&D debris processing facility residues have been found at exempt sites. In many instances, the cost to remove the volumes that have been illegally disposed is far too great and the remedy becomes remediation by leaving the material in-place with appropriate environmental controls. Various exemption threshold volumes were considered as alternatives to minimize the impact of this unlimited and broad exemption provision. The chosen volume was determined to be a reasonable volume for small-scale disposal, considering that the select waste stream is a material that is unlikely to adversely impact the environment in small volumes. To help guard against these operations and to readily identify potential illegal disposal activities, the revised regulations prohibit disposal of C&D debris processing residues at an exempt site and restrict disposal at exempt sites to no more than 5000 cubic yards of concrete, asphalt, rock, brick, glass and general fill. A separate exemption allows disposal of concrete, asphalt, rock, brick, glass and general fill generated by state or municipal highway projects when disposal takes place in highway right-of-way or on municipally-owned property. The exemption for highway projects was not included in the initial proposed revisions, but comments received from municipal and state transportation officials as part of the rulemaking process argued that an exemption should be allowed for municipal projects, and that the incentive for improper disposal was reduced in these projects. After evaluation of the information presented as part of the comments and further evaluation by the Department, the exemption for state and municipal highway projects was included in the revised regulations. The exemptions are not available within Nassau and Suffolk counties due to statutory disposal restrictions that apply in those

areas. The revised regulations reduce the potential adverse impacts of improper disposal on surrounding communities and increase the Department's ability to enforce against illegal disposal of C&D debris and fill material. The revised regulations also provide a reasonable allowance for disposal of concrete, asphalt, rock, brick, glass and general fill by municipalities, where the potential of illegal disposal is reduced.

Subpart 363-3 Inactive Disposal Facilities

Issue: Under current regulations, solid wastes excavated from inactive landfills as part of a construction project must be handled, relocated, and disposed by practices approved in writing by the Department. This language currently exists under exempt facility requirements in the regulations. Consistent compliance with the requirements as written have been problematic. Accordingly, a different reporting mechanism should be established to notify the Department when an inactive disposal facility is encroached upon and solid wastes are identified.

Discussion and Findings: Encroachment on solid wastes or potential environmental impacts at inactive disposal facilities will inevitably occur periodically as part of routine construction activities. The handling of solid wastes should only be performed in a manner which is protective of public health and the environment. Many variations on these requirements and methods were considered by the Department, including requiring registration for inactive facilities which are disturbed or encroached upon. Inactive disposal facilities which are encroached upon or which exhibit environmental impacts may be subject to the requirements of the current regulations, and the owners of these facilities must provide notice to the Department of intent to alter the facility end use or upon discovery of a disturbance or upon discovery of environmental impacts. The chosen requirements provide the best balance between environmental protection and regulatory burden. These revised regulations provide the Department with the information necessary to ensure that solid waste from these types of disturbances are properly managed and environmental impacts are minimized. The revisions ensure that old landfills will be handled in an appropriate manner without the need for unnecessary paperwork, reinforce current practice and do not represent a negative environmental impact.

Subpart 363-4 Permit Application Requirements

Issue: All solid waste management activities, including landfill operations, should be conducted in a manner that minimizes adverse impacts on the environment and that conserve and sustain natural resources.

Discussion and Findings: A basic management premise for all solid waste management activities is the need to minimize adverse impacts on the environment and conserve and sustain natural resources. The current regulations under provisions of subdivision 360-2.9(a) embody these management premises. To ensure this concept continued to be carried out with respect to landfills, the revised regulations has updated the current requirements calling for a sustainability plan to be included as a part of all landfill permit applications as part of the facility manual to address how the landfill will be run on daily basis to help conserve resources, reduce greenhouse gas emissions and maximize the landfill's disposal capacity. The no action alternative was considered, however, in light of the vast amounts of natural resources used in the construction

and operation of a landfill and the significant potential environmental impact of landfill operations, the no action alternative was rejected. Landfill construction and operation has evolved over the past 25 years since the regulations were last revised and the regulations need to be revised to keep pace. After evaluating the developments in technology and landfill operation in the past and the full expectation of continued technological advancements and efficiencies in the future, the Department determined it appropriate to establish regulations that embrace advancement. Accordingly, the revised regulations incorporated a provision for the submission of a sustainability plan that will require applicants to implement a plan that minimizes impacts on the environment and conserve natural resources over the lifetime of the landfill. The sustainability plan calls for all landfills to describe operations that will conserve landfill airspace, reduce receipt of organic wastes, utilize alternative operating cover materials, enhance waste mass stabilization, include landfill reclamation techniques, and utilize other sustainable landfill management techniques. With the preparation and implementation of sustainability plans, landfill operation and development must continue to seek the most efficient and environmentally protective systems and will help increase recycling of organic waste and result in the conservation of natural resources.

Subpart 363-5 Siting Requirements

Issue: Current regulations require that applicants complete a site selection study for the siting of a landfill if the proposed landfill fails to meet the suitable site characteristics called for in the current regulations in paragraphs 360-2.12(a)(1) and (2). The site selection study required in the current regulations identifies a range of alternative sites and describes the process used to select the proposed site. While this process may be useful for a municipality which has multiple available parcels from which to choose, a private applicant usually will find the process unworkable. Ownership and operation of landfills in New York has dramatically shifted away from municipalities to the private sector over the past 25 years since the regulations were last updated and therefore these requirements need to be revisited.

Discussion and Findings: Current Subpart 360-2 describes the minimum siting criteria for the siting of a landfill and allows for a site selection study for locations that do not meet all siting requirements. While this process may be useful for a municipality which has multiple available parcels from which to choose, a private applicant usually will find the process unworkable. More importantly, the site selection study is duplicative of the alternative site evaluation required under SEQR for landfill applications. The Department considered the no action alternative - leaving the current requirements in place. The Department ultimately rejected the no action alternative based on an evaluation of the additional environmental benefit of the revision. It was determined that the current site selection report provides no additional environmental benefit and that these requirements were duplicative to the evaluation of alternatives under SEQR. Accordingly, the Department sought to keep the protective siting requirements in tact but eliminate the duplicative requirements. The revised regulations provide relief to applicants by eliminating the duplicate evaluation of alternative sites while maintaining the prohibited siting criteria. The revised regulations now correctly focus on site selection criteria which must be met for all landfills to ensure that a proposed site is appropriate for disposal of solid wastes and that potential impacts will be adequately addressed. No adverse environmental impact is anticipated since the SEQR criteria already require alternative site assessment.

Subpart 363-6 Liner integrity testing

Issue: Under current regulations, the quality of the landfill liner is evaluated after construction by measurement of the allowable leakage rate (ALR) into the secondary leachate collection system. ALRs below 20 gallons/acre/day are considered to be acceptable. However, since the development of the current regulations, liner integrity testing technology has been developed which can pinpoint defects in geomembranes immediately after installation and before operation allowing for defects to be repaired prior to landfill being put into service. These tests have been used successfully during the construction of many landfill cells in the State over the past decade and have greatly reduced the number of construction-related defects.

Discussion and Findings: With the advent of liner integrity testing technology, it has become evident that most liner system defects occur during construction activities. The no action alternative was considered but rejected as it would continue to require an outdated liner quality evaluation leaving the environment less protected. The Department concluded that requiring liner integrity testing will enhance environmental protection by greatly reducing the number of defects in landfill liners. The revised regulations require that liner integrity testing be conducted on both geomembrane liners of a double-composite liner system. The requirement for liner integrity testing on both geomembrane liners of a double-composite liner will ensure that all potential defects are located, thereby minimizing the potential for leakage through the double-liner system avoiding or greatly minimizing potential impacts to groundwater and the costs associated with abating any potential groundwater impacts. The Department expects that the change will have a positive impact on the environment.

Subpart 363-6 Enhanced leak detection system design requirements

Issue: The current regulations do not include standards for a minimum required hydraulic capacity for a landfill's secondary leachate collection and removal system (SLCRS). To assure that leaks in the primary composite liner can be detected, there must be a minimum hydraulic capacity which will transport of collected leachate rapidly to the secondary leachate observation point.

Discussion and Findings: As noted above, the current regulations currently do not specify a minimum required hydraulic capacity for landfill's SLCRS. The no action alternative was considered but rejected as inadequate as this would leave an existing regulatory weakness in place that could result in adverse environmental impacts. The Department determined that minimum hydraulic capacity must be required to reduce the potential for groundwater impacts. Numerous minimum hydraulic capacities were discussed and evaluated and after careful consideration, the Department determined that to assure that leaks in the primary composite liner are quickly detected, the revised regulations require that the SLCRS be designed with a minimum hydraulic capacity of 1000 gallons per acre per day. The Department expects that the change will have a positive impact on the environment.

Subpart 363-6 Recovering landfill airspace

Issue: Under current regulations, external slopes of final landfill cover systems may not be constructed at slopes which exceed 33 percent. This requirement is intended to maintain the stability of the slope and reduce the chance for slope and cover failures when the landfill is closed. However, as waste naturally degrades, settlement occurs and the slope reduces to angles below regulatory limits. This results in loss of permitted airspace capacity of the landfill from its original design. In those instances, in order for a landfill owner to use that fully permitted design capacity, they would need to remove the final landfill cover system and place additional waste followed by the installation of a new final cover system. Another current requirement is that final cover systems be installed within 210 days following the last receipt of waste in the landfill cell. Waste degradation and the associated airspace recovery may take much longer than 210 days to come to completion. The allowance of an interim cover system in lieu of the final cover system would allow for waste disposal capacity optimization.

Discussion and Findings: The combination of the requirement of no greater than a 33 percent final side slope and the requirement of placement of the final cover system within 210 days following the receipt of the last waste creates a natural and routine conflict for a landfill owner attempting to maximize use of the permitted capacity of the landfill and operational efficiencies. Under the current regulations, numerous landfills have applied for variances from these requirements to optimize the use of the recovered disposal capacity that would become available through natural waste mass decomposition. Allowance of greater than 33 percent slopes upon final closure was considered, but rejected in order to help ensure that slopes remain stable during post-closure care and custodial care. The no action alternative was evaluated as well but also rejected as it does not adequately address the reality of operation of a landfill and simply forces landfill owners to either apply a more inefficient filling plan that provides a greater potential environmental threat and keep a larger landfill operational area open or to apply for a variance from the regulations. Evaluation of various alternatives and combinations of temporary covers, temporary operating side slope angles and final closure time frames were considered as part of the rulemaking process. After careful consideration, the revised regulations will allow landfill operators to take advantage of the recovered airspace and avoid the cost to install and subsequently remove a final cover system to access that airspace, the revised regulations allow the external slopes of a landfill cell to be constructed initially at a greater than 33 percent slope upon demonstration by the owner or operator of the stability of that slope, as long as slopes are not greater than 33 percent upon final closure of the landfill. In addition, the revised regulations allow up to five years after a landfill cell has reached final grade before construction of the final cover system is required. These changes are expected to greatly increase the opportunity for the owner or operator of a landfill to use the full airspace of a given landfill cell. This added airspace will allow for a longer lifespan of the landfill and increased efficiency of existing landfill airspace, reducing the need for new landfills in the future. The Department expects that the change will have a positive impact on the environment.

Subpart 363-7 Surface impoundments and storage tanks

Issue: Current regulations allow the use of surface impoundments for the management of landfill leachate but they are an outdated technology.

Discussion and Findings: Current regulations allow the use of surface impoundments for the management of landfill leachate. Though most surface impoundments appear to perform satisfactorily, it is difficult to identify leaks that may develop. Aboveground or on-ground storage tanks allow greater scrutiny of the integrity of the storage vessel. An alternative requiring replacement of an existing surface impoundment before the end of its service life was considered but rejected because the associated costs were high in relation to the expected environmental benefit. The revised regulations require aboveground or on-ground leachate storage tanks to be used at any new landfills or subsequent development at existing landfills. Existing surface impoundments may continue to be used. The elimination of surface impoundments for the storage of landfill leachate will reduce the potential for groundwater impacts from leaking storage impoundments. The Department expects that the change will expectedly have a positive impact on the environment.

Subpart 363-7 Limits on alternative operating cover

Issue: Thresholds for alternative operating cover material acceptance need to be established in regulation. The current practice is inconsistent across the state and has led to instances where exorbitantly high volumes of waste was received as alternative operating cover instead of waste.

Discussion and Findings: Cover material is required to be applied to the working face of a landfill cell at the end of each working day to minimize odors, vector impacts, fire potential, and blowing litter. Current regulations allow waste materials such as petroleum-contaminated soil, municipal waste combustor ash, automobile shredder residue or C&D debris processing residues to be used as alternative operating cover. Although landfill owners or operators often charge tipping fees for acceptance of these materials, they have not been counted against a landfill's daily or annual waste acceptance limit established through permit because they are used in place of raw materials such as virgin soil. The Department has observed the practice of owners or operators misusing the alternative operating cover provisions by accepting far greater amounts of waste than envisioned under the permit as 'alternative operating cover'. Therefore, the no action alternative is not feasible and was rejected. In order to minimize the misuse of alternative operating cover provisions by landfill operators that accept far greater amounts of waste than envisioned under their permit, the original proposed revisions required that alterative operating cover used in excess of 20 percent of the landfill's annual tonnage be counted toward the facility's annual tonnage established in their permit. Commenters argued that the amount of daily cover used was a facility specific decision, and the establishment of a 20 percent limit would reduce their ability to utilize alternative operating cover in place of raw material. Based on the comments received and reevaluation by the Department, the revised regulations were adjusted to remove the 20 percent limit and instead require that the amount of alternative operating cover be identified in permit application documents and that a separate annual tonnage limit for alternative operating cover be included in the landfill's permit. This adjustment will provide transparency to the public regarding the volumes of alternative operating cover utilized at landfills. Setting a general limit of 20 percent or greater was considered but were determined to be inappropriate and inconsistent with industry standards and practice. No adverse environmental impact is anticipated because the revision addresses the method used to account for cover used but does not alter the requirement that the cover control dust, etc.

Subpart 363-7 Reduction of landfill gas emissions

Issue: Under the current solid waste regulations, landfill gas, which contains significant percentages of methane, can be passively emitted from landfills without treatment. The Department's Division of Air Resources' regulations limit gas emissions from landfills, but are not applicable to the smaller MSW landfills in the state. A Department Commissioner's Policy requires reduction of greenhouse gas emissions, including methane, by integrating climate change mitigation into all program areas. Currently almost all active MSW landfills conduct active collection and destruction of landfill gas, and some market carbon offset credits and renewable energy credits associated with that activity.

Discussion and Findings: The generation of odors is inherent in solid waste disposal and landfill management. Current solid waste management facility regulations require odors from landfills to be controlled but do not specify any specific mechanism to accomplish that control. Active collection and destruction of landfill gas is no longer considered cutting edge, but instead is standard practice for a modern landfill. The no action alternative was considered, but rejected because it would fail to update the regulations to address technological advances and would fail to address the Commissioner's policy to decrease greenhouse gases. The proposed revisions initially required active collection and destruction of landfill gas for all new MSW landfills and for subsequent development at existing MSW landfills. Commenters argued that setting this requirement would remove their ability to market carbon offset and renewable energy credits while not significantly decreasing the amount of greenhouse gases emitted. Based on these comments and further research into the carbon offset credits and renewable energy credits market, the proposed revisions were adjusted to remove the proposed requirement. In its place, the proposed revisions require that horizontal collection systems be installed in the landfill waste mass at regular intervals to increase efficiency of gas removal. In addition, as discussed above, a new greenhouse gas reductions plan is required as part of the landfill's permit application. The new requirement for horizontal collection systems will increase the efficiency of gas removal from the landfill, which will likely decrease both greenhouse gas emissions and nuisance odors. The proposed revisions allow flexibility in the way landfills reduce their greenhouse gas emissions, in that landfill may choose methods other than or in addition to landfill gas collection and destruction.

Subpart 363-9 Closure Activities

Issue: Under the current regulations, landfills are required to conduct post-closure care monitoring and maintenance after landfill closure, including leachate collection and treatment, gas monitoring, and groundwater monitoring for a minimum of 30 years, until the landfill is no longer capable of adversely impacting the environment. Some landfill owners have misinterpreted this requirement to mean that the post-closure period ends 30 years from the date of closure.

Discussion and Findings: The current regulations include post-closure care monitoring and maintenance requirements for a minimum of 30 years. However, there is a common misinterpretation expressed by landfill owners that the minimum requirement of 30 years is a finite time period as opposed to a potentially continuing obligation based on the conditions of

and at the landfill. The no action alternative was considered but rejected as it would not address the common misinterpretation of the minimum 30-year requirement and the fact that large landfills will routinely need to be maintained for a period of time beyond 30 years post facility closure. To clarify the current intent and practice, the revised regulations have been updated to include new language which clarifies the responsibilities of landfill owners after landfill closure by introducing the concept of landfill custodial care. Under the revised regulations, post-closure care activities including leachate collection and treatment; landfill cover inspection, maintenance and repair; and regular landfill gas, groundwater, and surface water monitoring must be conducted until the owner or operator can demonstrate to the Department that the landfill's threat to public health or the environment has been reduced to a level where environmental monitoring and maintenance can be reduced. At that point, custodial care activities including: landfill cap and vegetative cover maintenance; sampling of groundwater, surface water, and leachate at least every five years; maintenance of landfill gas venting system; and periodic inspections must commence and continue while waste remains on-site. In keeping with these requirements, the facility manual for a landfill will include a requirement for a custodial care plan. Throughout both the post-closure and custodial care periods, the owner or operator must maintain financial assurance to ensure that post-closure and custodial care activities will continue. The proposal will ensure that landfills will not become a threat to public health or the environment during post-closure and custodial care. The Department expects that the change will have a positive impact on the environment.

F. Part 364 Waste Transporters

Issue: The Part 364 Waste Transporter regulations govern the transportation of regulated waste including industrial-commercial waste and other select waste streams. The Waste Transporter regulations have not been comprehensively revised in over 25 years and revision will help clarify what wastes require regulation under Part 364. Further, *Beyond Waste* recommends an expansion of the waste transporter program to place specific requirements on transporters of construction and demolition (C&D) debris and fill material. Concerns have been expressed about the limited potential impact from small loads of solid waste requiring a wats transporter permit (which is 500 pounds in the current Part 364 regulations) as well as significant concerns about the need to expand the types of materials permitted. There have been calls for the need to specifically track certain waste materials such as C&D debris, fill material that have not previously been permitted or tracked under the current Part 364.

Discussion and Findings: The types of wastes regulated by the transporter regulations are specified in the ECL. The regulated waste includes all industrial and commercial waste as well as other waste including regulated medical waste, waste tires, sludges, septage, and raw sewage. They do not however include residential waste. There are regulatory fees involved with obtaining a permit. There are currently no registration provisions in the existing Part 364 regulations. An annual report from each permitted transporter is required in the ECL. The industrial-commercial waste category is quite broad. The current regulations include a number of exemptions for waste categories. Many of these currently exempt waste streams such as C&D debris and fill material have become quite problematic due to high incidence of illegal disposal.

Municipalities across the state have routinely called upon the state to assist with providing data regarding quantities of commercial waste and recyclables collected and transported to assist them with their solid waste management and planning responsibilities however, much of that material has been covered under existing exemptions from waste transporter permitting. The alternatives evaluated were extensive. The no action alternative of leaving the regulatory requirements the same was rejected outright. There have been nearly universal cries for adjustment in the waste transporter program for well over a decade to address various issues including permitting requirements, fees, the renewal process, insurance requirements, the type of materials either required to or not required to be transported under a permit, and the minimum quantity of material requiring a permit. The alternatives evaluated related to the entire system and process including the quantities of regulated waste that should qualify for exemption, registration, or permit. Each of these components were evaluated and decisions made with each beginning with the base case alternative of no change or no action. The waste transporter program is a vital link and cross-check on all phases and waste streams from the industrial and commercial sectors, sectors most municipalities have very little understanding of and control over.

A major issue considered was the minimum amount transported per load requiring a permit. The alternative of retaining the small load exemption at 500 pounds was evaluated but rejected because up to 2,000 pounds can be carried in a standard pickup truck and that quantity of solid waste generally poses limited potential concern. For some waste, such as C&D debris, an evaluation of the appropriate mechanism for regulation led to the development of registration criteria in Part 364. Because a permit and associated fees are too burdensome for these waste streams, registration provisions have been added to Part 364. The applicability of registration provisions were evaluated for each waste stream and it was generally determined that for most materials that were previously exempt, that it was appropriate to introduce them into the program through the registration process which does not require a fee or special insurance requirements. The material types ultimately determined should be managed through registration provisions include limited amounts of RMW and other infectious wastes, household hazardous waste, more than 2,000 pounds of commercial solid waste, and more than 10 cubic yards of C&D debris and certain fill material depending on the type and the location where generated in the state. After careful evaluation of the waste streams, it was determined that there is a need to track certain waste materials that have not previously been permitted or tracked under Part 364. To help ensure proper management and prevent illegal disposal, Part 364 has also been enhanced to require tracking of RMW and other infectious wastes, C&D debris and certain fill material, and non-exempt drilling and production waste.

After extensive evaluation of the various components the following is a summary of the basic changes in the revised regulations: The exemptions for small loads will be increased from 500 pounds to 2,000 pounds in the revised regulations. For the first time, Part 364 will include requirements for registration in addition to permitting requirements. The registration criteria will apply to the self-transport of regulated medical waste (RMW) in quantities less than 50 pounds per month; the transport of less than 50 pounds of source-separated household hazardous waste; the transport of commercial solid waste in quantities greater than 2,000 pounds; the transport of C&D debris, which includes general, restricted-use, limited-use and contaminated fill material, in quantities greater than 10 cubic yards; and the transport of sharps from a household medical waste collection facility. For commercial solid waste and C&D debris, this will be the first time

the transport of these waste streams will be subject to Part 364. The revisions to Part 364 will also include the requirement for waste tracking documentation for RMW, other infectious wastes, non-exempt drilling and production waste, and restricted-use, limited-use and contaminated fill material generated statewide, as well as for all those wastes and C&D debris, including general fill material, generated within New York City. In addition, the RMW generator standards have been removed from this Part in the revised regulations and are now incorporated in Part 365 Regulated Medical Waste and Other Infectious Waste.

The Department expects this array of changes to have a significant positive impact on the environment. The Departments review of public comments did not identify any issues that will create significant adversity. The evaluation and rulemaking process undertaken by the Department with respect to this Part afforded the Department the opportunity to address potential hurdles and areas of concern creatively in an attempt to balance the need for change and the implications of change with the environmental benefits.

G. Part 365 Regulated Medical Waste and Other Infectious Waste

Subpart 365-1 RMW Generators

Issue: There are approximately 36,000 generators of RMW in New York State that collectively produce 250,000 tons of RMW each year. Generators include healthcare facilities such as nursing homes, hospitals, and clinical laboratories, blood establishments (those that collect, manufacture, store, or process blood and blood products), colleges and universities, veterinarian and dental offices, funeral homes, research laboratories, and pharmaceutical and biotechnology facilities. In accordance with state laws and regulations, the New York State Department of Health (DOH) and the Department jointly administer New York State's RMW Program. In accordance with Parts 360 and 364, the Department has oversight authority for: all storage, treatment and destruction processes located at facilities not under DOH jurisdiction. Additionally, under the current regulations in Part 360, the treatment and management criteria apply only to RMW, as defined by statute. There are other waste streams (e.g., bioterrorism waste, etc.) that pose similar concerns due to biological contamination. The regulations also need to be updated to reflect changes in federal and state regulations.

Discussion and Findings: Under the current regulations in Part 360, the treatment and management criteria apply only to RMW, as defined by statute. There are other waste streams (e.g., bioterrorism waste, etc.) that pose similar concerns due to biological contamination. The term "other infectious wastes" has been developed to clarify that all wastes must be appropriately managed, not just RMW. The no action alternative was rejected as the existing regulations are not reflective of the current technology, industry standards and best management practices as well as updates to both federal and state regulations. The revised regulations update and enhance the existing requirements in the form of a single set of regulations titled "Regulated Medical Waste and Other Infectious Wastes". New definitions and exclusions have been added to

identify, classify and enhance an understanding of the waste stream based on the potential risk to public health or the environment as well as new RMW treatment technologies and associated treatment standards. Requirements and management procedures for on-site storage and use of both primary and secondary containers have been updated to ensure that RMW or RMW mixed with or containing hazardous waste, pharmaceutical waste, and radioisotopes resulting from medical procedures are separated and accurately labeled. The revisions underscore the generator's responsibility to document standard operating procedures for management of RMW or other infectious wastes generated and treated on-site or transported for off-site treatment. Limitations are specified for waste management activities involving segregation of wastes that require incineration from those that are suitable for treatment and those that can be landfilled. The revised regulations also rescind the requirement for submission of an annual report to the Department describing the quantity of RMW produced by each generator. These revisions provide a comprehensive framework for the proper management of these biological wastes. The Department expects that the change will have a positive impact on the environment. The Department carefully reviewed all public comments received during the two comment periods and these comments did not reveal any adverse impacts.

Subpart 365-2 RMW Treatment, Storage, and Transfer Facilities

Issue: Since 1995, RMW generators and solid waste management facility installations have relied on regulation, and supplemental guidance documents issued by the Department and DOH to inform affected facilities as to the Department's interpretation of changes brought about by Chapter 438 of the Laws of 1993 which amended both the Public Health Law (PHL) and ECL to revise definitions for RMW, standards for infectious agents and waste treatment, and waste container labeling requirements. The regulations need to be revised to incorporate these amendments.

Discussion and Findings: Revisions are necessary to update the technical standards that apply to the treatment and management of RMW. These updates are needed for consistency with DOH standards and current practices. The no action alternative was rejected as the existing regulations are not reflective of the current technology, industry standards and best management practices as well as updates to both federal and state regulations. Small quantity generators of less than 220 pounds per month, radiopharmacies which are currently required to have a Part 360 permit, and on-site treatment facilities of less than 50 pounds per month employing single use container treatment systems will be required to have a registration rather than a permit. Requirements for commercial facility installations include waste pre-acceptance procedures that include waste audits, quality assurance of treatment efficacy and emissions monitoring as necessary. The revised regulations allow for residence time, temperature or pressure parameters beyond the parameters codified in current regulations, provided the user facility demonstrates to the Department the effectiveness of treatment. The revised regulations further clarify that time/temperature indicators must be used in treatment devices at all times and requires the use of operation and treatment logs for each treatment device. The revised regulations also eliminate the requirement for submission of quarterly reports for permitted facilities and instead requires only an annual report. The revised regulations will assist regulated entities who manage RMW by

incorporating requirements of law and guidance into the regulations. The Department expects that the change will have a positive impact on the environment.

Subpart 365-3 Other Infectious Wastes

Issue: Incidents of bioterrorism in New York City and other locations in the fall of 2001 involving preparations of Bacillus anthracis mailed to public and private institutions and an accidental release of the agent in 2006 required extensive building decontamination at significant costs. Decisions had to be made about which sites required cleanup, what method to use, how to determine the effectiveness of the cleanup and how to handle, store, treat and dispose of tons of decontamination debris. In addition, the concerns associated with foreign animal disease outbreaks such as Foot and Mouth Disease that may involve numerous animal mortalities, contaminated food supply incidents and the 2014 Ebola incident in New York City have made it clear that available knowledge and current regulations would make it difficult to process contaminated materials within a reasonable period, address the social aspect of decontamination, and satisfy stakeholder and waste disposal concerns. Current Parts 360 and 364 requirements do not address these waste streams effectively.

Discussion and Findings: The Department determined that the alternative of continuing to handle incidents on a case-by-case basis was not prudent. During an incident, having criteria in place concerning the proper handling and management of the waste is critical to environmental protection and returning the incident location to safe conditions as rapidly as possible. The no action alternative was rejected as it would continue to leave many infectious waste outside of the regulatory framework. The revised regulations address waste generated from emerging pathogens and the protection of public health and the environment from events involving the potential release of pathogens associated with natural disasters, foreign animal diseases, pandemics or bioterrorism. The revised regulations set requirements for handling and treating infectious waste and provide flexible standards on a case-by-case basis to streamline the waste storage, treatment, transport and disposal process. The addition of requirements for the management of other infectious wastes will ensure that any waste containing infectious agents will be properly managed and disposed. Improper management of infectious waste can lead to public health concerns due to disease transmission. The Department expects that the change will have a positive impact on the environment.

H. Part 366 Local Sold Waste Management Planning

Issue: LSWMP requirements are currently found in Subpart 15 of Part 360, and were promulgated in accordance with sections 27-0107 and 27-0109 of the ECL. Much of current Subpart 360-15, the first eight of twelve sections, addresses the former planning grant program which has long been concluded and is out-of-date. The plan contents section is also dated and currently incorporates by reference the current CRA requirements of 360-1.9(f). This cross-reference has led to confusion on the part of planning units as to the requirements for formatting. The Department's direction to planning units has been to incorporate the components of the CRA in the base LSWMP as opposed to developing a stand-alone CRA document. Additionally, public involvement in the local planning process has been implemented inconsistently across the planning units due to the limited discussion in the current regulations.

Discussion and Findings: Leaving the current regulations in place with only the requisite reference adjustments was considered but rejected due to the outdated nature of the current regulations and the confusing reporting requirements. Concerns expressed by municipalities relating to the complexity of developing LSWMPs led the department to take an approach targeted at streamlining the process where possible. The possibility of eliminating the CRA as a stand-alone document from the regulations was considered, thus requiring all municipalities to develop LSWMPs; however, it was decided to leave a separate CRA portion in Section 360.11 for those municipalities who choose not to develop an LSWMP or are unable to act as a planning unit. A new Part 366 will replace and revise the requirements for preparing and implementing Local Solid Waste Management Plans (LSWMPs). ECL 27-0107 lays out the general requirements for LSWMPs, and directs the department to promulgate rules and regulations for implementation of section 27-0107. In developing Part 366, the department made a concerted effort to provide a more comprehensive, unified and logical, yet simplified format for LSWMP development and implementation. An example of this is the direct incorporation of the CRA requirements into all aspects and sections of the LSWMP allowing for easier preparation, understanding and implementation while continuing to satisfy all basic elements contained in the CRA. Part 366 also clarifies the process in which the public is to be involved in the preparation of an LSWMP to ensure consistent application across the state. Part 366 will also replace the current requirements which include updates, modifications and biennial compliance reports, with a biennial update. These updates will allow for evaluation and adjustment of the LSWMP, taking into account changes that will occur on a routine basis following initial approval and also allow for an optional two-year planning period extension as part of the biennial update. During the initial public comment period, significant comments were received requesting clarification of the partnership between local planning units and the State in the development of LSWMPs as well as requesting specific time frames for the various stages of Department review and approval of LSWMPs and LSWMP biennial updates. The revised regulations include numerous references to municipalities being encouraged to use information available from and developed by the Department as background and supporting documentation in developing their individual LSWMPs. The revised regulations also established the requested review time frames for the Department of the various draft stages of LSWMPs to ensure timely review and implementation. Overall, the streamlining and reorganization of the LSWMP development and approval process is intended to make the preparation and implementation of LSWMPs less complicated for municipalities, yet at the same time assist them in reducing the amount of waste they are managing through thermal treatment or disposal. These changes are expected to make it easier for municipalities to understand the LSWMP requirements and develop and implement compliant and effective LSWMPs and no adverse environmental impacts are anticipated. This change is expected to have a positive impact on the environment.

I. Part 369 State Assistance Projects

Issue: Current Part 369 sets forth the application, review, and contracting procedures for the state assistance grant programs for municipal waste reduction and recycling; current section 373-4.6 sets forth the application, review, and contracting procedures for the state assistance grant programs for municipal household hazardous waste collection and disposal; and current Subpart 360-9 sets forth the application, review, and contracting procedures for the state assistance grant

programs for municipal landfill closure, with a program policy containing the guidance for the municipal landfill gas management program. The regulations and guidance documents for these programs are currently in disjointed locations with many application and contracting provisions out-of-date, making them difficult for municipalities to easily locate, understand and use.

Discussion and Findings: Relocating all of the solid waste management-related state assistance requirements in a separate Subpart will make their accessibility and use much easier for municipalities. Additionally, over the years of implementation of these programs, a number of changes have occurred with respect to the basic administration of state assistance programs and contracts in the State that need to be reflected in the regulations. The need for funding of these programs by municipalities has continued to grow over the past 20 years and the available annual resources have decreased necessitating revision in the administration of the various programs in order to maximize available resources to the largest number of municipalities and priority project areas on an annual basis. Additionally, a change to the landfill closure program was needed to recognize the adjustment in landfill management regulation in 1993 requiring landfills that stopped receiving waste prior to April 9, 1997 have established financial assurance mechanisms in place to address all closure and post-closure costs. The Department considered leaving the waste reduction and recycling capital projects and the education and coordination projects grouped together in one application waiting list pool as is currently done but rejected that alternative in favor of dividing those programs to address municipalities' requests to develop a structure that could more routinely and readily fund routine recurring municipal costs such as education, coordination and household hazardous waste collection. The Department considered the elimination of funding for landfill gas projects for any landfill operating after April 9, 1997 under the assumption that any landfill operating beyond that date already had an active gas collection system, or had the means through tip fees received to install such a system if needed. That alternative was rejected to ensure that all municipalities that still operate landfills had the opportunity to apply for assistance to install landfill gas management systems on their landfill regardless of their funding and planning circumstances. While the changes primarily relate to the implementation of the program and application periods with only slight adjustments in the eligibility criteria for most programs, the changes made should have a significant impact on providing timely funds to municipalities for waste reduction and recycling education and coordination projects as well as more certainly of funding. The additional opportunity for the targeted priority area should also provide a positive impact on advancing new and/or highly critical program components. The Department expects these changes to ultimately have a positive impact on the environment.

IX. Other Impacts and Social, Economic and Other Essential Considerations

The proper management of solid waste in New York State has many values and important socioeconomic components as history has taught the Department that the improper disposal of solid waste can have significant, negative environmental, social, and economic consequences. Every New Yorker is highly affected by proper solid waste management. Adequate services and infrastructure must be in place to handle the solid waste generated. The revised regulations provide the template for the siting, construction, and operation of those facilities that will provide this critical societal need. If facilities do not exist to properly manage solid waste, societal

impacts such as health and well-being are negatively affected. This was evident decades ago when waste was disposed in common areas such as city streets, in water bodies and in wetlands.

Solid waste management facilities, including new recycling infrastructure, increase employment opportunities, leading to greater sustainable income and lifestyles in communities. As recycling of waste components increases, new business and employment opportunities arise. For example, the expected increase in the recycling of food scraps will result in multiple new facilities and employment opportunities. On a per-ton basis, for every job required to operate a landfill or municipal waste combustor, ten jobs can be created to process recyclable materials and prepare them for market. In the case of organics, four jobs can be created in composting those materials for every one job in disposal. Once recycled materials are used in manufacturing, the job ratio becomes even greater, and the quality and pay scales for those jobs is higher.

Overall, the revised regulations were developed to protect the environment through the protection of groundwater and other environmental resources through standards for the management of these wastes. Environmental protection has significant societal benefits by protecting the value of land, wildlife, and public health.

X. Findings Related to Coastal Zone Management

The action is statewide and as a consequence only incidentally affects the State's coastal policies. The discussion in the FGEIS evaluates eight coastal policies that might be affected by the new regulations. The analysis indicates that there will be no adverse effect on the coastal policies. The Department's review of public comments does not change this conclusion.

XI. Conclusions

The revisions of the solid waste regulations have met the statutory mandate to prevent or reduce water pollution, air pollution, noise pollution, obnoxious odors, unsightly conditions, and other conditions inimical to the public health, safety, and welfare while also meeting SEQR's mandate to avoid or mitigate significant, adverse environmental impacts to the maximum extent practicable while balancing social, economic and other essential considerations. The Department has given due regard to the economic and technological feasibility of compliance and appropriately balanced those needs with actions that avoids or minimizes adverse environmental impacts to the maximum extent practicable.

The revised regulations were subject to public review and comment in 2016 and 2017. In developing the revisions to the Part 360, Part 364 and Part 369 regulations, the Department evaluated and identified solid waste management facilities, activities, and waste streams that are not clearly addressed in the current regulations. These include navigational dredged materials, oil and gas brine, excavated soil and other materials defined in the revisions as fill material, end-of-life vehicle dismantlers, mulch, used cooking oil, and infectious wastes. The revisions have also relaxed or eliminated requirements that have proven to be burdensome to the regulated community and have provided little or no incremental benefit of environmental protection, such as landfill siting study requirements, certain outdated landfill construction quality

assurance/construction quality control testing requirements, and the extent of groundwater monitoring at landfills. For other facilities, the applicable technical criteria have been updated to current standards. These efforts have led to a regulatory package that comprehensively addresses all aspects of solid waste management in the State of New York and will serve the needs of the citizens of the State.

XII. Certification Pursuant to 6 NYCRR §617.11

Having considered the 2016 DGEIS and the 2017 Revised Draft GEIS, and having considered the goals and objectives of *Beyond Waste*, and having considered the preceding the preceding facts and conclusions relied upon to meet the requirements of 6 NYCRR 617.9, the Department certifies that:

1. The requirements of Article 8 of the ECL, as implemented by 6 NYCRR Part 617, have been met;

2. It has considered the relevant environmental impacts, facts and conclusions disclosed in the aforesaid prior environmental impact statements;

3. It has weighed and balanced the relevant environmental impacts with social, economic and other essential considerations;

4. Consistent with the social, economic and other essential considerations from among reasonable alternatives considered, the action approved (adoption of revised regulations) is one which minimizes or avoids adverse environmental effects to the maximum extent practicable, including the significant adverse environmental effects disclosed in the Final GEIS and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision (revised regulations) those mitigation measures that were identified as practicable; and

5. Consistent with the applicable policies of Article 42 of the Executive Law as implemented by 19 NYCRR 600.5, the action is consistent with applicable policies set forth in 19 NYCRR 600.5.

_____

Basil Seggos, Commissioner

Dated: September 5, 2017