Supplemental Assessment of Public Comment

for

Public Comments Received

on the

NEW YORK STATE

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

COMPREHENSIVE REVISIONS TO SOLID WASTE REGULATIONS

FOUND IN 6 NYCRR PART 360, PART 364, PART 369, AND ASSOCIATED REGULATIONS

Addressing the Revised Draft Regulations Issued in July 2017

August 2017

Table of Contents

INTRODUCTION

On June 21, 2017, the Department of Environmental Conservation published notice of a revised rulemaking in the State Register and the Environmental Notice Bulletin related to the Department's ongoing efforts to amend the Department's existing solid waste management regulations. The revised rulemaking was issued to receive public comment on substantial revisions made to the proposed rules since the expiration of the last public comment on September 13, 2016. In response to the June 21, 2017 public comment period, the Department received ninety written comments from individuals, businesses, municipalities, associations and non-governmental organizations. The Department also received several form letters, which raised the same or similar concern. One public hearing was held on July 13, 2017 in Albany, and during the comment period Department staff met with members of the regulated community and the interested public to receive feedback on the revised rules.

Like the first Assessment of Public Comment issued by the Department for the revised rules, this Supplemental Assessment of Public Comment responds to the comments received during the most recent public comment period, organized by citation. Similar comments are grouped together and, when applicable, summarized to reflect that the same comment was raised by more than one commenter.

Although some comments were received on each of the proposed Parts included in the revised rules, most comments received during the last comment period were focused on Part 360. Specifically, public comment was focused on the pre-determined beneficial use determination (BUD) and fill material sections proposed at Section 360.12 & 360.13. Regarding the proposed fill material pre-determined BUD, many commenters objected to the proposed rules on the grounds that characterization of soils that would be reused off-site would be costly and that stockpiling of fill while testing occurs is impractical. According to public comment, this was particularly a concern in urban areas where lack of space, time and public safety concerns require the efficient movement of excess materials from construction sites. There was also significant confusion concerning who would be required to characterize fill in order to utilize the beneficial use determination available under Section 360.13. The Department made changes in the final rules to 360.13 to clarify that only fill material that travels from the excavation site directly to the end use site would be subject to the section. Presently, the majority of fill material currently generated in New York City is sent to processing facilities. Under the final regulations, fill material sent to processing facilities in New York City must be sampled by the processing facility, not the generator.

Many commenters also raised concerns about the proposed rules for landfills, contained in Part 363. Regarding landfills, several comments sought clarification on Subparts 363-6 and 363-7, with respect to operating requirements for landfills, leachate testing parameters and the radiation detector provisions. In addition to specific concerns about the language or structure of the revised rules, many commenters also

took issue with the amount of time available to comment and with the amount of time available to existing facilities to come into compliance with the final rules.

In response to public comment, the Department made several clarifying revisions. A full list of sections, subdivisions and paragraphs adjusted since the public comment period is attached as an Appendix to this Supplemental Assessment of Public Comment. In many cases, the changes made were to correct typographical errors, adjust cross-references to other citations and to re-order existing language to assist in readability. In other cases, the proposed rules were adjusted to clarify the Department's original intent, because members of the regulated community presented genuine and verifiable questions about the feasibility of achieving compliance with the revised rules. For instance, the Department clarified proposed 360.13 to make clear that fill material sent to a facility regulated pursuant to proposed Part 361 need not be tested to characterize the fill. The purpose of proposed 360.13 is to provide a mechanism to allow direct reuse of fill from the site of excavation to an end use location. To the extent that readers believed that revised 360.13 required municipalities, utilities and their contractors to test every load of fill taken off a construction site, the final rules have been clarified to remove that implication.

Commenters also believed that since the volume threshold for testing of off-site material generated from within the boundaries of New York City was 10 cubic yards, this meant that every 10 cubic yards needed to be tested. This was not the case in the revised rules and is not the case in the final rules. Once the 10 cubic yard threshold is reached, representative samples can be taken of the entire volume of fill material proposed to be direct hauled to an end use location. The final rules also make clear that any fill material excavated outside the City of New York that shows no evidence of physical or chemical contamination, and otherwise does not fall into the categories of fill material in 360.13(d), is, in regulatory terms, presumptively clean soil and can be reused off site without restriction.

In response to comments received on the transition rules, the Department also provided some relief from the revised rules by extending the time for facilities subject to Subpart 361-5 to comply with new requirements. The final rules also allow those holding an existing BUD to submit a request for renewal within 180 days of the effective date of the rules. The renewal request would then continue the existing BUD in effect until the Department makes an individual decision on each BUD. This achieves the Department's regulatory goal of removing inactive or unused BUDs from the list of currently approved uses without creating an undue hardship caused by an automatic revocation on those persons who currently use BUD material.

There were also many instances where commenters suggested alternatives to the language provided in the revised rules. In many cases where a public comment requested stricter regulatory controls, the concerns were not accompanied by substantive evidence that the stricter regulations were required to address an actual environmental impact. For instance, several commenters called for an outright ban on waste coming from other states and requested bans from certain wastes from being

used pursuant to a beneficial use determination. Objections were often made to waste produced from an entire industrial sector, namely the oil and gas production industry, and many commenters called for changes to the proposed radiation detector requirements in order to prevent alleged illegal disposal of oil and gas production wastes in New York landfills. Public comments also covered many topics that were either not relevant to the proposed rules, were outside the scope of the Part 360 series or were outside the jurisdiction of the Department altogether.

Conversely, many comments from the regulated community cited concerns that the revised rules were too onerous, and would unnecessarily increase the costs to, for example, prepare a solid waste management plan, obtain a permit or to reuse excavated fill material off site. Other comments from the regulated community raised concerns about financial assurance, and the limitations on the number of registered facilities that could be located at the same site. Each of the concerns raised is addressed in this supplemental response.

Comments were also solicited on the revised draft generic environmental impact statement (DGEIS). Only a few public comments on the revised DGEIS were received by the Department. One comment questioned whether the DGEIS sufficiently addressed the environmental concerns related to the beneficial use determination program, including impacts in sensitive areas such as watersheds from the use of fill material. Concerns over impacts on communities of disproportionate impact from the testing requirements associated with the fill material criteria were also raised by one commenter. Other commenters expressed concern that the BUD criteria would inhibit the recycling of asphalt millings, metal, paper, concrete, and other materials. Lastly, a concern was raised that the State Plan, that was referenced in the DEIS, does not address emerging contaminants such as perfluorooctanoic acid.

In response to the concern that the Department did not consider the potential environmental impacts from the proposed beneficial use determination rules, the record created during the rulemaking process speaks to the extensive efforts the Department made to prevent improper reuse of fill material. The final rules would require the tracking of construction and demolition debris under the waste transporter program and testing requirements for direct off-site beneficial use of fill material would be new additions the Department's regulatory program. In addition, a refinement of what fill material would be considered presumptively clean in proposed 360.12 replaces a clean soil pre-determined BUD that was difficult to implement because it left decisions about what constituted uncontaminated soil almost entirely up to the generator. Contrary to public comment, the proposed final rules also address emerging contaminants, in that the list of leachate testing parameters includes perfluorooctanoic acid. In all, the final rules appropriately respond to the concerns about improper reuse of fill regardless of where the end use is located. Throughout the rulemaking process, as evidenced by the record created throughout the rulemaking process, the Department considered the potential for adverse environmental impacts, as required by SEQRA.

The proposed action is the re-promulgation of the Department existing solid waste management regulations reorganized and reformatted to provide the regulated community and the Department with a set of rules that are easier to implement. In addition to the reorganization of the existing program, the Department made several enhancements to the program that would reduce the potential for environmental impacts and thereby have a positive impact on the environment. Throughout the rulemaking process, the Department had two public comment periods, held multiple hearings and met individually with numerous stakeholders. Department staff listened to the concerns expressed and made revisions to the rules when it was possible to both provide the flexibility needed by facilities and still retain an appropriate level of regulatory oversight. The Department also listened to concerns from the regulated community that overly strict controls, such as outright bans on the flow of material and limited re-use options, would actually lead to either more illegal disposal or would lead to more reusable soils being sent to landfills. In that regard, the final regulations have added language to clarify that the majority of fill material, which is sent to regulated processing facilities, is not subject to the testing requirements in proposed Section 360.13. The proposed regulations simply provide a means for fill material to be reused in a manner appropriate with the receiving environment and end use. The regulations for fill material therefore do not have the potential for a significant adverse environmental impact.

REVISED DGEIS

Comment: The discussion of reuse of contaminated fill in the Revised DGEIS is insufficient. It fails to comply with SEQRA, which requires DEC to take a "hard look" at the relevant areas of concern. Moreover, it does not consider reasonable alternatives to the BUD program, such as excluding the New York City drinking water watersheds or limiting the program to already contaminated areas. Finally, DEC has not identified mitigation measures to minimize impacts to the maximum extent practicable, such as best management practices for erosion control and prevention of migration of contaminants.

Response: The commenter is correct that SEQRA requires a hard look at relevant areas of concern and the Department has fully met its SEQRA obligations. Throughout the rulemaking process, the Department had two public comment periods, held multiple hearings and met individually with numerous stakeholders, including the commenter. Evidence of the hard look taken by Department staff can be found, not only in the draft EIS, but the various iterations of the express terms, the supporting documents and in the two assessments of public comment. Among the alternatives evaluated by the Department is the no action alternative. In the context of the fill provisions, the no action alternative is to leave the reuse of fill material largely unregulated. Under the current regulations, Part 360 provided a pre-determined beneficial use determination for clean soils and provides that fill uses in place of similar soils could be used without confirmatory sampling. With no confirmatory sampling available, judgements about the suitability of soil substitutes is left to the generator or the receiver.

Under the regulations proposed in June of 2016, the Department sought to regulate the use of historic fill. That alternative would have focused on the reuse of soils from urban areas and was limited to only addressing historic fill by allowing use on the site of generation under certain conditions and under building foundations and paved surfaces or where covered by two feet of soil. This proposal did not address the broader categories of fill materials throughout the State including urban areas. That alternative was rejected in place of the pre-determined BUD provided in the revised 360.13 because the current proposal more specifically proscribes how waste should be characterized and the ultimate types of reuse that are appropriate based on site-specific sampling. Compared to the existing regulations, the present proposal more comprehensively addresses the potential impacts posed by improper placement of fill material while at the same time provides the regulated community with a clear path to reuse of fill material from construction sites.

Furthermore, in response to public comment received on the revised proposal, the Department did consider excluding the New York City drinking watersheds from areas where certain fill can be used pursuant to a pre-determined BUD. However, considering how low the thresholds are for the three fill types, and the limitations on use for restricted and limited-use fill, these prohibitions would not be warranted. For example, if a generator wanted to reuse restricted fill, Table 2 in the revised 360.13 would restrict

its use to engineered systems such as subgrade in a transportation corridor. Since the associated impacts of road construction are not prohibited within the geographic boundaries of the NYC watershed, preventing the beneficial use of excavated soils coincident with construction of a transportation corridor would serve no environmental benefit. To be clear, the end uses proscribed in Table 2 provide a range of uses depending on the compatibility of tested material to its location of use and does not provide relief from any other federal, state or local regulation that may also restrict the location where fill material may be placed.

Comment: There are significant direct, indirect, and cumulative environmental impacts associated with the proposed revision to 360.13, but the Department's revised Draft Generic Environmental Impact Statement (DGEIS) one-page discussion of 360.13 does not identify or even address these real impacts. The revised DGEIS suggests that the provision will "protect neighboring areas, particularly in communities of disproportionate impact." The commenter believes that the existing practice of removing fill promptly from an excavation limits the impact of a construction project on "neighboring areas". The unintended consequences of the Department's proposal - the necessity to leave soil in place for up to two weeks -- would exacerbate those impacts on New York City's neighborhoods. The Company appreciates that one of the purposes of the proposed revisions to 360.13 was to eliminate "problem disposal sites, especially in Long Island and the Lower Hudson Valley." However, there are a significant number of "communities of disproportionate impact" in New York City that could be adversely impacted by the unintended consequences of the Department's proposed revisions and those impacts need to be balanced with the consideration of similar communities on Long Island and in the Lower Hudson Valley. At the very least, if the Department proceeds as planned, the DGEIS should be supplemented and re-issued for public comment to consider the previously unidentified environmental consequences, a reasonable range of alternatives, and required mitigation measures. However, the need for a supplemental DGEIS could be avoided if the proposed rulemaking were refined to take into account and accept existing utility fill characterization and management procedures that already safely manage contaminated soils without creating new adverse impacts associated with stockpiling soils for days or weeks on City streets.

Response: The final regulations have added language to clarify that the majority of fill material, which is sent to regulated processing facilities, is not required to follow the criteria in section 360.13. Given this clarification, the limited impact of the regulations is sufficiently addressed in the DGEIS. The Department also must disagree that 360.13, as revised, would have any direct, indirect and cumulative impacts. Compared to the no action alternative, the final regulations would include new mitigation measures on an activity that is already occurring; the stockpiling of material at construction sites and the reuse of fill material. In areas, like New York City, where stockpiling is impractical, it is typical for material to be taken to facilities regulated under Part 361. That practice would be unchanged with 360.13 in effect. In other places, it is typical to see stockpiles at construction sites and sampling can be built into the construction schedule. Therefore, the regulations would not cause a generator to hold onto fill material longer

than they do under the existing regulations. Further, even if the testing requirements cause a generator to hold onto material at the site of generation - -which is not required by the proposed regulations - - the benefit of conducting confirmatory sampling of the material outweighs the temporary nature of a construction activity. Finally, construction of houses, building and roads throughout the state would happen whether the Department's regulations were implemented or not. The proposed regulations simply provide a means for fill material to be reused in a manner appropriate with the receiving environment and end use. If the generator of fill wishes to send material to a regulated 361 facility instead of beneficial use, then the impacts suggested in the comment are avoidable altogether. The regulations for fill material therefore do not have the potential for a significant adverse environmental impact.

Comment: The proposed BUD does not enhance the recycling opportunities as asserted in the GEIS. It in fact, it reduces the potential reuse of asphalt millings and concrete by raising the bar of what qualifies.
The current BUD includes: "...recognizable, uncontaminated concrete and concrete products, asphalt pavement, brick, glass, soil and rock placed in commerce for service as a substitute for conventional aggregate" (current Part 360-1.15(b)(11)). The proposed BUD requires the product to meet a NYSDOT specification, which a good portion of millings and concrete from non-DOT sources will not meet.

Response: The final regulations have been clarified to recognize other governmental standards and uses for concrete and asphalt.

Comment: The revised draft GEIS for Part 360 still does not take a "hard look" at environmental concerns and alternatives, in particular missing the chilling effect of its proposal on reuse and recycling operations in New York State. This effect comes especially to industries which generate byproducts from the recycling of materials such as metal or paper – the beneficial use, versus forced disposal, of residues or byproducts from these recycling processes is vital to the economic viability of recycling.

Response: The Department supports the appropriate recycling of byproducts through BUDs, either pre-determined or case-specific. As outlined in the DGEIS, the BUD process for these byproducts is not significantly different than the current regulations.

Comment: The Department relies in the EIS on recommendations made in the State Solid Waste Management Plan but several emerging issues have arisen since its publication. The rules should also address emerging contaminants, such as perfluorooctanoic acid.

Response: Recent environmental issues were considered during the rulemaking process, including perfluorooctanoic acid, which is included in leachate monitoring parameters for landfills.

RESPONSIVENESS SUMMARY

Page 20
Comment: The reference to DOT on page 20 of the RS as it relates to 360.2(b)(63) and (64) is not clear. Should this be USDOT?

Response: The reference is NYSDOT.

Page 20
Comment: "The historic fill definition is no longer used in the regulation and has been replaced by the term "fill material….." Is "fill material" the same as "historic fill?" That is, does it include soil, rock from an excavation that is not located in a potential historic fill area?

Response: Fill material is defined in the regulations and goes beyond material that would be considered historic fill.

Page 90
Comment: Response says "The predetermined BUD is only intended to provide waste cessation for C&D debris products leaving a processing facility; these concerns can only be considered in context of relevant proposed terms in Part 361." This appears to be contradictory to the Response on Pg. 88 which says, "Subdivision 360.12(c) has been revised to allow for direct haul of materials meeting this pre-determined BUD." Additional clarification is needed here.

Response: These two statements are referring to two different items and are taken out of context from the comments from which they were responding. The first is referring to a question related to a BUD related to materials leaving a processing facility and the second statement is a generic reference to the general BUD subdivision identifying a revision that was made. These statements need to be read independently and in context.

Page 198
Comment: Response says threshold has been changed to 500 tons per day based on a monthly average. The revised regulations (361-5.2) state "weekly" average. Which is it?

Response: The 500 tons per day limit is based on a weekly average.

Pages 200, 204
Comment: Response to a comment about limiting storage of asphalt millings to 180 days says, "The 180 [day] storage limit has been removed from the revised proposal." Comment: Does this mean there is NO time limit for storage of asphalt millings (which appears to conflict with 361-5.2(a)(2)] or is it 365 days as specified in 360.12?

Response: The final regulations have been clarified for both Parts 360 and 361, to allow storage of asphalt millings up to 365 days.

Page 200
Comment: Response to a comment suggesting that mines with C&D Processing Registrations are exempt from storage time limits, pile size limits, etc. The response also goes on to state, "Part 360 requirements for solid waste management facilities are appropriate for facilities that are located at a mine and any overlap with an operator's mined land use or reclamation plan should be addressed during permit review. The operating requirements associated with solid waste management facilities would be implemented to restrict any environmental impacts." What specific "operating requirements associated with solid waste management facilities" is DEC referring to? This seems to imply a full Part 360 permit is required for mine sites, in which case many (if not all) mines will cease processing of RUCARBS and importing clean fill causing thousands of tons of these materials to be disposed of in landfills.

Response: The final regulations for C&D debris handling and recovery facilities are found in Subpart 361-5 and do not prohibit processing in mines. Whether the facility requires registration or permitting will depend on the type and quantity of material managed, as outlined in the regulations.

Page 213
Comment: Response to comment states that the BUD in 360.12 allows for RUCARBS to be used as reclamation backfill at mine sites. Comment: This is not explicitly made clear in 360.12. Specific language needs to be included regarding a BUD for mine reclamation using RUCARBS and clean fill.

Response: The final regulations specify that uncontaminated, recognizable concrete and other masonry products, brick, or rock can be used as aggregate if a recognized specification has been met. Asphalt is limited to road construction uses. Use of aggregate in a mine is not prohibited unless it is not allowed by the mining permit.

REGULATORY IMPACT STATEMENT

Page 19
Comment: The RIS says that the removal of the exclusion of case-specific BUDs from UPA and SEQR requirements (Parts 617, 622, 624) will give BUD holders due process when BUDs expire, but this is not true based on the scope and applicability of Parts 617, 622, and 624. In particular, Part 624 should apply also to renewals of existing BUDs.

Response: To clarify, the RIS does not indicate that due process will be available when case-specific BUDs expire. If a case-specific BUD expires without renewal, there is no further action required by the Department. What the RIS indicates is that beneficial use determinations are not exempt from review under the State Environmental Quality

Review Act and the Department's hearing regulations. This means that a proposed revocation, denial or the imposition of conditions of a BUD can be addressed in a hearing, if one in requested. In addition, there was some ambiguity in the existing regulatory program over whether SEQRA was applied to these determinations and the statement in the RIS was intended to eliminate that ambiguity. The comment indicates that Part 624 should apply to renewals. The applicability of Part 624 is not within the scope of this rulemaking, however, referrals for a hearing related to a permit, license or entitlement are generally governed by Part 624.

PART 360 GENERAL REQUIREMENTS

General Comments

Comment: The revised "tracked changes" versions of the proposed regulations is difficult to analyze in the shortened 30-day timeframe offered for review and comment. In some cases, sections which were completely rearranged registered as one change, with no way to determine whether the content of the sections changed significantly without thorough review of the documents. Given the number of sections that were affected by this, the 30-day comment period is insufficient to perform a thorough review. In addition, there can be little confidence in the tracked changes, as many errors have been found. Many are minor typos, but some are significant. For instance, the entire section on the environmental monitoring plan is referenced incorrectly. The Part 363 table of contents lists the section as 363-4.7, a subsection of permit application requirements. However, within the text of this section, the environmental monitoring plan regulations are listed as item (f) under 363-4.6 Facility manual, and all items under item (f) are affected. Similarly, the site analytical plan and water quality analysis tables are included as items (g) and (h), respectively, under the Facility manual and it is not clear what references to use when citing sections for comments. The section on hydrogeologic investigations underwent a similar restructuring, with no way to determine changes made from the previous draft and very little time for a thorough review. Subpart 361-3 was similarly rearranged to clarify the regulations, but with no ability by interested parties to thoroughly review these sections in the given timeframe. Another example of this is Part 365, which appears to be completely rewritten.
The "tracked changes" document does not appear as any changes to be tracked, rather sections of this revamped Part are simply highlighted with no indication of the implications or whether the content has been significantly revised outside what is addressed directly in the comment response document. The comment response document simply states that the section has been "substantially revised."

Response: To ease with public review, the regulations were provided in both "track change" and in a copy with all changes included. Comments to the Department could be provided in any format. The typographical error noted has been adjusted in the final regulations.

Comment: The Department should explain the delay in submitting the revised rule for publication and should provide a document showing a comparison between the proposed rules and the existing regulations.

Response: The Department made every effort to inform the public about the proposed changes from the start of the rulemaking process in 2016. Since the proposed regulation was a complete repeal and replacement of the existing solid waste regulations, it was impractical to create a side by side comparison of the existing regulations and the proposed regulations. However, the Department did make available a track changed version of the revised regulations compared to the 2016 proposed regulations. As to the timing of the revised regulation, publication occurred as soon as possible and within the timeframes provided in the State Administrative Procedures Act.

Radiation Monitoring
Comment: It should be required that all acceptable manufactured equipment installed at DEC permitted solid waste facilities (not just landfills) be required to provide a minimum of 25pCi/g protection rating.

Response: The radiation equipment that will be used at all permitted facilities must be approved by the Department as part of the permit process.

Comment: We had previously commented and requested a cost/benefit/value analysis associated with the proposed revisions; however, our request has not been addressed. Consequences resulting from the implementation of these proposed revisions will impact the NYSDOT Capital Projects and highway maintenance operations, and it is anticipated to result in increases in project costs, overall. Please provide a cost/benefit/value analysis associated with the proposed revisions to the Part 360 regulations.

Response: All required supporting documentation has been provided with the rulemaking. Additional clarifications concerning the applicability of 360.13 have been provided as they apply to construction projects. These clarifications will clarify that less impact is anticipated based on interpretation of the draft language.

Comment: DEC should have a mechanism to provide assistance to private well users whose water quality is impacted by facilities performing solid waste activities (similar to DER's DER-24) and provide a funding source.

Response: A funding mechanism as described would be handled outside these regulatory revisions.

Comment: We urge the Department to ban the storage and processing of any type of solid waste at any sand mine within a sole source aquifer region. At a minimum, the DEC should prohibit this activity in sand mines located within a designated Special Groundwater Protection Area as defined by Article 55.

Response: All solid waste management facilities must be designed and operated in a manner that minimizes the potential for groundwater impacts regardless of location.

Comment: We recommend increased inspection requirements for sand mining facilities to ensure that they are not illegally operating as a composting or storage and/or processing facility for C&D debris, yard trimmings, or mulching. Ensuring that these illegal activities are not taking place is critical to protecting public health and the environment.

Response: The management of Department personnel is outside the scope of this rulemaking.

360.2 Definitions

Comment: The following definitions are in Part 360-2 but do not appear in sections relevant to RMW. Authorized collector – recommend deleting; Biological Drug – term only used under pharmaceutical waste definition and recommend moving it under that definition; Bone Shadow – recommend deleting; Infectious Substance – recommend incorporation into 365; Mixed or Dual Waste – recommend deleting; and Pathogenic Organism – recommend deleting.

Response: Authorized collector is used in section 360.14 concerning the collection of pharmaceuticals. Biological drug is used in the pharmaceutical definition and a separate definition is appropriate. The definition of bone shadow has been deleted since it is no longer used. Infectious Substance is used in the definition of toxin. The definition for Mixed or Dual Waste was deleted since it is no longer used. The definition of Pathogenic Organism applies to other subparts of Part 360 and must remain.

360.2(a)(3)(i)
Comment: In comments submitted on the prior draft rules, the commenter indicated that this definition was insufficient, in that it should permit commercially valuable reuse, regardless of whether that reuse was in the form of its original function. Numerous waste products, such as certain used solvents, can be reused in a manner that, despite not serving the same original function, would not require any additional processing. As currently drafted, the rules would require any reuse of materials for a purpose other than their original function to comply with either a predetermined or case-specific beneficial use determination, which substantially increases the costs associated with this reuse. For the purposes of encouraging reuse and limiting landfill disposal, it would be advantageous to eliminate the requirement that the intended reuse be exclusively for their original function.

Response: This exclusion, along with the numerous pre-determined beneficial use determinations outlined in section 360.12, provide an outlet for the recycling or reuse of materials that have been recognized as routinely used in the manner specified. Other

materials can be recycled through a case-specific BUD. The Department is developing new forms and other means to expedite the review of case-specific BUD petitions.

360.2(a)(3)(viii)
Comment: "Soil that has no known or suspected contaminants present due to human activity" should be reinstated in this provision, and thus, excluded from the definition of solid waste. By deleting this provision, the Department is significantly broadening the definition of solid waste in a manner that will adversely affect every excavation or earthwork operation in the state, no matter how small, and will require significant additional regulatory and compliance costs, with no significant benefit to human health and the environment. Suggesting that a material that by definition has no known or suspected contaminants, is of regulatory import, and therefore must be treated and handled as a solid waste, goes beyond the statutory mandate afforded to NYSDEC for regulation of solid wastes in New York. The revision should be struck, and the exclusion of such materials from the definition of solid waste should be reinstated.

Response: This provision was replaced by the criteria in section 360.13 that govern all types of soil use. Under the final regulations, soil that is excavated outside of New York City that has no known or suspected contamination would still be considered clean soil and does not need to be managed as solid waste. However, considering the pervasiveness of historic fill being excavated in New York City, soil may still qualify as general fill, but must be subjected to confirmatory testing to determine where such soil may be used off-site.

360.2(a)(136)
Comment: Due to New York State's definition of hazardous waste and exclusion of "drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy," oil and gas development waste is considered, by definition, solid waste. This type of waste will not be considered hazardous, regardless of the fact that its constituent chemicals (benzene, arsenic, etc.) are, in fact, hazardous. This is an outdated regulatory inconsistency which allows for hazardous waste to be disposed of in municipal landfills, where the effluent is processed at municipal sewage treatment plants. Many commenters asked that the DEC use this opportunity to close this “loophole” and require that wastes be disposed of at facilities based on their chemical constituencies, rather than an arbitrary and flawed regulatory definition.

Response: The definition of hazardous waste is found in the Part 370 series and is outside the scope of this rulemaking. However, the Department disagrees with the statement that hazardous waste is being disposed in municipal landfills.

Definitions
Comment: DEC has failed to classify drill cutting as technologically enhanced naturally occurring radioactive material (TENORM). Specifically, the DEC excludes drill cutting from ever being defined as "processed and concentrated," so laws governing the

disposal of radioactive waste can never apply. This failure means that potentially radioactive and toxic waste can continue to be disposed of at landfills. For more information on this issue, Pennsylvania's troubled experience with TENORM, and the dangers of accepting this kind of waste can be found in the attached report.

Response: The definition of TENORM is outside the scope of this rulemaking. The Department also disagrees with the characterization of wastes as "toxic" since that term is not assigned any specific meaning in the Part 360 series.

Definitions
Comment: With no legal definition of "char" from certain technology processes; will char be considered a solid waste and BUD eligible.

Response: The approval of the end uses of char are handled as part of the permit application for the pyrolysis facility under Part 362.

360.2 Definitions
Comment: Consider identifying defined terms by capitalization or italics. This would allow the reader to differentiate between defined terms and undefined terms.

Response: The Department is considering means for the final regulations to be more user friendly, such as the ability to search on a defined term. However, otherwise, the comment is noted.

360.2(a)
Comment: DEC should reference in this section the exemption included in Part 360.13 for reused fill.

Response: This section references section 360.12. Section 360.12 references Section 360.13 for fill uses.

360.2(a)
Comment: These proposed revisions fail miserably in meeting the expectations of the scrap processing industry. Not only does the proposed definition of solid waste contradict the corresponding federal regulatory provision, the proposed definition also conflicts with the long established DEC regulatory definition of solid waste set forth in Part 370. We respectfully requests that the defined term "solid waste" be amended to conform to Federal and State regulation by explicitly providing for an exclusion for scrap metal.

Response: The cited regulations in the comment refer to hazardous waste regulations at both the State and Federal level. These regulations remain consistent with the current Federal and State solid waste regulations in New York.

360.2(a)(1)

Comment: The paragraph is awkwardly worded. It reads that solid wastes are "discarded materials" but then lists materials that are not discarded (i.e. materials that are recycled or that may have value). Materials that have value and are not discarded should not be regulated solid wastes. The term "Discarded" should be defined as it is integral to the definition of solid waste.

Response: The language is consistent with the terminology found in the existing regulations.

360.2(a)(3)(i)
Comment: If these items are not considered solid waste are they included in a diversion rate calculation?

Response: Yes, textile donations and other items covered by this provision can be used in a municipality's overall accounting when determining diversion goals.

360.2(a)(3)(viii)
Comment: Soil that has no known or suspected contamination present due to human activity should continue to not be classified as a waste.

Response: This provision has been replaced by the pre-determined beneficial use criteria in section 360.13.

360.2(b)
Comment: The defined terms, as currently proposed, lack a definition of reprocess, reprocessor, or reprocessed. Add the following definition: "Reprocessed" with respect to a single-use device, means an original device that has been used on a patient and has been subjected to additional processing and manufacturing for the purpose of an additional single use on a patient. For purposes of this and federal regulation, the reprocessors become the manufacturers and the used healthcare products are not RMW if transported in accordance with 49 CFR 173.134(b)(12)(ii).

Response: The regulatory criteria are sufficient, along with Department review during permitting, to handle these activities.

360.2(b)
Comment: The commenter recommends a new definition of "dispatch" be added to Part 360 to define a municipality who directs transfers of General Fill Material as defined in 360.13 from a generating site to a receiving site without stockpiling at a third location. Only General Fill, not Restricted-Use Fill, should be allowed for transfer under this definition. The Dispatch municipality should be allowed to obtain a registration pursuant to 361-5.

Response: The final regulations do not dictate the relationship between municipalities and those they hire or direct to manage fill material. There is no prohibition on a municipality from obtaining a registration under Subpart 361-5.

360.2(b)(9) Amendment
Comment: In general, the term "amendment" has many other uses and meanings throughout the regulations (i.e. permit amendment, soil amendment, etc.). Consider embedding the definition in section 360.12 or 361-3 and remove from this section.

Response: The definition in 360.2(b)(9) specifies that it only applies to section 360.12. The use of the term amendment in Subpart 360-3 is used in a manner that is explanatory of its meaning.

360.2(b)(16)
Comment: This section is still too vague and the previously submitted comments were not comprehensively addressed. Given the strenuous siting restrictions surrounding landfills, especially with regards to proximity to aquifers, we do not believe it to be "inappropriate" to provide some clarity to this issue so that definitions are applied consistently from Region to Region for siting and potentially for additional environmental monitoring services as specified in 360.20(a)(iv). This is a topic that has been adjudicated, but seems to be left purposefully vague. We understand that the definition of Primary and Principal aquifers is the ultimate responsibility of the Division of Water. However, that should not preclude the Division of Materials Management, after consultation with the Division of Water, from adding language or providing clarification to those definitions (TOGS 2.1.3 notes). The Division of Materials Management has a duty to address this issue so that the regulated community knows the exact definition of the State's Primary and Principal aquifers in order to make facility siting a quicker, smoother and less expensive endeavor, as well as provide consistency for Department determinations for additional environmental monitoring services. At a minimum, the Department should define what constitutes a "critical aquifer" as referenced in 360.20(a)(iv) and as previously requested, since this has not been included in the Definitions nor acknowledged in the assessment of comments. In addition, the following recommendations (in bold) for the revisions of aquifer definitions are reiterated:

(i) Primary water supply aquifer or primary aquifer means a highly productive aquifer which is presently used as a source of public water supply by major municipal water supply systems. ***To be considered a Primary Aquifer, all three of the following criteria must be met: 1) have a minimum contiguous areal extent of 5 square miles; 2) thickness of saturated deposits of highly permeable material should average at least 20 feet through much of the area, with some locations at least 50 feet thick; and 3) have sustained yields to individual wells of 50 gpm or more from sizable areas (two square miles or greater) throughout the aquifer.***

(ii) Principal aquifer means a highly productive aquifer or deposits whose geology suggests abundant potential water supply, but which is not intensively used as a source

of water supply by major municipal systems at the present time. Some water supply development has taken place in some of these areas but it is generally not as intensive as in the primary aquifer areas. ***The criteria found in Primary Aquifer for aquifer size, deposit thickness and sustained yields also apply to Principal Aquifers.***

Response: The definition was developed in conjunction with Department staff with expertise in defining water resources and is sufficient for the regulatory needs of the Part 360 series.

Definition for *Disposal Area*
Comment: The term "disposal area" is used several times in Part 363, please add a definition for this.

Response: The Department does not believe a definition is necessary for this term.

360-2(b)(30), (147), (229)
Comment: Regulated medical waste is often referred to as biomedical waste, infectious waste, infectious agent waste, etc. Department refers to these wastes in the following four different ways: Biosafety Level, Infectious Substance, RMW and Risk Groups 2, 3, or 4 (un- defined). Identifying infectious substances and waste can be complicated. It is requested to the extent possible, that the Department consider consolidating these definitions and applications of these, to be more manageable, recognizable and consistent. BSL and DOT PHMSA definitions under 49 CFR 173.134 for Category A and B and RMW definitions are now most commonly known and understood, thus it is requested that the references in the regulations stay with these definitions.

Response: The NYS Environmental Conservation and Public Health Laws define regulated medical waste (RMW) and govern the activities for its management in NYS. Waste generated from the provision of health care to humans or animals, research pertaining thereto or in the production and testing of biologicals is managed as RMW or infectious substances in accordance with NYS laws and regulations that conform to the USDOT definitions and 49 CFR requirements. However, the concerns brought about by the 2014 Ebola crises, 2001 and 2006 buildings contaminated with *Bacillus anthracis* that generated large volumes of RMW and other infectious waste (building decontamination materials are not a RMW under NYS or USDOT regulations) the Department recognized the potential impacts to human health and the environment if the waste from future incidents involving high risk biological agents is not managed properly. To address this other infectious waste stream, the Department worked with experts in academic institutions and industry to identify and codify a framework for management of other infectious waste based on risk. The Department determined that the best approach would be to use a framework that was already recognized internationally. Risk group categorization is an international classification system recognized by the scientific community that is based on the relative hazard of infective micro-organisms to laboratory workers, the community, to livestock and the

environment. In contrast to Risk Groups, Biosafety Levels (BSL) prescribe procedures and levels of containment for working with a particular microorganism or material (including Research Involving Recombinant or Synthetic Nucleic Acid Molecules). Similar to Risk Groups, BSL are graded from 1 – 4. Due to the variability of how or where waste contaminated with bio-agents may be generated in NYS, the Department believes it is necessary to identify and define these wastes separately so that they may be properly managed. Waste generated from future incidents would be regulated in accordance with 365-3 and require packaging and marking in accordance with USDOT requirements for infectious substances.

360-2(b)(43)
Comment: We recommend that NYSDEC include in this definition that certification is to be based on accepted professional credentials. For example, see Sections 360.2(b)(214) and (215) where credentials are suggested for qualified environmental professional and qualified groundwater scientist.

Response: The Department retains the option to determine if any individual providing certification is qualified to present the information for approval.

360.2(b)(62)
Comment: Clarify: Does the definition of C&D debris, with associated regulatory requirements, now include RAP? RAP should be considered a recyclable or recycled product, not C&D debris.

Response: RAP is considered C&D debris but section 360.12 has been clarified in the final regulations to allow beneficial uses of this material.

360.2(b)(62)
Comment: The proposed change to the definition of "Construction and Demolition Debris" has stricken the word "uncontaminated" and now includes the newly defined "Fill Material" in this definition. Does this mean that any existing facilities currently permitted to accept, process, transfer or dispose of C&D Debris are now permitted to accept, process, transfer or dispose of Fill material as well? This definition requires clarification if possible.

Response: Subpart 361-5 has been revised in the final regulations to clarify which types of fill can be accepted at the various types of C&D debris processing facilities.

360.2(b)(62) and (109)
Comment: The new definition of C&D debris includes the new term "fill material," which itself is a defined term. Yet when the term fill material is used at 360.13 and 360.12, fill material is further characterized and redefined as "fill material type." To the extent the Department elects to adopt these "fill material type" designations, the definition of C&D debris should include each of the fill material types, and in turn a definition of each one

of the fill material types; "General Fill," "Restricted Use Fill "and "Limited Use Fill" must be provided.

Response: Section 360.13 and Subpart 361-5 use the specific terms for fill and how each can be processed and used. Definitions for the various fill materials have also been added in subdivision 360.2(b) of the final regulations for clarity.

360.2(b)(64)
Comment: Why has a separate definition been inserted for "construction waste"? How does this differ from C&D? Please clarify.

Response: Construction waste is a subset of C&D debris. The definition was added to provide clarity concerning the materials that qualify for this subset.

360.2(b)(77)
Comment: We appreciates NYSDEC's consideration of the September 2016 comment on this provision, as reflected in NYSDEC's Response to Comments document indicating NYSDEC's intent to revise this provision to clarify what is meant by appropriate regulatory authority. However, the proposed revised regulatory language does not reflect this change, and is identical to the original proposed language. We therefore reiterate its comment that NYSDEC clarify the meaning of "appropriate regulatory authority" in the manner identified in NYSDEC's Response to Comments.

Response: The definition in the final regulations has been revised to clarify that it applies to Part 365 and to remove the regulatory authority since it is not needed.

360.2(b)(89) Drilling and Production Waste
Comment: For clarification, if DEC intends that soil impacted by drilling and production fluids to be considered drilling and production waste, we recommend that DEC include soil contaminated with drilling and production fluids in §360.2(b)(89).

Response: The referenced definition is sufficiently broad to include all waste produced during the drilling, completion, and production phases.

360.2(b)(89) and Part 363
Comment: Creating a "bright-line standard" by banning the disposal of industrial process wastes, including those from oil and gas exploration and extraction ("drilling and production waste"), in landfills, including those from conventional drilling and hydrofracking activities, consistent with DEC's Findings Statement explaining the state's rejection of fracking for New York; any argument that the Department lacks the authority or that such action would be beyond the scope of this regulation proceeding is simply unpersuasive. The installation of radiation detection systems should be used in conjunction with banning source wastes, not instead (363-8). The conclusory assertion that detection systems "will result in a positive environmental impact by ensuring that

these [radioactive] wastes are not disposed at these facilities" is unreasonably optimistic.

Response: The final regulations include restrictions on this type of waste and includes radiation monitoring to detect waste unacceptable for disposal in a municipal solid waste landfill. The Department has concluded that these provision are sufficient to protect human health and the environment.

360.2(b)(89)
Comment: In the first sentence of this definition, there appears to be an inadvertent deletion of the word “or” after “oil” and before “gas well.”

Response: The definition in final regulations has been adjusted for clarity.

360.2(b)(89)
Comment: In the second sentence of this definition, the commenter agrees that used drilling and completion fluids should only be considered wastes when they are not intended for reuse at the originating well or another well, as proposed, but suggests that same qualifier should also be applied to flowback waters or fluids and production water or brine. As such, the end of that sentence should read “flowback waters or fluids that are not intended for use or reuse at the originating well or another well and production water or brine that is not intended for use or reuse at the originating well or another well.” Rationale: Flowback water or fluid and production water or brine which is intended for use or reuse in a well is not being discarded or disposed (it is being used), and therefore does not meet the definition of “solid waste” at § 360.2(a).

Response: The final regulations have been clarified to reflect this suggestion.

360.2(b)(90)
Comment: This term “drilling and production waste tracking form” is used nowhere else in the proposed Parts 360-369 regulations and we recommend that it be deleted. However, if this term is retained for some reason, then we recommend that the reference to “New York State” be removed from the definition. Rationale: shipping papers, shipping orders, bills of lading, and non-hazardous waste manifests are obtainable in a variety of formats that are not State-specific, and there should be no requirement to use a specific New York State format which has not been otherwise defined or described in these regulations.

Response: The term has been deleted in the final regulations since it is not used.

360.2(b)(93)
Comment: We recommend that NYSDEC clarify the definition of “ecologically sensitive areas.” We believe that the proposed definition is ambiguous as to who has authority to designate land “as habitat for threatened or endangered species” so as to qualify as “ecologically sensitive area” within the meaning of Part 360. We believe that NYSDEC

intended for the phrase “by federal, state or local government” to modify both clauses. If so, we recommend the following revisions:
“*Ecologically sensitive area means any land designated by federal, state, or local government as habitat for threatened or endangered species or as an area intended to encourage natural habitat development.”*
Furthermore, we request that NYSDEC include maps or other documentation that define areas that are “intended to encourage natural habitat development…”.

Response: The definition is consistent with how the term is used in Part 375, which is the context of how it is used in Part 360.

360.2(b)(95)
Comment: The definition of Electronic Waste or e-waste references ECL Article 27, Title 26. For ease of use of Part 360, the referenced definition should be reprinted here in 360 in its entirety.

Response: The reference is quite extensive and a reference to the ECL was deemed more appropriate.

360.2(b)(99)
Comment: Excluded waste – response – The word “combustion” should be changed to “the combustion and/or gasification of alternative fuel.

Response: The final regulations have been revised to provide this clarification.

360.2(b)(109)
Comment: The elimination of asphalt from RUCARBs will result in a conflict between reality and the rule. In the metro region, a very large portion of the flow of material contains asphalt in a manner that makes complete removal physically impossible. The consequence will be either non-compliance or the categorization of all material in the more restricted categories. The costs of such inefficient categorization will be significant. This inefficient approach to asphalt will significantly increase the cost of construction in the metro region without any real world corresponding benefit.

Response: The regulations concerning the management of fill and other components of C&D debris such as asphalt and concrete have been significantly revised to provide environmental protection as well as potential markets for various materials. Inadvertent minor amounts of material found in fill types will be evaluated by the Department on a case-specific basis.

360.2(b)(119) Friable Asbestos-containing waste
Comment: Consider reverting to the current Part 360 defined term for "Asbestos Waste" with an exclusion for non-friable asbestos waste embedded in the definition. The Part 360 Regulations should ensure consistency with NYS Department of Labor Code Rule 56 management requirements by the generator and EPA regulation criteria.

Include clarification on management of vermiculite and asbestos management as it relates to homeowners/residents.

Response: The Department's intent is to ensure consistency with the requirements of the NYS Department of Labor and believe the definition accomplishes that goal.

360.2(b)(121)
Comment: The word "liquefied" should be removed from this proposed definition of "gas storage brine". The requirements related to "gas storage brine" within these regulations do not depend on whether the gas in storage was in a liquefied or gaseous state, so there is no reason to limit this definition only to brine associated with storage of liquefied gas.

Response: The intent of the Department is to specifically define and regulate the use of brine used in liquefied petroleum gas storage operations so it is necessary to use the word liquefied in the definition.

360.2(b)(122) Gasification
Comment: We recommend additional criteria be used to define Gasification. "Gasification means the thermal conversion of organic material at a temperature exceeding 700 degrees Celsius with a limited amount of combustion in waste by direct or indirect heating in the presence of air into syngas products."

Response: The definition includes the production of syngas, which is associated with gasification as opposed to combustion. The details of how the gasification system is operated will be reviewed by the Department as part of the permit application under Part 362.

360.2(b)(122)
Comment: Gasification – There is no provision provided for thermal conversion that operate without oxygen or in the absence of oxygen.

Response: Part 362 governs all thermal conversion processes (other than anaerobic digestion), regardless of the use of oxygen.

360.2(b)(123) Generator
Comment: A generator can produce a waste by changing the composition of an existing waste, for example MSW incinerators create ash from MSW. We recommend inserting "or changes" into this definition.

Response: The definition includes the term "process" which would include combustion as a source of ash as a solid waste.

360.2(b)(165)

Comment: Lumber and engineered wood – should be a named ingredient in the definition of construction and demolition debris.

Response: The definition of construction and demolition debris is based on origin rather than listing specific waste components.

360.2(b)(173)
Comment: This definition of mulch should also include use on soil surfaces also for landscape aesthetics.

Response: Use on soil surfaces is too vague and could allow for indiscriminate disposal of the material. Use for landscape aesthetics typically also impart other benefits outlined in the definition such as weed suppression.

360.2(b)(173)
Comment: Mulch – a reference should be added that states "increases longevity of moisture content."

Response: The definition in Part 360 is sufficient for its use in Part 361.

360.2(b)(185)
Comment: Operating cover – references only "soil" as operating cover. Definition should allow for approved or BUD approved "soil-substitute." Landfills only permitted to use "soils" will significantly financially impact C&D processing facilities negatively. Using the word/definition of "soils" will also increase the demand for further mining permits of natural soils when prohibiting alternative daily covers.

Response: Part 363 allows for other materials termed alternative operating cover.

360.2(b)(190)
Comment: This definition of organics recycling facility should also allow for semi-composted materials. Not all products sold as soils and are not fully composted. Tailings are incorporated back into the composting windrows.

Response: The permit application for composting facilities under Subpart 361-3 allows the applicant to describe the proposed end uses of the material and the degree of stability that is required for those uses. During the permit review process, the Department will determine if the stability is sufficient for the proposed end use.

360.2(b)(218) Receiving Facility
Comment: This definition is inferring that a hazardous waste management facility is NOT a solid waste management facility. Please revise.

Response: In New York State, solid waste management facilities and hazardous waste management facilities are handled under separate regulations.

360.2(b)(225)
Comment: Recycle – definition should include products that are prepared from waste in accordance to an engineered specification that incorporates additional expense(s) to be incurred to manufacture such product(s) beyond handling, transfer and disposal.

Response: The definition of recycle is sufficiently broad to include the products referenced in the comment and does not need to be more specifically defined in order to achieve the regulatory purpose for which the definition is needed.

360.2(b)(268)
Comment: Thermal treatment – definition(s) does not provide for heat transfer technologies that operate in the absence of oxygen (gasification).

Response: The definition does not require the technology to include oxygen and does specifically list gasification.

360.2(b)(284)
Comment: Still present is a definition of "uncontaminated", but use of this term is for the most part minimized from use, as it is specifically deleted from the definition of C&D debris. If the definition of uncontaminated remains, a definition of contaminated should also be presented.

Response: Uncontaminated is used several times in Part 360. The term contaminated is not used without explanation alongside the terms, therefore a definition is not warranted.

Comment: The definition of uncontaminated is ineffective and contradicts the wise corrections DEC made in its approach to historic fill. This provision maintains that concept that characterization of material is not a function of what is actually in the material, but vague references to the past of the material and the intentions of the people in the past who handled the material. Under this definition, a large amount of pristine blue stone becomes legally
contaminated because a sufficient number of paper coffee cups were placed on top of the stone. The dangerous and ineffective nature of this approach was recognized in your changes to historic fill. We strongly suggest that these
definitions simply provide chemical limits on the content of the material independent of any other factor.

Response: The final regulations include provisions to characterize fill material, found in section 360.13, to provide additional clarity and to assist in implementation. Section 360.13 and Subpart 361-5 include testing requirements.

The Department also disagrees that, in the example provided, a pile of blue stone would become contaminated by paper cups. The proposed definition provides that to be uncontaminated, a material must not be comingled with other solid waste. According to its ordinary meaning, to commingle is to blend thoroughly, or to combine into a more or less uniform whole. It is not reasonably likely that paper cups could be so thoroughly mixed with stone to become a uniform whole.

Comment: The definition should be changed to "VISUALLY UNCONTAMINATED" since all the references throughout Part 360 relate to a material being uncontaminated with respect to being mixed with other wastes. The definition of uncontaminated states that it must be free from petroleum, pesticides and hazardous wastes, but makes no connection to the Part 375 Soil Cleanup Objectives to logically make that distinction. It is simply not possible to LOOK at a waste and determine if it is UNCONTAMINATED (free from petroleum, pesticides or hazardous wastes) without supporting laboratory results. DER-10 provides for testing guidelines for soils and should be applied to verify that it is "UNCONTAMINATED".

Response: Section 360.13 and Subpart 361-5 include additional criteria, including analytical requirements, to verify the status of materials that may be beneficially used.

360.2(b)(308)
Comment: Wood debris from any source should be either adulterated or unadulterated. We are splitting hairs too thin and casting further confusion into the regulatory process. There are too many references to different types of wood(s) definitions.

- Unadulterated is waste wood, no coatings of any type on it and no ingredients injected into it. Examples are any part of a tree, unadulterated dimensional stick lumber from C&D recovery such as unadulterated floor joists, wall studs, ceiling rafters, wooden pallets.
- Adulterated waste wood;
    - Any manufactured ingredient added into or onto the external surface or internal fiber of the wood products.
    - Typical unadulterated waste woods;
        1. Painted
        2. Glued – Internally contains glue or other type adhesive and/or pressed together
        3. Creosote coating or injection
        4. Pressure treated lumber coated or injected

Response: Different types of wood are handled at various types of solid waste management facilities - composting, mulch, construction and demolition debris handling and recovery and landfills. Separate definitions are useful in outlining what can be accepted at each of these facilities.

360.4 Transition

360.4
Comment: Grace periods for all requirements in the proposal should be increased to 365 days after its effective date.

Response: The Department believes the transition periods outlined in the final regulations provide adequate time for new and existing facilities, transporters, and events to transition to the new requirements.

360.4
Comment: We urge the Department to delay the effective date of those provisions governing the use and testing of fill material by 2 years, specifically for Section 360.13 and the provisions of Subpart 361-5 that reference it.

Response: Section 360.13 has been clarified in the final regulations to outline that it only governs fill material taken directly from the source to the end use. In New York City, the majority of the fill material is handled and processed at solid waste management facilities and would not be impacted. Therefore, an extend transition period is not needed.

Comment: The Department has required that all currently exempt facilities, must comply with the revised regulations within 180 days. The supporting documents make no attempt to explain the impact of this decision, again the EIS uses conclusory statements to say everything is fine. How may currently exempt facilities will be forced to close, or amend their operating situation as a result of these changes? As an example, wood waste facilities could currently be as large as three acres, under the new regulation the size is restricted to one acre, this is a tremendous difference in volume of material. The Department has failed to even consider the environmental impacts, regulatory burdens, and small business impacts of this decision on the currently permitted facilities or the anticipated number of new facilities. Additionally, the Department has failed to take a hard look at the potential impacts this will have on the un-accounted-for residual waste stream that will no longer have a place to be properly disposed-of or the impacts of the private sectors response over the next several years as it responds to no available disposal options and creates new or alternative disposal facilities to accommodate this increasing waste-stream. You have removed any larger scale disposal locations (i.e. old 3 acre stump dumps) and replaced them with 1 acre stump dumps or newly regulated wood waste processing facilities (i.e. either exempt, registered or permitted), all new requirements to this industry. The supporting documents make no attempt to address the environmental, regulatory or financial burdens of this decision on small rural towns and on small businesses within NYS.

Response: Consideration of impacts have been appropriately identified and evaluated in accordance with regulatory requirements. With respect to the currently registered wood waste disposal facilities of 3 acres or less as compared with the exempt disposal of wood waste at a facility of 1 acre or less, the number and size of potentially affected facilities were evaluated and the number of currently registered sites that even

approached the 3 acre size was small. An evaluation of the reported rate of fill at these registered sites relative to their size showed that there would be minimal if any impacts to the current operations for many years. Accordingly, the Department's evaluation of the environmental benefit versus potential financial impact on a statewide basis was made in favor of the change in the draft and final regulations.

360.4(a)
Comment: (180) one-hundred and eighty days is not sufficient time for the regulated community to execute the regulation requirements. This schedule will cause significant financial hardship and additional regulatory burden on many private businesses that are heavily burdened at present time.

Response: The Department intends to provide new forms and procedures to facilitate the transition for affected facilities.

360.4(b)
Comment: It is impractical and a regulatory burden to have all BUD's expire 180 days after the effective date of these new regulations. A renewed application and allowing continuance of the BUD until the Department makes a further determination must be considered.

Response: The final regulations have been adjusted to address this concern.

360.4(b)(1)
Comment: If a facility is exempt, how does it have a compliance requirement?

Response: An exempt facility must comply with any criteria listed as part of the exemption.

360.4(b)(1) and (2) and 360.4(p)
Comment: These sections require existing facilities to apply within 180 days. Department staff will be inundated with applications if this stands. I recommend that facilities with existing approvals be required to apply within 180 days in advance of their approval expiration date. This will give these facilities sufficient time to address the new requirements.

Response: The expiration date cannot be used because many BUDs do not have expiration dates. The Department will develop forms and procedures to ease with BUD renewals.

360.4(b)(2)
Comment: Notices should be sent to Registered Facilities respecting new application and compliance requirements.

Response: The Department will work to provide appropriate notification to existing facilities.

Comment: Compliance with prior regulations should continue until "final disposition of application by DEC" or insert the "received validation" language in (c). The phrase "makes a determination" is not a term of art and is so vague as to perhaps mean a determination that the application is complete.

Response: The phrase “makes a determination” covers both approval and declination of a registration request.

360.4(c)
Comment: Permitted facilities should be permitted to continue compliance with prior permit until "final disposition of application" for or validation of renewal or modification by DEC. The transition to the new regulations will require time for DEC and the each facility to deal with the various problems that will arise in the case specific application to facilities. There is no risk to this approach as DEC can always simply make a decision and the time period ends. The absence of this approach eliminates DEC having the option to problem solve where it feels that is necessary.

Response: The provision provides more time for transition than requested by the commenter. The facility must provide notification to the Department, not obtain a registration, within 180 calendar days.

360.4(d)
Comment: Need to allow compliance with prior law until "final disposition" or "received validation" of new permit application

Response: This provision allows 365 days for exempt facilities to have a complete application on file. Requiring approved (validated) permit issuance would be an increased burden on facilities.

360.4(f)
Comment: Allowing only 180 days from the effective date of the regulations for registered facilities to complete an application is unreasonably short. Most facilities will be unable to comply in this short of time period.

Response: The regulations allow for 365 days under subdivision 360.4(f).

360.4(j)
Comment: Exempt facilities should be required to post financial assurance within (12) months of effective date. Three years creates a financial disadvantage to permitted facilities.

Response: Exempt facilities are not required to obtain financial assurance.

360.4(k)
Comment: NYSDEC should confirm in this section that complete applications pending prior to the effective date of the new regulations would be approved based on Part 360 regulations existing at the time of application. This would track the language found in section 360.4(o)(4), which explicitly states that "[a]ny pending application for a landfill which was deemed complete prior to the effective date of this Part will be reviewed for conformance with the Part 360 regulations in effect at the time of the application."

Response: The final regulations include revised language for clarification and consistency.

360.4(p) Beneficial Use
Comment: Why are previously determined beneficial use determinations (BUDs) being terminated? Significant review went into the establishment of BUDs over the past fifteen years. What information exists to suggest that all BUDs were not properly instituted in a manner protective of human health and the environment?

Response: This provision does not indicate that BUDs issued were not appropriate. All BUDs must be renewed on an ongoing basis under the final regulations. The Department is developing procedures for the ease of transition, such as using existing information already submitted.

360.4(p)
Comment: The Department currently has (i.e., and historically has had) a time management problem, they cannot manage the work load they currently have. It seems unreasonable to require every registered facility in the state to re-new their registration at the same time, all within a 180 days. How can the Department support this idea with a simple conclusory statement that they can handle it, without giving any supporting information as to the number or type of registrations this will include (including in that the number, the number of new registrations anticipated by the new regulations). The supporting documents do not address the financial impacts of the re-registration process on the small businesses involved in these sectors, including the impacts to the newly regulated wood waste processing businesses.

Response: The Department is developing procedures to facilitate new registration for existing facilities. The provision allows facilities to continue to operate while the Department reviews the application so Department delay does not prohibit the continued operation of a facility.

360.4(p)
Comment: This provision does not address the consequences of having a BUD that both *is* still included in section 360.12 and *does* contain a condition with a specific expiration date. If those BUDs are similarly presumed to expire 180 days after the effective date of this Part, it would be burdensome and without benefit to require

facilities which have been properly using material under a BUD for many years to re-apply for the same BUD. It would also lead to confusion, in the case of facilities which are in the middle of using material for a project on the 180th day following the effective date of this Part. It would be impractical and costly to require that such projects cease operations to obtain a permit when they already have a valid BUD.

Response: If a material is covered by a pre-determined BUD, both prior to and after the final regulations are effective, it does not expire.

360.4(p)
Comment: Criteria for a DEC decision refusing to reissue an existing BUD, under this transition rule, should be stated. Better procedural safeguards must be allowed here as the revised rule and the RIS state, particularly applicable requirements of Parts 621, 622, and 624. These due process procedures should not be ignored for BUDs subject to expiration under this Transition rule at the same time the Department is affirming they apply for other BUD actions including review and granting or denial of petitions, and Department-initiated modifications or revocations of BUDs.

Response: BUD renewals are subject to the criteria outlined for new case-specific BUDs, outlined in 360.12. Information submitted with the original BUD petition can be referenced. BUDs are not subject to Part 621.

360.4(q)
Comment: The extensive and costly amount of information to be researched under this requirement places a significant burden on local municipalities under these revised draft regulations. Further, there is a real probability that such information would not even have value over the plan's time frame. What's important for enhancing recycling, reducing waste generation and properly disposing of waste is the education, management programs and technologies being employed. The revised regulations focus on gathering significant quantities of data that is likely not necessary to make sound judgments on the important tasks. Successful planning can be completed in a more simple approach that identifies "best available practices" which can be employed in a fiscally responsible manner. Management programs and technologies can be establish, including public education, sized according to the local planning unit's geographical area and population as well as its role in a regional market.

Response: The local solid waste management planning requirements are similar to those criteria in the regulations prior to revision. The revisions provide additional clarification and consolidation of the required plan components and procedures in a manner that allows planning units better use of available information and data generated by the Department and streamlining the development and review process.

360.6 Submission requirements and use of professional engineers and certified laboratories

Comment: This requirement is appropriate for design and engineering related submissions, however, does not allow for the other many professionals and disciplines associated with permitting and operating a solid waste management facility. Many documents/studies associated with permitting are related to noise studies, wetland delineations, geochemistry/groundwater statistics, ecological studies, sustainability planning, health-related studies, land survey, and land planning. These studies are not normally prepared or conducted under the supervision of a Professional Engineer and would be an onerous and an unnecessary requirement.

Response: It is acceptable for various professionals to complete components of a permit application. The provision has been revised to clarify that the engineering-related documents must be certified by a professional engineer.

360.6
Comment: Although it is appreciated that DEC recognized the problem with requiring an engineer's seal on all documents, its correction is not sufficient. The requirement of a seal must be limited to "engineering related" documents. This will permit DEC, as it gains experience, to evolve its definition to the correct type of documents and ensure the level of assurance that DEC desires without unnecessary seals. The inclusion of language such as "Design" and "Permitting" will be disastrous for several reasons: i) legal challenges will eventual force the sealing of all documents in all DEC filings; ii) There is now only a few and will never be a sufficient supply of engineers in the metro region with any degree of experience in this field resulting in a monopoly by the few and development of seals for rent; iii) there is no reason to over-seal the documents, especially where "engineering related" designation will permit DEC to add to the list of required seals whenever it sees fit.

Response: The final regulations provide additional clarification that professional engineering certification relates only to engineering-related documents.

360.6(b)
Comment: It is unclear from the response provided in the Assessment of Comments, what DEC's expectation is for this regulation. DEC's statement that "the requirement is limited to analysis that are certified by NYSDOH and would not cover other tests such as manual sorting and waste characterization" is unclear. The NYSDOH certification does include certification for testing of solid and hazardous waste characterization. Therefore, we respectfully ask DEC to reconsider our previous comment. As written, this requirement would apply to waste characterization analysis submitted by generators to evaluate non-hazardous waste processing, disposal or land application in New York State. Consider an exemption for waste characterization, or provide flexibility to allow for laboratory testing outside of New York State.

Response: The final regulations have been revised to remove the inapplicable examples.

360.7 Inspection of facilities

Comment: The law and DEC regulations permit the range of enforcement responses for refusal to consent to inspection. The inclusion of this provision does not increase the authority of DEC. What the provision does do is provide line staff with unchecked power to complain that a regulated entity refused to open a room, drawer or file.
The inclusion of (b) has only the purpose of permitting unreviewable conduct by DEC staff. This provision will and should be challenged as a serious violation of due process for no public interest other than uncheck authority of staff. It is unnecessary and mean spirited and is perceived as such by the industry.

Response: The concern expressed in this comment was addressed in the prior assessment of public comment. There is nothing in the Environmental Conservation Law or the Department's regulations that provides staff the power suggested in the comment.

360.7(b)
Comment: This procedure would implicate constitutional due process concerns for permittees subject to it. These provisions only allow the permittee to raise arguments regarding the three issues listed. This is problematic because it prohibits a permittee to defend based on other factors that may have influenced Department staff during the inspection and hearing process. For example, a permittee would not be able to claim that the hearing is motivated by religious or racial animus. This would be a violation of the permittee's procedural Due Process rights.

Response: The Department disagrees that the proposed regulations implicates due process concerns. A permittee's failure to provide Department staff with an opportunity to conduct an inspection provides the Department with a basis to revoke the facility's permit. The regulations specifically provide a right to a hearing, in which the permittee may raise any available defenses. The comment claims that the regulation prohibits a permittee from raising certain defenses, but no such prohibition is included in the proposed regulations. The proposed regulation, based on existing regulations at 6 NYCRR 360-1.4(b), simply proposes a focused hearing on the issue of a failure to permit an inspection. Once referred to a 6 NYCRR Part 624 hearing, an administrative law judge would make determinations on the relevancy of issues.

360.9 Prohibited activities

Comment: It is bad regulatory policy in any setting to require a submission to a regulatory agency for amendments of approvals for ANY change in the facts on the ground. Beyond the fact that actual compliance would overwhelm DEC, in fact DEC is actually only interested in receiving applications for "material" (or some other filter for immaterial changes) changes. The inclusion of a requirement for any change will surely result in two bad outcomes. First, noncompliance as there will be no filings for repaving,

change of color, new roof etc. Second, the provision will only be used by staff with bad intent as a way of pressuring or a regulated entity by threatening enforcement action for such noncompliance. Third, staff will include the failure to file for immaterial changes in an enforcement action as a way of buttressing a weak or inappropriate enforcement action. There is a reason almost all regulatory authorities limit amendment requirements to material changes.

Response: The Department expects actual compliance with the conditions of a Department issued permit. Partial or material compliance with permit conditions will subject a permittee to enforcement.

Comment: The inclusion of gratuitous language that a single undefined violation can sustain revocation is bad policy. First, DEC has the authority to revoke at any time for a single violation under the current law. The advantage of the current law is that there is history and case law to safeguard DEC from being accused of being arbitrary and capricious. This is the law for all regulatory agencies and protects DEC, and the public. Second, this provision will never be used by reasonable management at DEC as reasonable revocation will always be permitted without reference to this provision. Only attempts at unreasonable revocations by unmanaged staff will seek to use this provision.

Response: The Department disagrees that the subjects addressed by Section 360.9 are gratuitous. It is good policy to inform the regulated community and the general public about what constitutes appropriate management of solid waste in the state.

360.9(b)(6)
Comment: An unrealistic impracticable, if not illegal, restraint. It would appear to specifically exclude brokers (as it only cites facilities with N.Y. permits) for out of state disposal, which is absolutely improper and a violation of the interference with interstate commerce.

Response: The proposed regulation does not implicate interstate commerce concerns. The Department has the authority to regulate the management of solid waste by any person, including those who have a permit and those who dispose or arrange for the disposal of waste without obtaining the necessary permit.

360.10 Variances

Comment: It is not reasonable to simply outlaw variances for a sub set of regulations. It only makes sense if, like the US Congress, current DEC staff believes that future DEC staff will be incompetent and needs to be protected from itself. There is no provision concerning which it is impossible that exigent or changed circumstances render a variance consideration good policy. Permitting variances for all provisions simply permits DEC to be competent and effective in the future at its discretion.

Response: The intent of the regulation is not to regulate Department staff. The point of the proposed regulation, which has not been revised since the proposed regulation, is to inform the regulated community of the circumstances which are not appropriate for a variance.

360.11 Comprehensive Recycling Analysis

Comment: This section must maintain the requirement that comprehensive recycling analyses ("CRAs") continue to report on the recycling rate. While waste generated is an important metric, recycling participation rates help public officials and the public understand whether or not local recycling programs are improving, stagnating or falling behind.

Response: The Department believes the reporting metric identified in the state solid waste management plan (Beyond Waste) of measuring for a decrease in the amount of waste managed through thermal treatment and disposal is a more comprehensive and appropriate metric for comparison purposes and better encompasses all of the contributing factors for true waste reduction including recycling, reuse and source reduction measures that may be very difficult to measure and track independently.

360.12 Beneficial use

Comment: The commenter noted that revised regulations do not provide for any public participation in case-specific beneficial use determinations.

Response: The comment is correct. Case-specific BUDs are not subject to public participation regulations.

360.12(a)(1)
Comment: The third sentence in paragraph § 360.12(a)(1) stating that “this section also does not apply to waste used in a manner that constitutes disposal” should be removed. This terminology “used in a manner that constitutes disposal” is not defined in Part 360, but has a specific meaning under the hazardous waste regulations in Part 371 which should not be inferred here for solid waste without being clearly defined. The requirement for a determination as to whether a proposed use constitutes a beneficial use rather than disposal is adequately addressed by §360.12(d)(3)(ii), so the sentence referenced above is not necessary in § 360.12(a)(1) and could lead to inappropriate interpretations if retained.

Response: The Department disagrees that this terminology cannot be used in this section. The 1993 version of 6 NYCRR 360-1.15(d)(2)(i) contains the criterion for beneficial use, “the essential nature of the proposed use of the material constitutes a reuse rather than a disposal” and this wording was subject to public review in the March 2016 Proposed Part 360.

360.12(a)(1)
Comment: Does material that qualifies as BUD at its point of generation lose its BUD designation when it reaches the 361 facility?

Response: The material "qualifying as a BUD at its point of generation" only does so if it is used in the manner specified in the BUD (pre-determined or case-specific). If the material is sent to a Part 361 facility, the BUD does not apply to it.

360.12(a)(1) and 361-5.2
Comment: It says that "The materials cease to be solid waste when used according to this section." This seems to indicate a material such as "recycled material or residue generated from uncontaminated asphalt pavement and asphalt millings" which is listed in 360.12(c)(3)(ix), would not be considered a solid waste so long as it met the requirements of both 360.12(a) (for example, not stored more than 365 days) and (c)(3)(ix). This would imply that millings or uncontaminated asphalt pavement chunks would not be considered solid waste, but then they are still listed as a C&D material under 361-5.2. At what point are millings and asphalt waste considered 'beneficial use'?

Response: Asphalt millings and pavement chunks, to qualify for the pre-determined BUD in 360.12(c)(3)(ix) must meet a municipal or state specification for reuse; until they can meet this specification, they are regulated as a C&D debris.

360.12(a)(1) and 360.12(c)(3)(viii) and (ix).
Comment: The Applicability subdivision of Section 360.12 provides that "materials cease to be solid waste when used according to this section" – but in the next sentence, that waste cessation does not apply to materials that are being sent to facilities subject to regulation under Part 361. Then further on in 360.12(c)(3), pre-determined BUDs in 360.12(c)(3)(viii) for concrete, brick and similar materials, and (ix) for asphalt pavement and millings, apparently do not apply to these same materials. These provisions are contradictory.

Response: The Department disagrees that these provisions contradict one another. Materials sent to a facility regulated under Part 361 are not being sent to a site of "use according to this section" but rather are being stored, handled, treated or processed prior to being used pursuant to the pre-determined BUD (or a case-specific BUD), and hence the BUD does not apply. Once processed to meet an appropriate specification, however, the pre-determined BUDs in paragraph 360.12(c) attach. The BUDs in this paragraph were worded as they are to allow for beneficial use regardless whether the material is sent to a Part 361 facility, provided it meets an appropriate specification.

360.12(a)(2)
Comment: We request that NYSDEC clarify that its discretion under this provision to require permits for land placement in place of a BUD is only applicable to case-specific BUD determinations and would not apply if land placement is done under a pre-determined BUD, or involves General Fill, Restricted-, or Limited-Use Fill. This provision

would be unworkable if applicable to those instances and would result in significant increases in construction bids in order to account for unknown outcomes to construction budget and schedule. We recommend that NYSDEC revise 360.12(a)(2) so that the provision is limited to case-specific BUD determinations

Response: The reservation specified in proposed 360.12(a)(2) is meant to put the regulatory community on notice that a permit may be required for large fill projects. In general, the purpose of a BUD is to promote reuse of a material which would otherwise qualify as a solid waste, and the expectation is that use of material under a BUD will not pose adverse impacts. However, 360.12(a)(2) serves as a back stop in the event that land placement of an unlimited amount of fill leads to unexpected and adverse impacts on public health and the environment.

360.12(a)(3)
Comment: Section 360.12(a)(3) provides that materials may not be stored for more than 365 days (at a C&D
facility) prior to beneficial use. But if they are BUD material at the point of generation, yet transported to a 361 facility, do the storage time limitations apply to this material?

Response: Yes, the storage limit applies everywhere including a solid waste management facility unless a longer storage time is approved through the solid waste management facility's registration or permit. The intent is to ensure the material is beneficially used in a reasonable time frame.

360.12(a)(3)
Comment: Commenters objected to storage periods for BUDs, some stating they appear to be arbitrary or do not make sense for materials which must be accumulated for construction purposes and may be used over multiple construction seasons. One commenter recommended extension to two years; others requested this period not apply at all to inert "exempt C&D" materials such as recycled concrete aggregate or asphalt millings, or processed recyclables such as glass aggregate.

Response: As a default storage period, the Department believes 365 days is reasonable for construction projects. As stated, a longer period can be authorized through a registration, permit condition or case-specific BUD.

360.12(b)
Comment: New York must forbid so-called "beneficial use" of drilling wastes. Since fracking is banned in New York and little conventional drilling takes place, banning these wastes from disposal in the state would protect our environment, extend the life of landfills and remove a subsidy for out-of-state drilling interests.

Response: Conventional drilling does not generate a significant quantity of cuttings or other drilling waste, but production brine is generated from operating conventional gas and oil wells in New York State. Application of these brines, and those from gas storage

caverns, pursuant to requirements in 360.12(d), to de-ice roads, suppress dust on or stabilize unpaved roads, is not disposal but a legitimate beneficial use, and therefore has not been prohibited in the final regulations.

Part 360.12(c)
Comment: With the clarification of alternative operating cover as a BUD, more pre-determined BUDs should be made available for the landfill industry, in-line with what the Department has already approved state-wide or on many case-by-case bases. These should include at a minimum municipal solid waste incinerator ash and non-hazardous petroleum contaminated soil. Several Part 360 Operating Permits contain a pre-approved BUD listing for material that are permitted for use as daily cover at the site. It is very important that these permit conditions be maintained, as sites have entered into multiple long-term agreements that are based upon the use of these materials as AOC. Thus, we request that renewal of BUDs be concurrent with the renewal of operating permits. This will reduce the burden on both the facility and the Department for application, review, and approval of BUDs in combination with renewal of the permit.

Response: The final regulations do not include alternative operating cover (AOC) in Section 360.12 as a beneficial use at all. AOC is waste that may be approved for use at a landfill based on its characteristics and is addressed in Section 363-6.21. Since AOC is not addressed through a BUD, its approval will be part of landfill permits and any conditions or time limitations imposed by those permits.

360.12(c)
Comment: Pre-determined BUDs that authorize the use of solid wastes for construction should allow them to be used in all instances, including landfills.

Response: The Department believes that use of non-hazardous solid wastes in landfills in place of conventional materials for construction, operation, or closure of a landfill should not be pre-determined but rather based on the unique circumstances of each landfill and whether the material will meet the engineering requirements for its proposed use and pose no adverse public health or environmental effect if used in the specific landfill. For this reason, use of solid waste in landfills are addressed in Section 363-6.21.

360.12(c)
Comment: There appears to be some inconsistency as to when fill materials are no longer considered solid waste comparing different sections of the draft regulations. In 360-12(c)(1) it states “when used”, but in 360-13(a) it states “once delivered” or “once delivered to the site of reuse” or “upon being characterized”, depending on fill category. This is significant to understanding when transportation requires a permit, and when it does not.

Response: The phrase “when used” in 360.12(c)(1)(ii) is followed by, “…in accordance with section 360.13…” and should be understood as referring to any points of waste cessation identified in Section 360.13.

360.12(c)
Comment: Commenter strongly recommends including a BUD for small quantities of aggregate production/reuse spoil applicable solely for transportation projects, has a purposeful use for a residential/ property owner, and would be beneficial. Such materials should be limited to traditionally exempt C&D, such as clean concrete, brick, rock, etc.

Response: A small-quantity (ten cubic yards) threshold is present for these materials in the final regulations for characterization of fill material and for Part 364 transporter authorization.

360.12(c)(1)(ii)
Comment: Refers to fill material used in accordance with 360.13 which provides unrealistic and impractical constraints along with vague and ambiguous use criteria.

Response: The presence of this language in the final regulations emphasizes that Section 360.13 refers to the pre-determined, self-implementing use of fill material, and in most instances comes alongside current industry and Department practice for identifying absence or presence of contamination in excavated materials and evaluating their appropriate reuse as fill.

360.12(c)(1)(iii)
Comment: Comments were received that limiting the use of navigational dredged material (NDM) only as “aggregate” pursuant to this pre-determined BUD, would limit NDM use too severely, especially preventing its use as fill. At minimum, this term “aggregate” should mean the same as “commercial aggregate” in 360.2(b).

Response: The Department believes the use of NDM as commercial aggregate is sufficiently broad, only excluding uses that may require laboratory analysis or further review for beneficial use pursuant to 360.12(e) due, for example, to placement in sensitive settings. The word “commercial” has been added to the final regulations to clarify that the uses as defined in 360.2(b) are intended.

360.12(c)(2)(iii)
Comment: Please confirm our understanding of 360.12(c)(2)(iii), that, "car wash grit," includes grit collected in oil water separators (OWS) from the washing of State/County/Municipal transportation agency and highway Department vehicles, which is collected separately from oil.

Response: The grit from the source described by the commenter can be used pursuant to this pre-determined BUD if meeting the criteria of this BUD (sand or gravel that is free from litter and objectionable odors).

Section 360.12(c)(2)(iii)
Comment: Disposition of street sweepings does not protect the environment. We are mystified again that by simply classifying material that may contain contamination is generally classified as clean while there is an extremely high likelihood that these materials are contaminated. This broad interpretation permits dumping of materials that are likely contaminated and could have significant impact to the environment. This loophole should be closed. In many parts of the world, these materials are recognized as contaminated materials.

Response: The pre-determined BUD makes clear the limitations on use of street sweepings, which the Department believes will prevent environmental harm from this material.

360.12(c)(2)(iv)
Comment: This pre-determined BUD for waste tires to secure tarpaulins should not restrict farmers and other users of this BUD solely to passenger tires; many will use larger vehicle tires.

Response: The language of this pre-determined BUD is not intended to restrict the type of tire but rather to limit tires to the number of passenger tire equivalents, as defined in 360.2(b).

360.12(c)(2)(iv)
Comment: Farmers will need guidance to understand how many tires can be used pursuant to the “tire equivalent per square foot” limitation and also will need more time than the Transition period in 360.4(p) to bring current use of tires into compliance with this BUD. Cutting or piercing tires as required in the BUD to drain water, will be labor- and time-intensive and costly. Funding should be offered to small farmers through appropriate agencies to purchase tire cutters or providing funds directly to farmers to halve or hole their tires.

Response: The calculation of 0.25 passenger tire equivalents per square foot of cover or bunker area identified in this pre-determined BUD equated to a tire laid flat touching each other across the entire surface of the cover or bunker. Based on conversations as part of the rulemaking process, a transition of 180 days was determined to be reasonable.

360.12(c)(2)(iv)
Comment: The commenter requests that DEC increase the allowable passenger tire equivalent percentage per square foot from 0.25 to 0.50 passenger tire equivalents per square foot. This would allow greater flexibility for farmers who may need to place more

tires on their bunkers due to weather or other farm-specific conditions. The 0.50 passenger tire equivalents would also provide greater flexibility for farmers who use a wide variety of tires to weigh down the tarps covering the bunks. We request that a higher per square foot concentration be allowed along the tarp seams and edges of the bunks. These areas require more tires or tire equivalents to help ensure that rain and other elements are not able to enter the bunk area.

Response: The Department has based this per-square-foot basis for limiting the number of waste tires used under this pre-determined BUD based on current maximum agricultural and salt-storage practice. The regulation does not require a rigid spacing of tires but limits the total number of tires kept at farm, salt storage or other facility to a reasonable number to secure tarps.

360.12(c)(3)(ii)
Comment: DEC should expand this to include other agricultural products, such as, for example its use as an ingredient in a farm animal bedding product.

Response: The Department will not extend this waste stream (unadulterated wood combustion ash) to other uses without further study and demonstration of its effectiveness and safety to livestock and the environment.

360.12(c)(3)(v)-(vii)
Comment: In the Department's State Solid Waste Management Plan, the Department committed to "review all BUDs, pre-determined or case-specific as discussed in the following section, for coal ash and FGD residuals for consistency with EPA final rule and any guidance or information that results from the final rule." *Beyond Waste* at p 169. Beneficial use is plainly preferable to landfill disposal. Beneficial use of CCR should not be any more restrictive under Part 360 than allowable under 40 CFR Part 257, nor should the Rule impose obstacles, such as hastened closure, denying the potential beneficial use. Accordingly, the final Rule should provide time frames consistent with 40 CFR Part 257. The complexity and unnecessary burden of overlapping federal and state regulation would best be addressed by deferring regulatory action on CCR until the Department works with EPA and stakeholders to adopt 40 CFR Part 257 into the State's regulations.

Response: The Department is unaware of any conflict between the final Part 360 and EPA's final regulation with regard to beneficial use of coal combustion residuals. EPA has delegated solid waste management to the Department, and provided that any Department regulations are as stringent or more than EPA's, they are acceptable to EPA.

360.12(c)(3)(viii)
Comment: The commenter questions the value of "recognizability" in determining materials to be uncontaminated and acceptable for production of aggregate that can be used pursuant to this pre-determined BUD. Why aren't analytical results used instead?

No other regulatory authority in the United States has a similar approach. This approach is more objective and fair also when enforcement actions are taken.

Response: Unaided visual observation is a rational and sufficient method for determining the presence of contamination on concrete, brick, rock and similar materials prior to crushing. Analytical testing at this point would not be practical or necessary. Rather, sampling and analysis are used to verify materials leaving a facility that processes these materials into aggregate.

360.12(c)(3)(viii) and (ix)
Comment: The materials in these BUDs should not have to meet a DOT specification to be used as an aggregate or in asphalt pavement. Most work is commercial, not State and to limit the use of these materials to DOT projects or specifications will lead to more of these materials going into landfills. Specifications of any Federal, State or Local government agency or authority or other specifications should be allowed, as approved by a New York Professional Engineer.

Response: The Department has replaced "Department of Transportation" to "municipal or state" specifications or standards in the final regulation.

360.12(c)(3)(viii) and (ix)
Comment: Several comments raised objection to the requirement of these pre-determined BUDs for the respective materials to meet Department of Transportation specifications. One commenter asked that similar or stricter municipal specifications be allowed. Others stated that many private projects do not require materials to meet DOT specifications. Others stated forcing materials to meet DOT specifications that may come from a variety of sources, not necessarily State projects, would greatly limit the current market of reuse. On the product end, there is widespread sale and distribution in the construction market of material that does not meet Department of Transportation specifications, whether virgin or recycled.

Response: The Department has replaced "Department of Transportation" to "municipal or state" specifications or standards in the final regulation. These clauses are not intended to limit where recycled concrete aggregate or recycled asphalt pavement can originate, as long as it is uncontaminated and recognizable (before processing into RCA or RAP). State and municipal specifications provide a recognized standard that is a minimum for demonstrating a waste material (as opposed to a mined or virgin material) is an effective substitute for a mined material. Meeting these specifications does not restrict material from being used in any public or private construction project.

360.12(c)(3)(viii) and (ix)
Comment: These pre-determined BUDs each cite "a specification established by the Department of Transportation for use …(as aggregate or an ingredient in asphalt pavement)". DOT does not have specifications for RCA or RAP; these references should be removed.

Response: The Department understands this comment to mean that DOT has no specification entitled “Recycled Asphalt Pavement” or “Recycled Concrete Aggregate”, and therefore these materials are not addressed in DOT Standard Specifications. Nonetheless, DOT’s Standard Specifications clearly include RAP and RCA in Standard Specifications for aggregate, subbase, and other applications, and accordingly DOT provides specifications for the use of RAP and RCA. Furthermore, these clauses have been changed to require meeting “a municipal or state” specification or standard in place of the DOT Standard Specifications.

360.12(c)(3)(viii)
Comment: The legitimate reuse of uncontaminated soil, brick, concrete, rock, asphalt pavement and glass should continue to be the subject of a pre-determined BUD. Legitimate uses would include construction needs within an approved site plan under the jurisdiction of the local government. These materials should be exempt from Part 360 when placed into commerce. In fact, these types of materials are a marketable commodity that readily compete with
virgin earth materials.

Response: This comment captures the intent of 360.12(c)(3)(viii) and (ix) and 360.12(c)(4)(i), with the provision that facilities which process these materials to meet BUD requirements must comply with applicable Part 361 final regulations.

360.12(c)(3)(ix)
Comment: The March 2016 Proposed Part 360 referred to millings by listing "C&D debris use in accordance with section 361-5.6" under bullet (iv) in the previous 360.12(c)(4), which said the materials were no longer solid waste after they left a facility subject to regulation under 361 or 362. This appears to have been specifically removed, and new bullets referencing recycled aggregate and recycled asphalt products was added under 360.12(c)(3), which says that they cease to be solid waste by meeting the requirements for the intended use. This seems to imply these materials do not require processing at a Part 361 facility, but yet RCA and RAP are subject to facility regulation in the proposed 361 and the pre-determined BUDs do not apply to materials sent to Part 361 facilities. How are RCA and RAP regulated under the new proposal?

Response: RCA and RAP are a solid waste unless meeting the conditions of this pre-determined BUD. Concrete, masonry, brick, asphalt chunks or asphalt millings that require processing, or which must be stored, prior to use under this pre-determined BUD, must be processed or stored at a facility authorized pursuant to Subpart 361-5 unless the facility is exempted in Part 361.

360.12(c)(3)(viii) and (ix)
Comment: These pre-determined BUDs require separate storage of the segregated materials. This provision’s apparent prohibition of a direct loadout at the site of intended use will add significant new burdens and costs to projects by increasing handling and

transfer time and cost, and by increasing land needed for stockpiling, without a corresponding environmental benefit. We suggest that the regulation allow direct transfer from the project site to the site of re-use without the necessity of intermediate stockpiling. This seems to have been the Department's intent (as stated in the June 2017 Assessment of Public Comment) and if so should be clearly stated in the regulation.

Response: No prohibition on direct transfer or use is intended; this storage requirement merely states if these materials are not used directly but are stored, the storage must be in a separate area as a discrete stream. The Department believes no further clarification is needed to these clauses. Also, a pre-determined beneficial use has been added to this paragraph in the final regulation specifically for asphalt pavement and millings received at an asphalt manufacturing plant for incorporation into an asphalt product.

360.12(c)(3)(ix)
Comment: At the end of the day, we are aware of and share the Department's concerns regarding "midnight dumping". However, it appears that the Department's efforts to address this issue will only result in an outsized impact on those businesses already complying with Department regulations (and coincidentally reducing the waste stream headed to landfills by recycling RAP). It is respectfully submitted that the Department's efforts should be focused on enforcing current regulations rather than creating additional regulatory hurdles for the hot mix asphalt pavement industry.

Response: The Department disagrees that the final regulation, properly understood, will result in less recycling and more disposal of RAP. The regulation will come alongside current sustainable use of RAP and make enforcement easier for environmentally unsafe or noncompliant practices.

360.12(c)(3)(ix)
Comment: The language of this revision suggests that the Pre-Determined BUD for asphalt reuse (including millings) would apply only, or primarily, to road construction and maintenance. The limitation to "road" construction appears to be unintentionally narrow, since there are other common related uses for asphalt, such as parking, building pads, sidewalks, and site paving. We suggest that this language be revised to clarify that asphalt may be reused in such common paving projects under this Pre-Determined BUD. This is consistent with the Revised Regulatory Impact Statement's note that recycled asphalt may be used as "an ingredient in asphalt pavement for roadways, parking lots, or other similar uses." See Consolidated Revised Regulatory Impact Statement, at p. 26.

Response: The Department has added language to this pre-determined BUD to clarify that recycled asphalt millings can also be used for construction or maintenance of other paved surfaces. "Other…uses" is retained in recognition that RAP or millings may be

used for construction of paved surface shoulders or to backfill cuts or trenches in pavement.

360.12(c)(3)(ix)
Comment: We know that almost all milled asphalt pavement currently goes to a Part 361 C&D handling/recovery
facility for processing back into a useable product. This material stream would be in jeopardy because, in the first instance, the industry would not understand whether the RAP meets the BUD definition. And, it would be unclear if the limitations of Part 361 apply to the RAP, even if it is a BUD. Further complicating things is the fact that Part 361 would preclude the successful (and indeed, oftentimes project-sponsor required) reuse of RAP.

Response: The Department disagrees with this assessment. Part 361 merely regulates the facility that processes the RAP, and this pre-determined BUD addresses the RAP product, which is a product upon meeting the pre-determined BUD criteria (whether or not it is processed at a Part 361 facility; for example, if it is processed outside of New York State but meets these BUD criteria). A New York State processor – or an out-of-state processor doing business in the state – will be accustomed to meeting the criteria for RAP in this pre-determined BUD.

360.12(c)(3)(viii) and (ix)
Comment: We strongly recommend that 360.12(c)(3)(viii) and (ix) Beneficial Use be revised to state that Recycled Asphalt Pavement (RAP) and Recycled Concrete Aggregate (RCA) are completely exempt from regulation under Part 360 with no restrictions on amounts stockpiled or distributed, and are not subject to registration or reporting requirements. RCA and RAP should be listed in paragraph 360.12(c)(1) instead of paragraph 360.12(c)(3).

Response: The Department agrees that the use of RCA and RAP meet the criteria of beneficial use – provided they are produced to meet a recognized specification and contain no deleterious material or chemical contamination. These pre-determined BUDs are intended to establish these criteria. Furthermore, facilities sizing and sorting these materials for use as RCA and RAP do impact the environment, and local communities, and require regulation. Therefore, a complete exemption is not warranted.

360.12(c)(3)(ix)
Comment: What does uncontaminated asphalt pavement mean, as asphalt is made from petroleum products and inherently contains compounds in concentrations which will exceed Part 375 objectives?

Response: "Uncontaminated" has the meaning in 360.2(b), i.e., that it is not mixed with other waste or affected by a petroleum or chemical spill (except for road runoff).

360.12(c)(3)(viii)
Comment: Paragraphs (viii) and (ix) do not specify "location of use".

Response: No “location of use” is intended to be specified for pre-determined BUDs in paragraph 360.12(c)(3); these materials can go to any location.

360.12(c)(3)(viii)
Comment: To the extent uncontaminated recognizable concrete and asphalt is not a waste but in a BUD, but comes from New York City, will it require a transport manifest/tracking document?

Response: RCA and RAP aggregate products meeting BUD criteria (often, after processing) will be exempt from Part 364 requirements pursuant to 364-2.1(b)(13).

360.12(c)(3)(viii)
Comment: Several public comments suggested, in reference to subparagraph 360.12(c)(3)(viii), that the regulations should indicate which Department of Transportation specification must be met in order for material to qualify for the pre-determined beneficial use determination. Comments also suggested that the way recycled aggregate or residue is stored should not disqualify material from meeting the BUD.

Response: The specification will be dependent upon the intended use of the material. Guidance will be provided by the Department. Storage in separate piles helps to ensure product quality is maintained.

360.12(c)(3)(viii) and (ix)
Comment: The revision indicates that asphalt is removed from the previous “recognizable and uncontaminated concrete, rock, brick, asphalt pavement, soil..” that held a pre-determined BUD for aggregate and subbase, and that it would be managed separately as a distinct waste stream. The Department has identified reasons that asphalt and asphalt millings should be managed separately from soils, but we have not found a rationale for managing asphalt separately from other “RUCARBS” materials. As a result, we do not believe the Department has identified an environmental benefit to such a separate management requirement. If the Department nevertheless determines that asphalt should be managed separately from other “RUCRB” materials, we urge DEC to allow for *de minimis* or incidental quantities of asphalt in other material streams, to prevent a material stream from being unreasonably rejected from reuse.

Response: Recognizing that “RUCARBS” materials, with or without soil included, eventually may be mingled with soil and become unrecognizable, the Department’s goal is to divert asphalt to uses back in asphalt or in road or paved surface construction. While the Department will not specify a *de minimus* limit, it recognizes that incidental asphalt may be present in demolished concrete.

360.12(c)(4)
Comment: This section states, “The following cease to be waste when the material leaves a facility subject to exemption or regulation under Part 361 or 362, provided the material is ultimately recycled or reused.” Does this include C&D debris, including fill/soil, “reused” as fill (e.g., for mine reclamation)? Does it include pieces of asphalt cement, RAP millings, concrete chunks, etc., that have not yet been processed?

Response: No. This paragraph applies only to the materials listed in the paragraph. Reuse of C&D debris and fill material is addressed elsewhere.

360.12(c)(5)
Comment: Several requirements were received in opposition to the reporting requirement for greater than 10,000 tons in a year of any pre-determined beneficial use material. Objections came to the additional paperwork and a questionable benefit in reporting for materials that meet BUD requirements and accordingly do not pose harm to the environment.

Response: This requirement will facilitate the Department’s compiling of metrics to determine how much of waste streams with pre-determined BUDs are being reused, and will help the Department follow up on complaints and noncompliance.

360.12(c)(5)
Comment: Several comments requesting clarification of this requirement were received: What constitutes "distributing" 10,000 tons or more of a material with a pre-determined BUD? We interpret the reporting requirements of this section to apply only to the entity producing a marketable commodity. We request clarification in the proposed regulatory language as to whether “any person” could include a corporation and further whether the reporting obligation is to be completed by the generator of beneficial use material and is to be completed on an entity-wide basis rather than for individual sites or projects.

Response: “Person” has the meaning stated in 360.2(b), and “distributing” has been added to account for materials being used by the entity who generated them, or which are provided free of charge to others but nonetheless meet BUD criteria and are beneficially used pursuant to a pre-determined BUD.

360.12(c)(5)
Comment: Materials that meet all of the requirements for a BUD should be exempt from further Part 360 requirements, including annual reports. The Department stated that annual reporting should not be needed for
pre-determined BUDs in the June 2017 Assessment of Public Comments on the Solid Waste Regulations.

Response: The Department acknowledges this error; it was determined not to change the annual reporting requirement, but a contrary statement in the Assessment was not removed.

360.12(d)
Comment: Entities should be able to beneficially reuse excess contaminated soils excavated in a construction project in areas where there are soils with similar chemical characteristics and end use. This practice of reusing excavated soils equal to or one step above the end use category for the placement location would not cause negative environmental impacts.

Response: The Department has considered these concepts and incorporated some of them in Section 360.13 for pre-determined beneficial use of fill material. Site use alone cannot guide what type of fill material is appropriate.

360.12(d)(2)(iv)
Comment: The requirement for analytical data is overly burdensome and vague. First, obtaining an analysis of the chemical constituents of any analogous raw material or commercial product for which the waste is proposed to be an effective substitute is not reasonable because it would essentially require procurement of the raw material or commercial product for testing and analysis, which is not even feasible in most cases. This would also be infeasible for "typical" clean backfill which varies significantly based on local soil background and other factors. For fill material, cannot appropriate Part 375 SCOs be used as a measure of clean backfill?

Response: This requirement is intentionally broad, and not prescriptive, to allow for many types of materials and many possible modes of beneficial use. Ordinarily the analogous raw material will be commonly obtainable from commercial sources and its chemical and physical characteristics can be analyzed by the petitioner, or obtained from the literature. The commenter is correct in stating that Part 375 SCOs can be used in place of an project-specific analysis of "typical clean backfill" to evaluate soil-like materials to be placed on the land; the appropriate SCOs are stated in 360.12(d)(3)(vi).

360.12(d)(2)(v)
Comment: In the June 2017 Proposed Revisions, NYSDEC eliminated the condition that standards must be "acceptable to the Department," but did not clarify which "governmental or industry standards or specifications" would be adopted. It remains unclear who will be evaluating the justification and how one will determine if that justification is acceptable. There should be a statement such as, "the BUD petition must include an explanation of the alternate material use and that this meets the intended acceptable use of the raw material for which it is a substitute." We urge NYSDEC to clarify what governmental or industry standards or specifications the use must exceed or meet.

Response: The Department will be evaluating all information submitted as part of a beneficial use petition. One of the requirements and tools the Department will use in its evaluation will be the information related to comparison with governmental or industry standards or specifications as required in the referenced subparagraph.

360.12(d)(2)(vii)
Comment: We recommend that NYSDEC clarify that testing be done before beneficial use, specify for what parameters the testing must be done (e.g., RCRA 14 metals, SVOCs, etc.), and describe what frequency will be deemed "periodic."

Response: The Department will not prescribe any list of tests or parameters, since a variety of materials have been and will continue to be proposed for beneficial use, some for which typical soil or waste testing would not be informative or appropriate. Likewise, a fixed frequency of sampling is not prescribed. The petitioner should propose testing that is appropriate and representative of the material proposed for beneficial use. Sampling parameters, tests, and frequencies are stated for various specific materials elsewhere in Part 360 and Part 361 that may offer the petitioner a starting place to develop a sampling protocol for a material such as a soil-like material intended as fill (pre-determined BUDs in Section 360.13 will not be used) or for a recycled organic waste product (Subpart 361-3 unless this Subpart is directly applicable).

360.12(d)(2)(vii) (*a*) (*1*)
Comment: This section should clarify that periodic testing be performed according to the Table 1 referenced in Section 360.13 of this regulation.

Response: The sampling protocol in Table 1 of Section 360.13 is intended for fill material and is not appropriate for all materials that have been or could be proposed for beneficial use. It also is not intended for periodic confirmatory sampling of a product from an ongoing process or use, but rather is intended to characterize one finite source of fill material.

360.12(d)(2)(vii)(*a*)(*2*)
Comment: A time period for storage of a BUD commodity is unnecessary.

Response: Many BUD materials do not lose their solid waste status until they are used, therefore a storage limit is necessary. As stated in the final regulation, this time period can be extended or eliminated if approved as part of the case-specific BUD.

360.12(d)(2)(vii)(*a*)(*3*)
Comment: Procedures should include dust suppression.

Response: Dust suppression is included in the petition requirement for "best management practices designed to minimize uncontrolled dispersion" in 360.12(d)(2)(vii)(*a*)(*4*).

360.12(d)(2)(vii)(b)
Comment: This section should clarify the specific criteria to be applied. No guidance is provided on the standard that Department will use to compare the waste and the product for which the waste is proposed to be used as a substitute. This would also be unnecessary for soil reuse, which is already compared to SCOs.

Response: As with many other requirements for case-specific BUDs, the Department will not specify criteria which would hinder the beneficial use of a material where the criteria would not be meaningful in determining whether the material poses an adverse effect to the environment and public health and whether the material is an effective substitute. The petitioner should discuss criteria for their unique material with the Department. An exception is material used on the land as fill or cover, which as commenters note are compared to Part 375 SCOs stated in 360.12(d)(3)(vi).

360.13(d)(3)
Comment: We urge NYSDEC to provide a timeframe or schedule for review and approval of case-specific BUDs.

Response: A rigid timeframe cannot be imposed in the final regulation since case-specific BUD petitions will differ in complexity.

360.12(d)(3)(iv)
Comment: The Department should clarify that “processing,” does not include the importation and placement of material in a pile and mixing it with other imported material to make a more consistent material. These types of “mixing” activities are regularly undertaken with waste prior to beneficial use and do not involve any contaminants being added to the waste.

Response: The intent of this clause is to make clear that a case-specific BUD cannot substitute for a facility authorization. The Department will review the proposed waste control plan, including any activities such as storage and blending, and determine whether these constitute decontamination or processing, in which case the petitioner may be required to obtain an appropriate facility registration or permit in addition to the BUD.

360.12(d)(3)(iv)
Comment: Please verify whether the existing case-specific BUD issued to the City of New York pursuant to which the New York City Clean Soil Bank operates will not be affected by proposed 360.12(d)(3)(iv).

Response: All case-specific BUDs are valid when the regulations are effective until the time renewal is required.

360.12(d)(3)(vi)

Comment: The June 2017 Proposed Revision of this section still does not address previous comments and still requires demonstration of properties or characteristics unique to the material or use that are acceptable to the Department, implying unknown and unpredictable outcomes that will drive up the costs of construction bids significantly. The Department should provide examples of what criteria it will use to determine "acceptable concentrations." The subdivision does not elaborate on any properties or characteristics that may be considered unique and thus creates a very vague standard. In addition, it would appear that this subdivision needs to be reconciled with the three levels of Fill Material established by 360.13 which clearly allow for use of materials that exceed the lowest acceptable levels outlined in the part 375 tables.

Response: The Department has addressed most construction materials elsewhere with pre-determined beneficial uses such as in 360.12(c) and 360.13. This subdivision addresses unique materials and situations when an otherwise pre-determined beneficial use material may not conform to pre-determined criteria. The Department acknowledges that some criteria differ from this clause for Restricted-Use Fill and Limited-Use Fill, but these pre-determined use categories also include specific limitations on physical composition of these materials, and where and how these categories of fill can be used.

360.12(d)(3)(vi)
Comment: Commenters objected to inclusion of any of the Part 375 SCOs in the proposed rule for any BUD, or asked why higher SCO limits for commercial and industrial land use are not allowed.

Response: Unrestricted distribution of materials and placement of materials on the land as fill or cover without themselves being encapsulated, or subject to institutional controls such as deed or use restrictions is not protective of public health and the environment. For the Department to allow any but the most stringent SCOs in projects authorized pursuant to Part 375, institutional controls would be required.

360.12(d)(3)(vi)
Comment: If soils from redevelopment projects are regulated as solid waste, is the intent to require off-site disposal above unrestricted criteria?

Response: The new fill material section 360.13 provides pre-determined beneficial uses for off-site use of excavated soil in excess to the needs of the project. There is also an associated pre-determined beneficial use for on-site use of these soils. Case-specific BUDs are still an option available to developers as well.

360.12(d)(3)(vi)
Comment: Part 375 standards may not be appropriate for Suffolk County, which, for example, has lower levels of arsenic (4 ppm) than the unrestricted SCO of 13 ppm.

Response: The intent of these criteria are not to restrict materials to local background concentrations, but to use criteria developed from public health risk assessment for residential land use and groundwater protection modeling as described in the Technical Support Document for Part 375.

360.12(d)(3)(vii)
Comment: The Department must clarify the applicable standard for whether a proposed use would "significantly adversely affect public health and the environment."

Response: This subdivision addresses case-specific beneficial use determinations; no one or limited group of standards can be used to determine whether all possible materials proposed for beneficial use may pose an adverse effect.

360.4 and 360.12(d)(7)
Comment: Existing Beneficial Use Determinations (BUDs) should not be rescinded and BUDs should not be limited to a five (5) year duration. The regulated community has expended considerable effort to secure the existing BUDs. The five-year time limit on case-specific BUDs has not been removed from the March 2016 proposal. This requirement effectively turns BUDs from a jurisdictional determination that material is not a waste when used in a beneficial manner, to a permit-like short term authorization. This change will create regulatory uncertainty and discourage businesses from recycling byproducts and waste materials, and will impact landfills and other facilities who rely on BUDs they currently hold as essential to their operation.

Response: The Department has determined that existing BUDs need review to determine if materials meet applicable, up-to-date criteria for protection of public health and environment. Case-specific BUDs will have a time limit to ensure ongoing review of compliance, effectiveness of the material in the use, and consistency with current beneficial use best practices and criteria for that material. The Department acknowledges this time limit will imply rights similar to other Department approvals such as permits. The Department will work with businesses and facilities to review and renew BUDs where appropriate. Once the final regulations take effect, landfill alternative operating cover approvals will be addressed pursuant to 363-6.21 instead of this subdivision.

360.12(e)(2)(i)(b)
Comment: In the June 2017 Proposed Revisions, NYSDEC's new proposal that NDM can only be reused under a case-specific BUD reviewed and approved by NYSDEC is even more stringent than NYSDEC's previous proposal, which we commented on as overly restrictive.

Response: This subdivision addresses case-specific determinations for NDM. A pre-determined beneficial use for NDM is found in 360.12(c)(iii).

360.12(e)(4)(ii)

Comment: We request that NYSDEC clarify the circumstances and types of additional sampling that would be required under this proposed regulation so that costs of analysis can be factored into construction contracts and other biddable work. We also request that NYSDEC provide a timeframe for NYSDEC reviews and approvals as it relates to the asterisked note under "TABLE: Sample Requirements", which states that "[t]he Department will require a project-specific approved sampling frequency."

Response: The final regulations provides some specifics, but recognizes the case-by-case nature of dredging projects. If other Department programs are involved in review of a project which includes beneficial use, Division of Materials Management (DMM) staff will coordinate sampling frequency with these other programs to ensure all objectives, including representative sampling and analysis of dredged material for beneficial use, are met. DMM staff will also coordinate with others to ensure a decision regarding a BUD, where possible, can be made coincident with other Department or agency approvals.

360.12(f)
Comment: Data on which the Department bases its assumption that conventional gas and oil well brine is safe to use for de-icing and dust control on roads, is old or lacking. More study should be made of actual concentrations of brine-related constituents in soils next to roads prior to the Department allowing further use of brine on roads. We also urge NYSDEC to require testing for naturally occurring nuclear materials, as non-Marcellus formations in New York State are known to contain such constituents.

Response: A considerable body of data concerning the natural ranges of minerals in brine from conventional-well formations has been amassed in the literature and through sampling provided by BUD holders. Actual well brine composition will vary but remain within these ranges. The final regulations nonetheless does not assume a natural limit in brine on constituents but contains criteria intended to protect public health and the environment when conventional well brine is used on roads. Likewise, the range of radiological substances present in conventional brine is sufficiently characterized that the Department has declined to require testing for these substances in case-specific BUDs.

360.12(f)(2)
Comment: Clarification is needed regarding whether the production company or marketer of the brine, or the user that applies it must prepare the application for a case-specific Beneficial Use Determination (BUD). If the user is the BUD holder, then should there be a parallel set of requirements that suppliers comply with prohibitions and provide required data? If the supplier or producer is the BUD holder, then should it not be an obligation of the producer/supplier to pass the BUD conditions and restrictions on to users?

Response: This paragraph identifies the person or entity spreading the brine as the BUD holder, though any entity acting on behalf of this person or entity can prepare the

BUD petition. The BUD holder is typically required to inform all employees or contractors of the BUD and its conditions. The BUD holder can make its own arrangements with suppliers, as needed, to ensure quality of the brine delivered, including meeting BUD criteria. The BUD holder is responsible for ensuring compliance with the BUD conditions and ensuring reporting is made to the Department.

360.12(f)(2)
Comment: Why is reporting required only annually, not monthly as required in some other jurisdictions? It is recommended that the Department require an analysis of a representative sample of the brine, obtained at the point of use, be tested at least semi-annually and included in the results in the March 31st annual report.

Response: The Department has determined annual sampling and reporting as detailed in this subdivision is sufficient and is capable of investigating problems or concerns in the interim.

Part 360.12(f)(2)(vi)
Comment: In the first sentence of §360.12(f)(2)(vi), the wording specifying the sampling location should be changed to read "which will be representative of the brine at a proposed point of use" since this information is appearing in a petition for an as-yet unapproved beneficial use.

Response: The existing language adequately conveyed that the proposed use was not allowed until actually approved by the Department. Nevertheless, the wording change has been made.

360.12(f)(2)(v)
Comment: The previously proposed Part 360.12(f)(2)(v) would have required all BUD holders to describe "the system used at the well location(s) to remove and minimize any oil or gas residue." In contrast, the modified proposal would allow operators to identify "any system used." In the latter proposal, there is no guarantee that the applicant will identify a separator system. The Department should revert to the original language making it clear that such a system must be used. We note further that this section should also refer to oil and gas separators at storage sites in addition to the well sites. To fix these minor gaps, we propose adjusting the language to read: (v) a description of any the system(s) used at the well and/or storage location(s) to separate brine and minimize any oil or gas in brine.

Response: The final regulations refers to any system used at the well location(s) to separate brine and minimize oil and gas in brine.

Part 360.12(f)(3)(i)
Comment: Commenters dispute that New York State currently does not allow production brine from the Marcellus Shale (as prohibited in the final regulations), asserting the Marcellus brine is spread illicitly or conventional brines are commingled

with Marcellus drilling waste. Commenters asked why brine from other shale formations, such as the Utica Shale, and not called out in the final regulations for restriction or prohibition.

Response: If spreading of Marcellus Shale production brine is occurring in New York State, it is happening in contravention of case-specific BUDs granted to date. This final regulation will assist the Department in enforcement of this prohibition going forward. The Utica Shale has not been developed to date, and will be evaluated when and if it is for beneficial use. In general, shale formation production brines are of poor quality for road treatment use, even if radiological or other constituents of concern were set aside from consideration.

360.12(f)(3)(i)-(iii)
Comment: The DEC must abandon the Beneficial Use Determination process for the use of production brine from oil and gas production wells and gas storage facilities to treat roads. There are no "beneficial" uses for drilling waste, regardless of whether the wastes are from "conventional" or fracked wells. This waste contains toxic chemicals, metals, excess salts, and carcinogens like benzene and radioactive material. One of the salts associated with "formation brine" which could be sprayed on roads and bridges or released from wastewater treatment plants into our waterways is bromide which when combined with chlorine from public water supplies creates trihalomethanes, a potent carcinogen. Brine from gas storage facilities contains similar contaminants. Currently chemical testing of liquid waste before it goes on roads is minimal, chemical thresholds are set very high, and restrictions on where spreading can occur are vague and limited.

Response: In this subdivision, the Department has set limitations to ensure use of gas and oil well production brine and gas storage brine to treat roads, a practice which has occurred for several decades, will pose minimal impacts to public health and the environment. The BUD process will require each user of brine to meet criteria, follow practices required in the final regulations, and report to the Department, as opposed to not regulating this practice at all or attempting to ban it altogether. Road treatment is a critical safety issue for small, rural municipalities in winter and an air quality and road integrity issue in the summer. The “excess salts” naturally occurring in these brines are an effective substitute for purchased rock salt or calcium chloride, and NYSDOT has developed protocols for salt use for de-icing to minimize runoff impact to soils and waterways. The ionic form of halogens in natural brines is inert and does not form trihalomethane compounds. Other constituents in brines can pose concern but the Department’s approach is to limit their concentrations at the point of use.

360.12(f)(3)(iii)
Comment: The proposed Part 360.12(f)(3)(iii) also applies only to the well site, but should apply to both well and storage sites, whether single or multiple.

Response: The Department has retained this requirement only for well sites.

360.12(f)(3)(iv)
Comment: NYSDEC states without justification that a 50-foot buffer would be "adequately protective given other provisions to limit the quantity of brine spread." It is NYSDEC's duty under state law to protect water quality in all of the state's waters. Buffers of 100 feet from water bodies are common for nearly every industrial activity in New York. For instance, state freshwater wetlands are protected by a 100-foot buffer in which "discharging [of] sewage treatment effluent or other liquid wastes into or so as to drain into a freshwater wetland" is regulated. There is no justification for employing a shorter buffer to allow spraying of highly toxic chemicals. and the response to previous comments on the 50 foot setback elevates the value of roads over wetlands and water bodies.

Response: The Department has retained the 50-foot buffer in recognition that brine use of necessity takes place on roads that pass near or over bodies of water. Limitations on methods and quantity of brine used on road surfaces are intended to minimize runoff of brine, and the proposed conditions on production brine use in the final regulations are appropriately tailored to allow the beneficial use of brine while minimizing potential impacts. Use of conventional de-icing or dust control agents is fraught with the same or greater concern to minimize runoff and impact of the chemicals on waterways (examples include elevated phosphorus present in some organic enhancers such as brewery waste or beet juice mixed with de-icing salts). To the extent the commenter suggests the use of excess salt for de-icing and dust control is the equivalent of discharging sewage treatment effluent into a wetland, the comment is noted. Available data indicates that statements such as these are without a factual basis.

360.12(f)(3)(viii)
Comment: The adjustments to this section are important changes, given that the constituents of oil and gas wastes vary by well and over time. In order to be perfectly clear, and for the sake of consistency, proposed Part 360.12(f)(3)(viii) should specify that annual samples should also be obtained at a point of use.

Response: The requirement specifies that the samples must be representative. The provision has been revised to include that analysis includes prior to use.

360.12(f)(3)(ix)
Comment: Commenters asked for more detailed information to be included in annual reporting. Others expressed concern that the Department is overly reliant on the petitions and reports submitted and is not able to verify the information or identify non-compliance.

Response: The Department has determined reporting requirements in the final regulations are sufficiently detailed. If BUD holders want to make any change to the information submitted in the initial petition (for example, to add additional roads for treatment), the holders must request the Department specifically modify the BUD with

these changes. The Department relies in every program on reporting as a tool, but not the only tool, for tracking compliance. Enforcement related to the Waste Transporter program has helped ensure compliance with brine use BUDs.

360.12(f)(3)(i)
Comment: The prohibition against use of production brine from the Marcellus Shale has no sound technical justification and is arbitrary. Furthermore, it will burden interstate commerce by preventing the use of production brine from other states in New York, a probable violation of the U.S Constitution Commerce Clause.

Response: The Department has technical justification for its prohibition on Marcellus Shale brine and no direct intention to prohibit material from other states; conventional well brine from other states is not prohibited. There is therefore no preference to products placed in commerce based on the state in which a product originates. Marcellus Shale brine is known to contain naturally occurring radiological constituents, and is of poor quality for road treatment use due to the presence of excessive, non-beneficial mineral constituents.

360.12(f)(3)
Comment: Specific application rates must be defined for spreading oil and gas storage brine on roadways.

Response: The Department will not specify application rates in the final regulations, since these will vary depending on the width of road and other factors. Rather, the Department has specified other application practices for dust control and that de-icing use be consistent with NYSDOT practices.

Part 360.12(f)(3)(ii)
Comment: We continue to be concerned regarding the Department's use of the term "plugging fluids" in this rule and which has not been included in 360.2(b) Definitions. The term "plugging fluids" is not in common use within the oil and gas industry, and will be subject to varying, and potentially inappropriate, interpretations if left undefined. Also, any regulatory requirements specific to drilling fluids, flowback water (which is defined at § 360.2(b)(89) as separate from production brine), and plugging fluids should not be hidden within a regulatory section where both the Title and Applicability statement indicate that it addresses only gas storage brine and production brine.

Response: The Department agrees that the use of plugging fluids is not appropriate since there are no produced fluids associated with the plugging process. It is also impractical to imply that once a well is plugged there will be any associated fluids produced by a well that would either exist or be available for beneficial use. Therefore, the reference to plugging fluids was removed in the revised regulations.

Part 360.12(f)(3)(iii)

Comment: The Criteria specified for Barium of < 1.0 mg/l is unnecessarily and inappropriately low, particularly given that Calcium, Sodium, and Chloride will be > 20,000 mg/l, > 40,000 mg/l, and > 80,000 mg/l respectively. The commenter recommends that the Barium Criteria be increased to at least 350 mg/l, which would be consistent with the soil clean-up concentrations in §375-6.8 for both Unrestricted and Residential use, and also consistent with §360.12(d)(3)(vi) for use of materials on land. The regulatory requirements specified throughout §360.12(f) to ensure safe and environmentally sound handling and management of brine based on other constituents are more than adequate to ensure Barium concentrations well above the proposed 1.0 mg/l are also properly managed. As a comparator, even the EPA hazardous waste determination threshold for barium is 100 mg/L as identified by the Toxicity Characteristic Leaching Procedure (TCLP).

Response: The Department has based the barium limit on modeling of potential impact of barium to surface and groundwater near roads. Barium migration to surface and groundwater is limited due to potential human health impacts from drinking water with barium present.

Part 360.12(f)(3)(iii)-(xi)
Comment: As currently drafted, §360.12(f)(3) contains two subparagraphs numbered "(iii)," which appears to be an inadvertent duplication. The second paragraph (iii) should be renumbered (iv), and the following paragraphs similarly renumbered in sequence.

Response: This numbering has been corrected in the final regulations.

Part 360.12(f)(3)(x)
Comment: Paragraph §360.12(f)(3)(x) [which reads "The Department will determine in writing, on a case-specific basis, whether the petition constitutes a beneficial use, based on requirements described in this section and subdivision 360.12(d) of this Part"] should be removed from §360.12(f)(3), which deals with "conditions for brine use," and should be moved to § 360.12(f)(2) dealing with petitions, as paragraph § 360.12(f)(2)(viii). This paragraph deals with the petition process and the Department's determination regarding the petition, and does not address any conditions of brine use, so it would be more appropriately located in § 360.12(f)(2) dealing with petitions rather than in § 360.12(f)(3) which addresses conditions of use.

Response: The Department agrees and has made this change.

360.13 Special requirements for pre-determined beneficial use of fill material

360.13 General
Comment: This has been expanded on to the point that it is a brand new regulation, not a revised version of the historic fill section.

Response: The Department acknowledges having made significant changes to this section, in response to concerns expressed during the comment period for the March 2016 Proposed Part 360. These concerns went beyond management of historic fill to concerns about the transfer and reuse of soils of all types. Finding "historic fill" to be too narrow a definition and designation of material of concern, the Department has removed "historic fill" from 360.2 and replaced it with "Fill Material", with further types of material (General, Restricted-Use and Limited-Use Fill) and consolidated all pre-determined beneficial uses of soil and other material as fill into the current Section 360.13. It must be emphasized that this section expands on self-implementing, pre-determined reuse of soil and fill material and does not prohibit soil reuse with a case-specific beneficial use determination pursuant to 360.12(d).

360.13 General
Comment: Commenters frequently asked for clarification of requirements in this section, or that the Department would reword or add wording to various requirements to emphasize their applicability to certain materials or activities.

Response: The Department, where noted below, has reworded conflicting or unclear requirements in this section. However, wording has not been added where the Department has deemed requirements to be clear and in fact, commenters themselves could state specific requirements or exclusions. Another clarification that was frequently requested is that criteria and protocols apply in this section only to self-implementing, pre-determined beneficial uses of fill material. Persons who manage soils can always petition for case-specific BUD pursuant to 360.12(d) for unique circumstances such as materials that cannot meet criteria, or when a reduced number of samples is requested. As an alternative to characterization and reuse pursuant to this section, entities can direct soil to a facility authorized by the Department.

360.13 General
Comment: This section should be renamed and revised to clarify that the proposed uses described in the section constitute predetermined BUDs and that they do not preclude case-specific BUDs.

Response: Agreed. The title of section 360.13 and the applicability have been reworded.

360.13 General
Comment: Regulation of the excavation and movement of soil under Solid Waste regulations is duplicative of Department SPDES regulation of stormwater discharges from construction activity – and they are unnecessary.

Response: Stormwater discharge regulations are different than regulations governing the movement of soil within and from excavation activities. Stormwater regulations are meant to control the impact of precipitation and runoff from construction sites. Fill

material regulations under Part 360 are needed to control the movement of soil that may contain chemical or physical contaminants.

360.13 General
Comment: This section is over-reaching and attempts to establish jurisdiction over materials DEC has not regulated before, especially clean soils.

Response: Section 360.13 provides pre-determined beneficial use criteria for fill material. Section 360.13 does not regulate fill sent to processing facilities and does not regulate clean soils generated in New York State but outside New York City. The section was developed to address a limited universe of potentially problematic fill material.

360.13 General
Comment: The Department undermines its authority by trying to make the fill approvals self-implementing; this will not stop "bad actors" from misusing contaminated soils as fill, but rather adds a burden to law-abiding contractors that will especially hurt upstate contractors and small-businesses. The cost impact of these new fill regulations is not adequately evaluated in the support documents for the Proposed Part 360. Cost impacts have not been planned in consideration of the burden of complying with fill management requirements from other jurisdictions (local, state and federal).

Response: The handling of soils assumed to be uncontaminated has always been self-implementing, it has usually been up to the contractor to make the call that testing and special handling were required. It has been, and will continue to be, the Department's responsibility to enforce the regulations and keep bad actors from misusing contaminated soils as fill. Regarding upstate contractors, the regulations only affects those fills that qualify as limited-use or restricted-use.

360.13 General
Comment: If downstate fill management is the problem, why apply this proposed regulation statewide rather than targeting downstate?

Response: Problems with fill material management in New York City, on Long Island and in the lower Hudson Valley, did drive the development of regulations in this section, but fill material can presents problems everywhere in New York State, especially in upstate areas near cities and current or former industrial centers. Brownfields and Superfund regulations address some, but not all, potentially contaminated fill upstate that may be relocated to inappropriate sites.

360.13 General
Comment: The Department is not staffed or prepared to process the notifications and other paperwork that will be created by this regulation.

Response: The Department has reviewed its resources and is prepared to administer these regulations and to enforce compliance.

360.13 General
Comment: Can road maintenance and reconstruction be exempted from these regulations?

Response: This section only applies to fill material that would be brought directly to a road project or fill generated by the road project that it used directly on another site. It does not govern concrete or asphalt generated during the road work. Material that remains on-site at the road project is provided an exemption. The regulation of fill material received or leaving the road project is dependent on the quality of the fill and where it is generated, as outlined in the section.

360.13 General and 360.2(b)(102)
Comment: "Fill material" is defined in 360.2, but not General Fill, Restricted-Use Fill or Limited-Use Fill. These terms therefore are unclear. Does General Fill apply to any material that is not subject to characterization? To what extent do these categories apply to fill used on the same site?

Response: Definitions have been added to 360.2(b) for the three types of fill. It is correct that any material generated outside of the City of New York that is not required to be sampled and analyzed can be used without restriction. An exemption is included for on-site use anywhere in New York State.

360.13(a)
Comment: This regulation tries to enforce Part 364 requirements on BUD provisions for some types of fill material by moving the point of solid waste cessation beyond the point at which the materials have been transported. Although the provisions may be acceptable, compliance with Part 364 is more appropriately addressed in Part 364, and the burden of complying transportation requirements should be on Part 364 transporters, rather than broadly on any regulated entity that obtains a BUD.

Response: Fill materials which require any kind of tracking should be the responsibility of the BUD holder, whether the generator or the recipient, as well as the transporter. Hence the applicable fill types do not cease being regulated as solid waste until they reach an appropriate place of use.

360.13(a)
Comment: Is fill material also considered a construction & demolition debris? Can fill material be managed at the C&D debris processing facility or does this section only intend direct haul of fill material?

Response: Fill material, though having its own definition, does constitute a component of C&D debris as defined in 360.2(b). Fill material management facilities are included in

Subpart 361-5, C&D Debris Handling and Recovery Facilities. Yes, fill material can be managed at a 361-5 authorized facility. The requirements in Section 360.13 apply only to direct transportation of fill material to end-use sites.

360.13(a)
Comment: Many permitted mine sites in New York have conditions within their mine permits or, other written approvals, to import clean RUCARBS into their mines for use as backfill for reclamation. This section appears to only apply to fill generated by an excavation activity as opposed to clean RUCARBS being imported to a site and reused as reclamation backfill. It is unclear, however, whether mine sites will be allowed to continue to import clean RUCARBS for use in reclamation. Also, it is not clear as to whether mine reclamation will be allowed under the "Beneficial Use of Fill Material" provisions of this section. The regulations should specifically clarify the "exemption" for the beneficial use of clean RUCARBS for mine reclamation and what, if any, specific requirements apply.

Response: Requirements of this section will apply only to entities who wish to place fill material directly transported from an excavation. Recognizable concrete, masonry products, brick and rock importation to mines, or aggregate or residue from processing of these materials, are addressed in Section 360.12 and in Subpart 363-2.

360.13(a)
Comment: This subdivision should clarify whether these regulations will apply to fill material originating from out of state. One commenter expressed concern that contractors generating fill material in surrounding states or provinces with more stringent testing or use requirements might take advantage of New York's pre-determined beneficial use requirements to import fill material without having performed characterization, if required, at the point of generation. Another commenter expressed concern the rules could be used to allow importation of drill cuttings or other soil-like waste from oil and gas development.

Response: Fill material excavated from outside the New York City that a generator intends to reuse in the State may be reused by complying with the pre-determined beneficial use determination provided in section 360.13. The revised regulations make a distinction between fill material generated in New York City and outside of New York City based on the history of fill material composition in urban soils but does not distinguish between fill material excavated in or out of State. Therefore, fill material generated out-of-state would fall into the same classification as fill material generated outside of New York City should a generator intend to reuse fill material in State. The fill material would be subject to the same criteria in 360.13 as material generated in the State from the pre-determined beneficial uses allowed pursuant to this section. The notification requirement in 360.13(j) for New York City includes imported material and will help to alert the Department of material from out-of-state sent to the City. Drill cuttings from oil and gas development are not fill material pursuant to the definition of fill material, but rather are Drilling and Production Waste as defined in subdivision

360.2(b), and hence are not allowed as fill under these predetermined uses. For both out-of-state fill material and for drill cuttings to be used in New York State as fill, these materials would require case-specific BUDs pursuant to subdivision 360.12(d).

360.13(a)
Comment: The New York City Clean Soil Bank and other successful soil reuse programs should be exempted from 360.13 requirements, some of which conflict with these programs and would hinder them, for example that materials do not cease being solid wastes until placement.

Response: Although the final regulations do not include an exemption for soil reuse programs, case-specific BUDs and MOUs can be developed with municipal entities who have soil management programs.

360.13(a)
Comment: The commenter applauds the Department establishing that clean soil ceases to be regulated as solid waste upon documenting that it is clean at the point of generation – but why is this waste exclusion not fully extended to soils generated within New York City? This discrimination is legally untenable.

Response: The Department has observed that many incidents of illegal fill disposal arise from materials originating in New York City, for this reason additional sampling, transport and notification requirements have been imposed on materials generated there.

360.13(b)
Comment: Can the meaning/intent of "on-site" be extended to all property owned by or under control of a utility company, similar to the meaning of the on-site exemptions in 360.14(b)(1)? The commenter requests clarification that control includes control of property by virtue of the utility's franchise agreement with a municipality that authorizes the utility's presence within the right-of-way.

Response: The definition of "on-site" cannot be altered from its definition in 360.2(b)(184) [now 360.2(b)(183)] as requested by the commenter, but entities such as a utility company could petition for case-specific BUDs for projects, or broader uses of materials, that do not conform to the restrictions of this or other predetermined beneficial uses in 360.13. The revised definition, which has not been modified in the final regulation, does however consider noncontiguous properties connected by a right-of-way to be "on-site."

360.13(b)
Comment: For determining use of fill material on the same site, can "similar" characteristics be determined using professional judgment that includes knowledge of prior site history of contamination, presence or absence of odors or visual signs of

contamination? If there is no evidence of contamination, is the fill material suitable for use on-site without testing?

Response: Yes, the expectation is for generators to use professional judgment in determining what constitutes similar characteristics. The commenter is also correct that no testing is necessary if excavated fill will be reused on-site.

360.13(b)
Comment: To require characterization pursuant to 360.13(c) into categories of Restricted-Use or Limited-Use Fill and especially comparison of “chemical characteristics” seems to run counter to the intent of this subdivision to exempt the activity of fill material relocation within the same site.

Response: The Department agrees that, as written, the revised regulations did not make clear whether fill intended to be reused on-site must be tested before placement. In response to this comment, this subdivision has been modified to more clearly reflect the intent to allow visually contaminated material on the same site in areas of similar-appearing material while avoiding impacts to public health and the environment.

360.13(b)
Comment: This definition seems to contradict the definition of "fill material" under 360.2(b)(l09); specifically, if one is reusing material on-site, then how can it be "excess to the needs of" the project? If it is not "excess," then it cannot be "fill material" under 360.2(b)(109) and, presumably, is unregulated.

Response: The Department agrees this discrepancy exists and has removed the phrase “excess to the needs of the project” from the definition of fill material in 360.2(b)(109). The intent in subdivision 360.13(b) is to confirm that materials moved within the boundaries of a project site are not subject to Department regulation while noting limits to this exemption.

360.13(b)
Comment: Regarding “similar physical characteristics” and “similar chemical characteristics”, these terms seem to be used interchangeably in this section, even though they have very different meanings. We urge NYSDEC to develop a uniform interpretation of these terms throughout the state so that these provisions can be understood and consistently implemented by both the regulated community and by NYSDEC staff. It is also notable that this sub-section will require a different and stricter standard for onsite reuse of RUF and LUF than is established for reuse on other properties because Table 2 does not apply the physical and chemical similarity standard included here.

Response: The requirement for “similar chemical characteristics” has been removed. “Similar physical characteristics” has not been removed since this similarity can be left

to the judgment of the site owner or contractor, based on factors such as named in the second sentence (historical or visual evidence or odors).

360.13(c)
Comment: Is generator knowledge adequate to judge a fill material without laboratory analysis, even if from an urban site or commercial-use property?

Response: Generator knowledge can determine (for material generated in New York State but outside the City of New York) whether material has been impacted by a chemical or petroleum spill or previous use of the site and through observation of staining or non-soil particles in fill material except for industrial sites and sites with historical records of contamination. If contamination is known or suspected, laboratory analysis is required pursuant to determine if the material is General Fill, Restricted-Use or Limited-Use Fill.

360.13(c)
Comment: Does this rule set characterization responsibility at the point of the site of reuse, or at the point of generation?

Response: Characterization for use under one of the predetermined fill types (use categories) is *de facto* at the point of generation for materials being direct-hauled to a reuse site. Otherwise, characterization is the responsibility of a fill material processing facility.

360.13(c)(2)
Comment: If this provision is part of the final regulation, it should clarify whether fill leaving the state would be subject to this requirement.

Response: This section only applies to material managed in New York State. Material intended to leave the state is only subject to Part 364, to the extent that a transporter conducts regulated activities in state.

360.13(c)(2)
Comment: The requirement to characterize more than 10 cubic yards per project in New York City will present a logistical nightmare for small contractors, and for larger contractors with many small excavation projects (e.g., utility companies). Work cannot be held up while materials await laboratory results and characterization into a fill type before shipment. Staging excavated materials on the site pending characterization may also result in violation of City work permits. In New York City, excavated materials are normally immediately transported to a DEC-authorized, City-designated facility. Excavating the material and moving it to a temporary off-site location for testing is not an option because the proposed rules specifically require the material to be analyzed and notification sent to the Department before any material is moved. Can entities such as utilities be exempted from this regulation? Note that utility companies follow in-house protocols to evaluate soils for proper processing or disposal before projects start.

Response: The clarification that this section does not apply to fill material that is delivered to a processing facility regulated by Subpart 361-5 will alleviate many of the issues raised. In other cases, compliance with the criteria in the section or petitioning for a case-specific beneficial use determination are possibilities.

360.13(c)(2)
Comment: Several organizations, public and private, stated they have detailed protocols for the assessment of materials in planned excavations, such as the researching of site histories and past spill events, prior to beginning work. These organizations asked whether the Department would accept these protocols as being adequate to rule out the need for sampling and analysis (characterization) as required in 360.13(d).

Response: This section only applies to the direct use of fill material as outlined. If sampling and analysis is required, it must, at a minimum, follow the protocol outlined.

360.12(c)(2)
Comment: Please clarify that a, " ... history of reported spill events," including only minor spills that did not result in any significant soil contamination (i.e., traffic accidents, leaking pole transformers, etc.), would not trigger the characterization requirement, per 360.13(c)(2)(i)(b) and (c)(2)(ii).

Response: The Department's intent is that spills reported to DEC would be included in this assessment.

360.13(c)(2)(iii)
Comment: The term "industrial land use" indicates that only current land use is to be considered. This provision should be expanded to include historical land use and commercial land use as well as if land was used for chemical or petroleum storage, or other raw or waste materials were managed or stored on site. This section should also apply if, during excavation, visual indication of chemical or physical contamination is discovered.

Response: The provision also includes other indications of contamination as well as the industrial use of the site so these other actions on the site should be included.

360.13(c)(2)(iv)
Comment: The paragraph needs to be clear as to who can make these determinations. Is it the NYSDEC's intent to require a qualified environmental professional onsite during excavation? Do all excavations need to be certified by an environmental professional?

Response: Certification by a QEP is only necessary when sampling is required. The QEP takes responsibility that all sampling and analyses were done properly.

360.13(c)(2)(iv)
Comment: Table 2 requires chemical testing, whereas 360.13(c)(2)(iv) makes clear that chemical testing is only required if there is visual or physical evidence or contamination. This is contradictory and very problematic when fill is placed into commerce.

Response: The language in the section was revised to make it clear that not all material requires sampling and that some fill material does not have restrictions on use.

360.13(c)(3)
Comment: The sampling protocols for material leaving a 361-5 facility need to be created. The current language instructs a 361-5 facility to collect samples in accordance with 360.13(d), but this protocol is not workable for a facility where material from multiple sources will be received and processed in a continuous versus a batch or one-time manner from a single source.

Response: The sampling and analysis criteria in Subpart 361-5 have been revised for clarity to address the continuous nature of these facilities.

360.13(c)(3)
Comment: This section should not require characterization of materials before they are transported to a Department-authorized facility.

Response: The Department did not intend in this paragraph to imply that characterization is required before transport to an authorized facility. Fill material does not require characterization before transport to the facility and requirements for characterization at a facility are addressed in Subpart 361-5.

360.13(d)
Comment: Delay due to lab return results will impact construction schedules especially if done as work progresses – can pre excavation sampling be used?

Response: Yes, in-situ cores or test pits can be acceptable for characterization sampling if representative.

360.13(d)
Comment: QEPs are not needed for small scale projects. Less qualified individuals meeting several other accreditations, or following recognized industry protocols for site assessments and sampling, could accomplish an adequate level of certification for many fill management projects.

Response: QEPs are needed for certification of characterization for the predetermined Fill Types. An entity can request review of soil reuse under a case-specific BUD for deviation from any requirements in this subdivision.

360.13(d)
Comment: Sampling should only be for obviously contaminated materials, not for materials now recycled under current 360. Such materials should be sent directly to a facility intended for these materials and the facility be tasked with characterization.

Response: Sampling is only required for direct use of fill material under certain circumstances. Most material currently recycled in the most affected area, New York City, is currently sent to fill material processing facilities, and would not be required to be sampled.

360.13(d)
Comment: At what point do "distinctly different materials" need separate characterization (minimum volume of different material)

Response: This phrase has been deleted. The QEP must ensure that the sampling is representative.

360.13(d)
Comment: Is DEC approval required for sampling plans?

Response: No. However, please note that this subdivision has been renumbered.

360.13(d), Table 1
Comment: Commenters remarked on the minimum frequency of sampling in Table 1. One stated the sampling frequency is more stringent than previously accepted frequency of 0-500 CY, 501-1000 CY which should be continued. Another recommended the Department set a more stringent frequency, pointing to other states with stricter protocols, and let a QEP make the determination to reduce the frequency.

Response: No frequency has previously been specified or generally accepted by the Department for sampling of materials for reuse as suggested by the commenter. Table 1 provides a frequency similar to the Department's Environmental Remediation program for imported fill for smaller quantities and reduces this frequency for higher quantities of fill material. A QEP should require more samples if visually different materials are observed.

360.13(d)(2)
Comment: NYSDEC should provide the specifics as to when it would require a sieve analysis because this requirement would increase bid prices significantly. NYSDEC should also clarify under what circumstances sieve analysis would be "as required by the Department." As this provision is in the "chemical testing" section, NYSDEC should also make clear whether "contamination" in this part refers to non-chemical contaminants, such as wood.

Response: The provision has been clarified to state that the volume of physical contaminants is done by visual observation.

360.13(d)(2)
Comment: Require VOCs for all commercial and industrial sites or if underground storage tanks are present.

Response: The Department believes the conditions for VOC sampling in this paragraph (site history, odors or field instrument readings) are sufficient.

360.13(d)(4)
Comment: NYSDEC should clarify whether this request would be a case-specific petition or, rather, a short version of a petition that would allow reuse without the full BUD petition.

Response: The request noted here would require a full BUD petition.

360.13(b) & (d)(2)
Comment: These revisions add the requirement for asbestos sampling at sites where building demolition has occurred. The proposed asbestos content threshold for such material, to be used as Restricted or Limited Use Fill, is “Non-Detectable.” The test method for asbestos is not prescribed, and typically asbestos containing materials (ACM) are regulated for disposal at a 1% concentration. While the regulations regarding asbestos are extensive, the requirement for a non-detectable concentration may unnecessarily remove fill material from reuse under this proposed regulation because of incidental fibers deposited from an off-site or non-demolition related source. There are numerous potential area sources of asbestos (e.g., such as a historic component of brake pads), and it is a naturally occurring fiber. Fibers present in materials from these sources are not generally deemed by regulators to pose an unacceptable risk to human health and the environment. As a result, significant quantities of potential BUD materials in urban areas could be disqualified from a beneficial reuse without a corresponding benefit or the
potential of an unacceptable risk. We recommend that if the provision for asbestos testing is included it should be a risk-based approach to identify acceptable levels of asbestos, corresponding to levels established under existing statutes and considering background concentrations of asbestos observed in urban areas.

Response: Soil with any detection of asbestos is potentially ACM and must be evaluated by the Department for any beneficial use pursuant to a case-specific BUD.

360.13(d)
Comment: Statistical analysis is allowed for Navigational Dredged Material (NDM) to demonstrate compliance with SCOs and Protection of Groundwater (PGW) criteria. We request consideration that a similar statistical approach be allowed for fill material characterization by the QEP, and provisions to request reduced sampling and analyses.

Response: Statistical analysis for fill material results may be appropriate, but in general, too few results will be required or obtained to conduct a statistical analysis. Since these characterization protocols support a self-implementing, predetermined use, if an entity wants to deviate from them, case-specific Department review and determination will be necessary pursuant to 360.12(d).

360.13(e)
Comment: Comments recommended additional restrictions on fill material reuse, such as limiting use to a designated distance from the generation point; pre-designated zones on maps where various types of fill are allowed or prohibited; and best management practices such as erosion controls, buffers around water bodies or water-supply wells.

Response: The Department considered limiting haul distance, but distance is less a factor in fill movement, and discouraging misuse, than haul cost. Many best management practices mentioned by commenters are covered in other Department regulations such as for stormwater control and wetlands protection.

360.13(e), Table 2
Comment: Does General Fill always require testing?

Response: No – only in circumstances outlined in this section. The language of the section has been clarified to eliminate confusion concerning what activities are covered.

360.13(e), Table 2
Comment: The Department should clarify in Table 2 that, when the BaP Equivalent is utilized, the criteria found in Part 375-6.S(b) for the individual PAHs that are used in the calculation are inapplicable. As currently drafted, it is unclear to a regulated individual whether or not the materials must meet BaP Equivalents, in addition to unmodified Part 375-6.8(b) criteria for individual PAHs.

Response: The criteria for Restricted-Use Fill and Limited-Use Fill have been reworded to clarify when General Fill criteria can be exceeded for applicable parameters. Individual Protection of Groundwater SCOs must still be met for PAHs for Restricted-Fill use in Nassau and Suffolk counties.

360.13(e), Table 2, footnote
Comment: This section should be revised to allow use of restricted-use and limited-use fill greater than 30 days after arrival at the project site subject to DEC approval (i.e., add the following to the end of the provision: "unless DEC approves of use later than 30 days after arrival at the project site"). To ensure that material is eventually used, DEC can then require the prospective user to purchase of a bond.

Response: The Department believes the 30-day deadline to place these materials in their final location of use is not unreasonable. Deviation from this timeframe can be approved through a case-specific BUD for the project, with justification.

360.13(e), Table 2
Comment: General fill can't be used on undeveloped land or agricultural crop land? Does this mean a landowner can't take material to smooth over bad spots in his property so that he could develop it? Or that a farmer can't take suitable material to fill in low spots in a field? There aren't very many locations where it's possible to get rid of material that don't fall in to one of those two categories? And what is a landowner wants to create a level spot for future development? Forcing them to purchase gravel is excessive and cost prohibitive, and would cause increases in the cost of gravel for those people that truly need it, such as for roads, buildings and parking lots.

Response: The restrictions apply to material that is required to be sampled and qualifies as General Fill. Material that does not have to sampled is not subject to the use restrictions mentioned. If a landowner does wish to accept a material meeting General Fill criteria, the landowner could petition for a case-specific BUD.

360.13(e), Table 2
Comment: These PAH criteria should await EPA's proposed changes to toxicity factors for PAHs.

Response: Comment noted; as changes to soil cleanup objectives are promulgated, these will be incorporated into this section.

360.13(e), Table 2
Comment: Why must materials in Nassau and Suffolk Counties meet Part 375 Protection of Groundwater SCOs?

Response: This requirement is based on the restriction of waste disposal in these counties in the Long Island Landfill Law (ECL 27-0704) and the Department's interpretation that attaining the Protection of Groundwater SCO will fulfill the definition of "inert material as determined by the Commissioner".

360.13(e), Table 2
Comment: The requirement that Restricted-Use and Limited-Use Fill be placed above water table should be amended to exempt material intended for use in structural resiliency projects on the coastline. Otherwise, this rule would stifle post-Sandy coastal resiliency projects and similar climate change adaptation efforts.

Response: A case-specific BUD could be developed, if necessary, to allow this specialized beneficial use of Restricted-Use and Limited-Use Fill. However, the restriction to above the seasonal high water table is not intended to mean material cannot be placed in a flood zone, or below a flood elevation.

360.13(e), Table 2
Comment: The criteria for all three types of fill in this table conflict with the objective of preventing water quality impacts in the New York City Watershed. The 6 NYCRR Part 375 soil cleanup objectives are higher than natural background in the watershed and soils allowed under these rules will introduce contamination to less-contaminated areas. One of the most basic principles of environmental protection is "anti-degradation." If land and water are clean, they should remain so and regulations should be designed to ensure that outcome. Unfortunately, the proposed beneficial uses of fill material, however well-intentioned, do the opposite; they encourage the export of contaminated fill material excavated in the New York City metropolitan area and disposal of it in the relatively pristine New York City Watershed.

Furthermore, the allowance for up to 40% non-soil material and up to 100% non-soil material in Restricted-Use Fill and Limited-Use Fill, respectively, could result in releases from materials such as gypsum wallboard or coal combustion ash. These rules conflict with NYC DEP regulations for placement of construction and demolition debris in the Watershed, and also conflict with State Public Health Law.

Response: Beneficial use determinations made pursuant to 360.13 are intended to address the suitability of reusing material that would otherwise be regulated as a solid waste. BUDs granted by the Department do not provide the BUD holder with any right to violate any other state, federal or local laws or regulations. Therefore, enforcement of the Public Health Law or NYC DEP regulations should not be impeded or affected by determinations made pursuant to 360.13. As to the concern raised in the comment about non-soil materials, the definition of fill material in 360.2(b) indicates the fill material is soil and similar material. Wallboard is not similar to soil. Nevertheless, to make this more clear, the Department has added the term "inert" to "non-soil material" with an explanatory footnote noting potentially reactive (though non-putrescible) materials such as gypsum wallboard will be excluded. With regard to SCO criteria for General Fill: Anti-degradation is one principle of beneficial use of a material on the land, but so is similarity to commercially-available, non-waste products. The Department acknowledges the General Fill criteria will often exceed local background for soils, but they reflect maximum concentrations of constituents in typical construction fill that is presently regarded as uncontaminated. Furthermore, these criteria are protective of public health and groundwater quality, when these materials are used as specified in Table 2.

360.13(e), Table 2
Comment: Examples or better description of what constitutes acceptable "non-putrescible, non-soil material" are needed. Do these materials fit into the definition of fill material in 360-2(b)(109) for "soil and similar material"?

Response: The term "inert" has been added to "non-putrescible, non-soil material". "Inert" is not identical to "inert material" as defined in 360.2(b) but is explained in the

added footnote. For purposes of fill material, materials "similar" to soil will exhibit geotechnical or engineering properties when put in place that are adequate for the needs of a project. They will be durable, incompressible, non-degradable materials.

360.13(e), Table 2
Comment: Many commenters objected to use of the 6 NYCRR 375-6 soil cleanup objectives in this proposed regulation as being too stringent or not stringent enough, and fundamentally being inappropriate as they are cleanup standards, not reuse criteria.

Response: No soil criteria exist for beneficial use of soils in New York State. Therefore, at present, the determination of whether soil is uncontaminated is largely left to the discretion of the generator. The Part 375 criteria, while developed for the Superfund and Brownfields cleanup programs, are intended to be protective of public health in various land-use scenarios or protective of groundwater when materials are placed above the seasonal high water table. Unrestricted-Use SCOs, while based on rural background statewide, would frequently prohibit reuse of materials that are now commonly reused on construction sites as uncontaminated fill, including many native soils that exceed Rural State Background. With the restrictions included in the predetermined BUDs of Section 360.13, the Department believes the SCOs are protective of public health and the environment while allowing reuse of fill on construction projects.

360.13(e), Table 2
Comment: Allowable non-soil constituents in general fill should include masonry, concrete, and other materials traditionally considered "exempt" C&D debris. At least a de minimus allowance should be stated in criteria for General Fill.

Response: Masonry and concrete typically included in excavated soils are typically not recognizable, and should be sampled for beneficial use. Masonry and concrete that are recognizable have their own pre-determined BUD for use as aggregate in 360.12(c)(3).

360.13(e) Table 2
Comment: Commenters remarked the 40 percent limit for Restricted-Use Fill non-soil content appears arbitrary and without technical basis. Some objected that a value of 10 to 20 percent is more consistent with mapped urban ("historic") mixtures of ash and soil. Others asked why the percentage could not be higher, provided the non-soil content was inert and analytical results met chemical criteria. Still others requested a by-weight basis as being easier to measure than a by-volume basis. Others asked if the percentage applies across an entire site or must pockets of higher-percentage material be addressed separately?

Response: The 40 percent limit for inert, non-putrescible non-soil material is the basis for this self-implementing fill use determination. Ten to 20 percent are typically used as the minimum to indicate human involvement. Forty percent recognizes that human impact is acceptable but larger percentages may limit the engineering properties of the

fill for the uses specified for restricted-use fill. Entities can request use of materials of differing characteristics under a case-specific BUD (360.12(d)). A volumetric basis addresses non-soil contaminants of low density.

360.13(e), Table 2
Comment: "Transportation Corridor" should be defined.

Response: A definition of this term has been added to 360.2(b).

360.13(e) Table 2 and 360.13(h)
Comment: Table 2 provides detail on how fill may be re-used and paragraph 13(h) requires entities to maintain records for at least 3 years; however, in the case of limited-use fill, it appears that fill material meeting the Part 375 SCO metals criteria for Commercial Use may be utilized under any foundation and/or pavement regardless of zoning. NYSDEC should identify the protective measures it will institute for fill placed in areas zoned residential, such as a deed notice be required for fill movement/handling if a structure or paved area is redeveloped, renovated or modified.

Response: Placement of Limited-Use Fill is only allowed on projects with a local building permit or municipal authorization. A deed notice can be required by the municipality, if appropriate.

Comment: The restriction on placement of General Fill on "undeveloped land" will hamper its use on vacant undeveloped properties in New York City through the NYC Clean Soil Bank or other programs.

Response: A definition of undeveloped land has been added to 360.2(b) for clarity.

360.13(e) Table 2
Comment: Laboratory reporting limits present problems when they exceed criteria.

Response: The Department agrees, but points out the QEP's role will be to interpret unclear findings of fill characterization.

360.13(e) Table 2
Comment: Native material can exceed General Fill criteria.

Response: The Department acknowledges this concern. General Fill criteria are above Rural State Background as defined in Part 375, so this problem should be limited. If it occurs, the Department will review a case-specific BUD petition for this material.

360.13(e) Table 2
Comment: The Fill End Use criteria for Restricted-Use Fill include "or on sites where in-situ materials exceed . . ." As discussed above, more guidance is needed to make sure that the intent of this regulation is properly understood and implemented by both

the private sector and NYSDEC and that NYSDEC implements this provision equally in different parts of the state (or defines how this will be implemented differently).

Response: Taking place pursuant to this predetermined BUD, the placement of Restricted-Use Fill will be self-implementing and subject to the judgment of the generator and recipient.

360.13(e) Table 2
Comment: The new Restricted-Use and Limited-Use Fill categories will provide materials at low cost or no cost that previously were disposed. This may have unintended consequences, including allowing out-of-state materials to be imported to NYS sites, especially when the state where material is generated has more stringent criteria for use. This may especially happen with PAH-containing fill material. NYS may become a dumping ground for these materials.

Response: This concern is noted; however, the requirement that Restricted-Use and Limited-Use Fill must be used in a project approved under a local building permit or other municipal authorization, will help ensure legitimate reuse rather than disposal of these materials.

360.13(e), Table 2
Comment: Please clarify whether metals background levels should also be considered for General and Restricted Fill comparisons?

Response: With regard to General Fill, determining site-specific background would require sampling of every specific receiving site. With the intent of this regulation to allow pre-determined beneficial use and general sale or distribution of General Fill, the Department has instead chosen a uniform set of criteria, based on protection of public health and protection of groundwater.

360.13(f)
Comment: Several commenters objected to the prohibition on a fee or form of consideration to receive fill material. One commenter asserted since a BUD removes the material from regulation as a solid waste, its placement is not disposal as intended in the prohibition in the ECL for a fee or form of consideration for disposal of C&D debris. Some stated recipients of fill need reimbursement for costs of sampling and monitoring of incoming materials, getting permits and approvals, and to build infrastructure such as haul roads to place fill, and hence need to charge a fee.

Response: The prohibition of profit-making from receipt of some types of fill materials is important to discourage the formation of unpermitted landfills under guise of a BUD. If a material is worthy of beneficial use (an effective substitute for a commercial material), its generator should not have to pay to get rid of it. This does not “demonstrate a legitimate market” for the material. Costs of fill characterization will typically fall on the

generator and the recipient has only to verify that materials meet the type of fill appropriate for the site. Other expenses stated occur with any fill material.

360.13(f)
Comment: The no fee restriction will shut down all facilities as these charge for receipt of materials.

Response: This understanding is incorrect. This prohibition applies to placement of fill on land, (i.e., at its end-use location). Facilities receiving fill material to process and/or store for later use are not prohibited from charging for these services.

360.13(f)
Comment: This prohibition could have the effect of making it illegal for a contractor to lease private land to place excess fill.

Response: The final regulation has been changed to state "beneficial use" in this subdivision in place of "placement". Placement of excess fill such as described by the commenter would not constitute a beneficial use but rather temporary storage of soil, and would not be affected by this prohibition.

360.13(g)
Comment: This section should require that the fill material recipient be provided with the certification report.

Response: The Department has not included this requirement but has required that entities provide the Department with characterization results on request. These records effectively become a public record available to the fill recipient.

360.13(g)
Comment: Commenters expressed concern about the availability of qualified environmental professionals to certify any characterization sampling and analysis needed for fill.

Response: The Department has evaluated this concern and believes taken together with the limited number of projects which will require characterization, the growing number of QEPs will meet the need for those who want to manage fill material pursuant to these predetermined fill types.

360.13(g)
Comment: We are concerned about material being determined "General Fill" which is placed into commerce, and subsequently, on delivery to a site, is tested and found not to meet Table 2 chemical or physical criteria for General Fill. This material should not then be reclassified and possibly rejected. This possible scenario caused by these rules will create uncertainty hindering the reuse of fill, unless the proposed terms can forbid the reclassification of material once deemed "General Fill" especially by a QEP.

Response: The Department does not believe this change is necessary. This section does not require testing of fill material by the recipient or end-user. A more likely scenario is that the recipient asks for documentation of fill characterization by the generator or processing facility and accepts or rejects fill on that basis.

360.13(i)
Comment: This sentence is confusing and inconsistent with Part 364. Part 364- 1.2(e)(l l) states that Part 364 applies to all "fill material generated by commercial or industrial activities" in the entire state, rather than New York City alone. Given this, the sentence in 360.13(i) is potentially misleading and leaves the reader confused as to which provision applies. Moreover, Part 364 only specifies fill material generated by commercial or industrial activities, whereas Part 360.13(i) makes no such specification. This could imply that fill material generated from non-commercial or industrial activities in New York City is also subject to Part 364, which is broader than what is stated in Part 364 itself. If this is the case, the Department must provide an explanation for why this requirement applies to only fill material originating in New York City. The paragraph needs to make clear that a Part 364 permit is not required for hauling fill elsewhere in the State.

Response: Part 364 and section 360.13 are compatible but are not necessarily equivalent in their regulatory oversight. Part 364 can require registration for the transport of fill that is not required to be sampled under 360.13. Part 364 does not focus solely on the beneficial use of fill to determine the need for the transporter to obtain a registration or permit.

360.13(i)
Comment: This subdivision should be modified to state the following: “Limited-use fill or restricted-use fill generated outside of Nassau and Suffolk Counties is prohibited from being transported to any destination within Nassau or Suffolk County, unless the facility has a part 360 permit to handle such materials.”

Response: This subdivision governs an end use site for beneficial use, not a processing or disposal site. Fill material sent to a regulated facility for processing or disposal is not addressed by 360.13

360.13(i)
Comment: The Department should provide an explanation for excluding Nassau and Suffolk Counties from receiving Limited-Use and Restricted-Use material from other counties. Specifically, the Department should explain whether there are issues in Nassau and Suffolk Counties' water tables that are directly associated with fill material. If the Department cannot provide such an explanation, the Department should either furnish another justification or strike out the reference to Nassau and Suffolk Counties.

Response: The Department must word the regulation to be consistent with the Long Island Landfill Law (ECL 27-0704).

360.13(j)
Comment: When it is considered that 15 days advance notification is required in New York City for any transfer of fill material, these timeframes and associated delays add up for transfer to a processing facility, then transfer out of a processing facility to a site of use. Together with sampling and analysis this adds at least one month's delay to fill material movement in the City. The Department should reduce or eliminate the notification requirement. Notification in particular should not be required for materials in New York City that are classified as General Fill.

Response: Notification for all fill material generated, moved, used in or imported to New York City is necessary due to the prevalence of urban fill that does not meet General Fill criteria, and the Department's need to be aware of traffic in fill materials in the City in order to respond to complaints or noncompliance. This requirement, however, has been changed from 15 days to 5 days, and a threshold quantity has been added in the final regulations to provide some relief from the requirements.

360.13(j) and (k)
Comment: Numerous comments were received that the 15-day advance notification of transfers of fill material will frustrate emergency work or, in general, most maintenance and many construction jobs where materials have tight deadlines for removal of excavated materials.

Response: The Department has changed this advance notification from 15 days to 5 days and a threshold quantity has been added.

360.13(l)
Comment: This provision seems to say that any soil-like material that cannot fit into one of the pre-determined Fill Types or that cannot be used under a BUD, even if clean soil, must be treated as contaminated fill requiring Part 364-permitted transport and landfill disposal. The cost consequences of this requirement have not adequately been assessed in the EIS and other supporting documents for this proposed regulation.

Response: The Department has changed the wording of this subdivision to make it clear that materials not used under one of the pre-determined Fill Types is solid waste, not "contaminated fill".

360.14 Exempt facilities

Comment: Withdrawing the proposal to expand the various waste exemptions allowed in 360.14, such as the "State highway and municipally owned transportation corridor

generated construction and debris material," which is justified by "eas[ing] burdens on government agencies and communities when rebuilding our critical infrastructure systems." This is a suspect justification under the Environmental Conservation Law. At a minimum, these facilities should be monitored and evaluated to determine whether the Department's belief that the exemptions will not have "any expected environmental impact" is borne out by experience.

Response: The referenced exemption is located in Part 363 at subdivision 363-2.1(i).

360.14(b)(1)
Comment: Please provide clarification to the general exemption contained in 360.14(b)(1) that control of the site of waste generation includes control conferred by virtue of a franchise agreement with the municipality where the site is located.

Response: The reference to control in the referenced paragraph was meant to cover those locations operated on behalf of a municipality regardless of which entity has a fee interest in the land where the facility is located. With the assumption that a franchise agreement provides a person with the right to operate a site on behalf of the municipality, these situations would be considered under the control of the municipality.

360.14(b)(1)
Comment: Will this exemption for processing and storage on the site of generation or same ownership, in effect exempt municipal highway and maintenance Departments from Part 361 facility regulation for use of RAP and RCA?

Response: The exemption does apply provided the RAP or RCA are generated and stored on a municipal property. Use of the material must comply with the BUD criteria in 360.12.

Part 360.14(b)(1)(vi)
Comment: The DEC proposed revision to § 360.14(b)(1)(vi) would add the word “no” such that the onsite, or same ownership/control, exemption in § 360.14(b)(1) would not apply to “storage of petroleum-contaminated soils for ‘no’ more than 60 days ….” rather than the previous language where the exemption would not apply to “storage of petroleum-contaminated soils for more than 60 days ….,” which seemed to make more sense. We can find no rationale in any of the background documents for this rulemaking to explain why the word “no” is being inserted in this sentence, and disagree with doing so. This sentence at § 360.14(b)(1)(vi) should read “Storage of petroleum-contaminated soils for more than 60 days, unless a longer time period is approved by the Department,” as previously proposed. As previously proposed, storage of petroleum-contaminated soils for more than 60 days would have disallowed use of the onsite or same ownership/control exemption in § 360.14(b)(1), and we understand why DEC may want to limit that exemption in situations of extended storage, such as more than 60 days. However, as revised, the exemption would be disallowed if petroleum-contaminated storage occurs from 1 to 60 days (i.e. “no more than 60 days”), but the

exemption would be allowed for longer periods of storage, which seems to be the reverse of what would be intended.

Response: The final regulations contain a revision to remove the word "no" as originally intended.

360.14(b)(9)
Comment: Under exempt facilities is an allowance for an exempt facility to store less than a 1,000 tires. Are these tires passenger car equivalents as discussed in other section of the regulations? Additionally, there are alternative sections that suggest only 150 tires can be maintained on one site for various incidental uses. Which restriction is applicable?

Response: The referenced provision refers to tires, not passenger tire equivalents. The reference to the 150 tires refers to a pre-determined BUD in 360.12(c)(2)(v) for 150 of fewer tires or tire equivalents at a single site for purposes such as retaining walls, decoration, playground components, bumper guards, manufactured products feedstock, and similar purposes.

360.14(c)(3)(ii)
Comment: The requirement in 360.14(c)(3)(ii) for keeping containers and rolloffs attached to the vehicles
that transported them is too restrictive. There should be allowances for temporary, time-limited, storage of unattached containers, at least at their final disposal destination.

Response: The intent of this provision is to provide limited relief for situations where temporary storage is necessary for activities incidental to transport. Accordingly, the requirements are restrictive.

360.15 Registered facilities, transporters and collection events

Comment: We are concerned that if a municipality has a transfer station on the same site or proximate to their highway Department where they want to store millings or have a yard waste chipping operation that these minor individual operations would require a permit. It is our reading that the proposed regulations and the revised proposal would not require exempt facilities to be incorporated into a permit.

Response: This section limits the number of registrations but does not limit the number of exempt facilities.

Part 360.15(a)(3)
Comment: To avoid an apparent inconsistency between subparagraphs (i) and (ii) of §360.15(a)(3), it appears that § 360.15(a)(3)(i) should begin "Operations of more than two registered facilities" rather than "Operations of two or more facilities" as currently drafted. As drafted, § 360.15(a)(3)(i) says that the operation of two or more facilities

engaged in the same solid waste management activity on the same site, or on geographically contiguous land, by the same person is prohibited, but § 360.15(a)(3)(ii) says that a maximum of two registered facilities similarly engaged is allowed, so there appears to be a discrepancy with regard to whether two such facilities are prohibited or allowed. Changing § 360.15(a)(3)(i) to read "operation of more than two registered facilities …." would seem to resolve that discrepancy and would be consistent with the Regulatory Impact Statement on page 21, where it refers to requiring a permit for "more than two" facilities.

Response: The comment is correct that there was a potential discrepancy between subparagraphs (i) and (ii) of paragraph 360.13(a)(3). The final regulations have been clarified to match the intent of the rule as stated in the regulatory impact statement.

360.15(a)(3)
Comment: The requirements surrounding multiple facilities or multiple registrations places an un-due burden on the small communities and small business of NYS. The solid waste regulations are a very complex set of regulations requiring various waste materials be handled and treated at various types and sizes of facilities. Why would it not make sense for a small processor to be able to place various exempt, registered or permitted facilities on the same parcel of property, as long as the facilities themselves are isolated from each other? Why do the regulations prevent the contractor from owning these facilities at the same site, but situated independently? A mulch facility, a RUCARBS facility and a C&D recovery facility, maybe even couple that with a small land application or disposal facility or an exempt tire storage facility. Why is it necessary for multiple facilities to be placed on multiple pieces of property, when one already impacted site may prove an environmentally sound solution? Additionally, the EIS and other supporting documents make no mention of the impacts this requirement may have on existing or future facilities. The documents make no attempt to discuss the number of facilities where this is occurring or the cost and associated additional environmental impacts to site various solid waste facilities on various parcels of property to accomplish the same outcome, isolation is the key.

Response: The registration provisions do not limit the number of exempt and permitted facilities activities on the same site. The limit on registered facilities is intended to recognize that multiple registered facilities may have environmental impacts that were not envisioned for each registered facility operating in isolation. To qualify for a registration, a facility would have to meet a threshold level of activity, as specified in the proposed and revised regulations. The presumption made under the regulations is that a registered facility, if operated at the level required to meet the threshold, would not have a significant impact on the environment. However, that presumption would not be reasonable if the Department allowed multiple registered facilities to be co-located on the same site. Nevertheless, to address the concern in this comment, the final regulations were clarified to more closely match the Department's original intent and limit the impact of the regulations on the regulated community.

360.15(a)(4)
Comment: In 2017, the City, through DSNY, will hold 11 SAFE Disposal Events where it collects and correctly recycles or disposes of residential waste requiring special handling, like hazardous household cleaning supplies, fluorescent lightbulbs, thermometers, unwanted medicines, and e-waste. These SAFE Disposal Events are highly successful and provide City residents with a convenient method to safely dispose of residential waste requiring special handling. Due to the size of the City and the fact that many of its residents do not have access to automobiles, DSNY moves the locations of its SAFE Disposal Events to serve more residents in the five boroughs and safely handle more materials. DSNY would not be able to identify on a facility permit application whether the facility may have a registered collection event in the future because DSNY will simply not have that information available at the time the permit application is submitted. Since collection events are short in duration, this provision should not be applicable to collection events.

Response: The provision allows, but does not require, that registrations be incorporated into permits. Situations such as the one described, would provide justification for keeping the registrations as separate actions.

360.15(c)(2)
Comment: The new requirements listed in Section 360.15(c)(2) indicate that the owner must declare the intended storage volumes for the material. There should be a maximum pile size listed in the regulations that correlates to a dollar amount that would not warrant any type of financial assurance.

Response: The regulations allow the facility to declare the maximum pile size based on the site specific conditions. In some cases, the registration criteria for a specific facility (mulch, as an example) also include pile size restrictions. Financial assurance, if required, will be based on the material that could be on-site.

360.15(c)(2)
Comment: The requirement to accurately state facility throughput and volumes and attain those volumes would be better handled as a statement that permit modification must be initiated within a set time period of exceeding the daily, weekly or monthly or annual throughput or volume, or the facility is in violation and can be fined. Some other alternatives may exist, such as a set percentage increase above limits prior to requiring permit modification. The supporting documents do not attempt to evaluate any alternatives to this conditions.

Response: This provision requires information concerning storage and throughput for a registered facility. These are not permitted facilities. To maintain the registration, the facility must comply with the information submitted as part of the registration submittal.

360.15(e)

Comment: Consider including a timeframe for response issuance or otherwise approved. For example, if DEC does not approve or deny the registration within 20 days of receipt by the Department, the applicant may proceed as approved.

Response: Registrations are ministerial actions which are unlikely to be delayed, however evaluation of the submitted information may take some time. The Department will develop forms and criteria to help ensure all required information is submitted and the Department can respond efficiently but a definite time frame will not be included in the final regulations.

360.16 Permit application requirements and permit provisions

360.16(a) and (c)
Comment: The regulations should be revised to explicitly require that the actual operator of the landfill be identified as the Applicant and that the need for the facility and the adequacy of the Application be reviewed and considered in light of the facts that pertain to the actual owner/operator Applicant and not on the basis of the information that applies only to a "front" posing as the owner/operator.

Response: It is acceptable to the Department for either the owner or operator of a facility to apply for a Part 360 permit.

360.16(c)(2)(iii)(b)
Comment: "the location of all public and private water wells, surface water bodies, roads, residences, public areas and buildings, including the identification of any buildings which are owned by the applicant or operator, on the property and within 800 feet of the perimeter of the property;" This provision should be expanded to 360.14 (Exempt Facilities) and 360.15 (Registered Facilities). In addition, all public and private wells and surface water bodies beyond 800 feet that could potentially be impacted from site activity should also be identified.

Response: Exempt facilities are not required to submit any documentation to the Department, and the criteria for registered facilities is established to minimize the potential environmental impacts. The 800 foot evaluation is considered reasonable and will be retained in the final regulations.

Comment: If impacts to public or private wells are identified as a result of Exempt, Registered or Permitted site activities, the facility owner should be required to mitigate the impacts. Additionally, if such impacts are from an Exempt or Registered facility, the facility should be required to obtain a permit.

Response: The Department agrees that a facility which impacts the environment must mitigate those impacts. Many actions may be taken by the Department, including revocation of the facility's authorization to operate, may result from improper operation.

360.16(c)(5)
Comment: A proposed revision requiring applications to demonstrate consistency with Department-approved
Local Solid Waste Management Plans only "if one exists" is inappropriate and irresponsible. The practical impact of such a revision would be to essentially eliminate the principal incentive for even having an approved LSWMP.

Response: This comments cites a partial subparagraph out of context and draws an incorrect conclusion. Read in context with the remainder of the paragraph will lead to a more complete understanding that having either a LSWMP or CRA in place is a requirement. There are a number of motivating factors for a planning unit to complete a LSWMP. This provision does not negate any of them. However, it recognizes that not all municipalities will be addressed in a LSWMP at all times for a variety of reasons.

360-16(e)(1)
Comment: The law and the cited corrections law provide the DEC with the authority and more important the statutory and case law guidance of what is a reasonable basis for denial. To add the gratuitous sentence that a single violation of minimal significance is enough is: improper as it undercuts the law and criteria cited previously in the provision; improper because clearly it is arbitrary to deny based on an insignificant violation and there is no criteria or case law history to define how DEC is to act; Most important it is always bad policy to include ad hoc sentences
attached to provision establishing comprehensive powers. Especially when the prior portion of the provision already provides DEC with that exact authority, plus the professional safeguards against error or bad faith.

Response: The concern expressed in this comment was addressed in the previous assessment of public comment. No changes to the referenced language were made in the revised regulations. Nonetheless, the Department disagrees with the characterization of the revised regulations as gratuitous, improper and arbitrary. The Department also disagrees with the claim that the revised regulations would lead to revocation of a permit for a de minimus violation. Nothing in the proposed, revised nor final regulations indicates that Department staff have the ability to take such an action, and due process available to permittees provides a right to challenge revocation decisions.

360.19 Operating requirements

360.19(b)(2)
Comment: “The owner or operator of a facility must operate the facility in a manner that minimizes the generation of leachate and does not allow any leachate to enter surface waters or groundwater except under the authority of a State Pollution Discharge Elimination System Permit.” Since sections 361-3 and 361-4 of the proposed regulation states that “Precipitation, surface water, and groundwater that come into contact with”[the materials regulated under these sections] “is not considered leachate”, there

must be language that expressly prohibits this contact water (run-off?) from entering surface waters and groundwater, consistent with what is required for leachate. Also, the term “run-off” needs to be expressly defined.

Response: Subparts 361-3 and 361-4 include specific criteria that prohibit impacts to water quality for liquid that is not considered to be leachate for the purposes of Part 360. The common understanding of the term run-off is sufficient for the purposes of the regulations.

360.19(c)(1)(iv)
Comment: Requires a clear and concise definition/explanation of" ... the criteria for the intended use ... ".

Response: The final regulations have been clarified to make it clear that this subparagraph refers to beneficial use authorized under 360.12 or 360.13, which establishes criteria for beneficial use of waste.

360.19(c)(1)(iv)
Comment: There appears to be a typographical error in § 360.19(c)(1)(iv) where the word “used” (the last word of the sentence) should be “use.”

Response: The comment is correct; the typographical error has been corrected in the final regulations.

Part 360.19(c)(2)
Comment: We appreciate the clarification that out-of-state waste is excluded from this requirement, however we still have concerns that this is a difficult requirement for Owners and/or Operators of solid waste management facilities to comply with. Transfer and disposal facilities should not be the enforcing agency of a requirement that is complicated, expensive, and ultimately in the hands of the Department, which has historically been unresponsive and anything but timely with approvals. We understand that there is a website available with the status of every planning unit’s LSWMP. How often will the information available there be updated? With the number of different ways that approval can be revoked, some very minor given the consequences, there is no real-time way for a facility to verify that waste they are receiving is from a municipality that is not included in a Department-approved CRA or a Department-approved LSWMP. Not only does this requirement hurt facilities that could take waste from these areas, but it discourages proper disposal of solid waste by limiting economical and more environmentally-friendly disposal options for facilities that do not have approved plans. We request that this requirement be eliminated. At a minimum, however, the Department should notify transfer and disposal facilities if a municipality is non-compliant.

Response: The Department will notify landfills, combustors and transfer facilities when a planning unit becomes non-compliant with regulations via posting on the Department's LSWMP/CRA webpage.

360.19(c)(2)
Comment: This proposed regulation, both as originally proposed and as modified, requires reconsideration/elimination or, alternatively, specificity and clarity as to its administration and enforcement. Landfill operators are not in a position to administer and oversee whether or not incoming waste is being received from a municipality or planning unit that is in compliance with this requirement. For private landfills, in most instances, waste is being received directly from private generators, making the private landfill operator's dealings one step removed from the municipality or planning unit. Additionally, the CRA is an ongoing requirement, and, likewise, a municipality's compliance with its LSWMP is a day-to-day issue. Accordingly, this provision should be clarified to specify that it is the Department's responsibility to administer and enforce municipal compliance with CRA and LSWMP requirements.

Response: Determination of compliance with and enforcement of LSWMP and CRA requirements continues to be a Department responsibility.

360.19(i)
Comment: As part of the compost operation the proposed change to the regulation, should allow the use of seed materials and/or inoculant to accelerate the composting process and for odor control.

Response: The regulations do not preclude the use of seed materials or inoculants where warranted.

360.19(j)
Comment: In Section 360-1.19(j), the Department deleted the introductory phrase: "Except as may be authorized under a noise easement..." The use of noise and environmental easements to demonstrate compliance with the noise standards contained in Part 360 has been established by precedent dating back to 1996. We request that the phrase "owned or controlled by the applicant" succeed the phrase "property line" in subdivision (j). The suggested language would confirm the long-standing precedent in New York State that noise and environmental easements allow the applicant to consider the property boundary to which the noise or environmental easement applies as part of the landfill boundary for noise compliance purposes.

Response: The removal of the phrase "Except as may be authorized under a noise easement" was not intended to signal a change in policy, as the use of noise easements remains an acceptable means for an applicant to address noise impacts beyond the facility's property line. Rather, the reference to noise easements in the existing regulations was viewed as a limitation, in that there may be other arrangements or legal

instruments that an applicant may secure for the same purpose. The requested clarification has been incorporated into the final regulations.

360.19(j)
Comment: Back up alarms should be excluded when determining noise.

Response: Noise resulting from equipment or operations at the facility is required to be controlled. Back-up alarms are included in that criteria.

360.19(j)
Comment: Providing that an existing facility meet stringent noise standards which may be impossible to achieve will result in a regulatory taking. Facilities currently operating under a valid registration should be exempt from this requirement. It is also noted that the proposed sound levels are inconsistent with the Department's Noise Policy.

Response: The Department's noise policy does not supersede the regulatory requirements of Part 360. Noise regulations are a standard requirement for all registered and permitted solid waste management facilities.

360.19(j)
Comment: The requirement for a noise study for registered sites is onerous and has never been enforced to my knowledge. Registered sites and existing permitted sites should be exempt.

Response: A noise study is not required as part of the registration process. Only if the Department has reason to believe that the facility exceeds the Part 360 noise limits would a study be required.

360.19(j)(1) and (2)
Comment: Noise. The proposed regulations interchangeably use background and ambient and many acoustical experts discern between. Background sound is the community pre-development sound and is often represented by L90. Ambient is the sound level of the community at the time of the application and is often represented by Leq. The term "ambient" should be used and the term background removed.

Response: Paragraph 360.19(j)(2) defines the background sound level as the existing ambient sound level. The language will be retained in the final regulations.

360.19(j)(3)
Comment: Measurement of ambient sound. There are many ways to measure ambient sound. The settings recommended by the sound meter manufacturer should be a viable option.

Response: The requirements established in Part 360 set a consistent requirement for all facilities. Requests for alternative methods would require a variance.

360.20 Environmental monitoring services

Comment: Environmental monitoring services should be provided by personnel trained to consistently apply regulations and focus on assisting a permittee in compliance efforts rather than enforcement actions against the permittee.

Response: The comment accurately reflects the intentions of the Department's environmental monitoring services program.

360.22 Financial assurance

Comment: The provisions on financial assurance will devastate the industry in the face of there not being a single instance in NYC where the DEC has had to clear a site. The economic realities result in cleared sites every time.
NYC already requires bonding. Bonding for a transfer station must be limited to the costs of clearance of fill material, not remediation of a contaminated site. The inadequate CEQR review of the financial impact of this
provision will result in the provision being overturned.

Response: Financial assurance is required of a limited number of solid waste management facilities. Paragraph 360.22(c)(2) allows for a reduction in financial assurance when a municipality also requires financial assurance for the facility.

360.22
Comment: The requirements for Financial Assurance are somewhat vague. Some parts of 360-365 specify when Financial Assurance is required. Other portions of the regulations elude that Financial Assurance may be required, without giving the criteria for requiring it. This leaves it up the local DEC officials to determine when it will be required resulting in a different practice in different Regions. Also, it makes it difficult for a business owner to project costs when the need for Financial Assurance can be required at any time in the future. This situation needs to be corrected.

Response: The regulations are designed to require financial assurance on a site-specific basis a determined by the Department. Financial assurance is typically established when a facility is first authorized, and it is unlikely to change unless circumstances at the facility warrant change.

360.22
Comment: The City prepares an annual cost estimate update in accordance with the Governmental Accounting Standards Board (GASB) Statement No. 18. The City's Fiscal Year ends on June 30th of each year. The close-out of outstanding obligations for the fiscal year typically occurs at the end of August. This information is then used to determine the expended costs and calculate remaining costs required for Financial Assurance and GASB reporting requirements. These reports include print-outs from the

City's financial management systems to support the basis for expenditures and review by the City's independent accountant. Completion of the GASB occurs several weeks after this information is available. We request that the cost estimate update be completed within "**90 days after the close of the municipality's fiscal year"** rather than 60 days in order to accommodate this process. The additional 30 days will not impact compliance with the Record Keeping and Reporting requirement of Section 360.22(d)(4)(iv), which provides a municipality with 270 days following the close of its fiscal year to comply.

Response: The final regulations have been revised to address this concern.

360.22
Comment: No specific criteria for requiring Financial Assurance. It makes it difficult for a business owner to project costs when the need for Financial Assurance can be required at any time in the future. Needs to be clarified.

Response: Section 360.22 is intended to set out the general requirements for any financial assurance instrument that may be required for a registered or permitted facility. Whether a given facility is required to submit financial assurance is specified in the Part applicable to that type of facility. For instance, Section 360.22 provides the wording required in a letter of credit that may be issued on behalf of a transfer station but the obligation to obtain financial assurance for a transfer station is specified in Subpart 362-3.

Comment: The requirements for Financial Assurance are somewhat vague. Some parts of 360 -365 specify when Financial Assurance is required.

Response: See response to comment, above. The regulatory requirement to obtain financial security is specified in each Part and Subpart of the revised regulations.

360.22(b)(2)(iv)
Comment: Refers to Subpart 363-11 of this title; should be subpart 363-10

Response: The cross reference was corrected in the final regulations.

360.22(b)(2)(v)
Comment: What is the justification behind these contingency factors? Although we appreciate the slight reprieve in developing these cost estimates, these percentages are still high and will tie up funds unnecessarily. We respectfully recommend that a mandated contingency percentage be deleted from the regulations or reduced to a less burdensome level of 5% regardless of cost estimate total.

Response: Guidance related to this evaluation will be provided to increase clarity and to ensure consistency across the State.

360.22(b)(2)(v)
Comment: Previous comments stated that correspondence with the Department has precluded sites from using leachate regressions in post-closure cost estimates, but the summary of assessment of comments states that this will be allowed with a reasonable and supported estimate for leachate reduction following closure. Please clarify what the Department would consider a "reasonable and supported estimate" to allow this to be factored into post-closure cost estimates. Will the same consideration be applied consistently across all Regions?

Response: The contingency factor was adopted based on comments received. It is the Department's understanding that contingencies are built into some costs estimates. These built-in costs estimates should now take into account the regulatory requirement for contingency.

360.22(b)(2)(v)
Comment: We have previously submitted a comment regarding interim capping options, which does not seem to have been addressed in the revised draft regulations nor the assessment of comments. Please consider the following: "DEC has indicated that they would entertain a proposal to defer final capping after cessation of waste acceptance with an interim more permeable soil cover. This approach is a European Union-modeled approach that would require modification of the Subtitle D rules to be fully implemented. This type of proactive design specification integrates well with a functional stability driven outcome. For some landfills and climate zones, "dry tomb" encapsulation may not provide suitable degradation of the waste to eliminate the potential of future threat, or at a minimum may require extended care of the cover system beyond 30 years. In some cases, extended care of the cover can be conducted under deed restrictions and/or covenants as envisioned by ITRC under a Custodial Care program. For others, though, extended degradation of the waste mass post-closure is required to achieve the target functional stability objective. We encourage the DEC to take whatever steps are necessary to implement this alternative approach."

Response: The Part 360 regulations must comply with the minimum requirements of federal Subtitle D. If a modification of Subtitle D is required the Part 360 regulations cannot be modified until the Subtitle D modification is in place.

Comment: At our facility we have a Pollution Insurance policy with a $2mm limit. The agency could be named as an additional insured on the policy and this mechanism would provide the same level of assurance and not add an additional financial burden to our business.

Response: The Department does not currently accept insurance policies as financial assurance and it is not an acceptable mechanism in the final regulations.

361-1 Recyclables Handling and Recovery Facilities

361-1
Comment: This Part does not seem to have any provisions for the facilities that are considered Recyclables Handling and Recovery Facilities, but receive their material from other facilities where separate non-putrescible recyclables were already processed, for the purpose of temporary storage before transferring to the final destinations.

Response: Source-separated recyclables that are processed at a Recyclables Handling and Recovery Facility (RHRF) and are transported from the RHRF for recycling or reuse qualify for a pre-determined beneficial use determination under 360.12(c)(4)(i). They are no longer considered solid wastes and no further authorizations under 361-1 are necessary.

361-1.2
Comment: Exempt facility – if any significant waste is on-site, NYSDEC should inspect the site.

Response: The final regulations will establish what amount of waste on a site will be considered significant for the purpose of determining whether a facility is exempt, or requires a registration or permit. Inspections by Department staff are often necessary to confirm whether a given facility is regulated appropriately.

361-1.5(c)(4)
Comment: We recommend that "In no case can the storage period exceed 365 calendar days" be deleted to allow for DEC discretion for facilities that handle low volume materials requiring extended time for product aggregation prior to sale.

Response: The language has been removed from the final regulations. The revised regulations released for public comment already provided a process for the Department to approve a longer storage period for recyclables. Therefore, the 365 day limit was deemed unnecessary.

361-2 Land Application and Associated Storage Facilities

361-2.3(c)(9)(i)
Comment: We are requesting that the maximum storage period be extended to 60 days rather than 30 days. This will provide more flexibility for use of this material.

Response: The referenced provision governs how long residuals can be stored on the farm field prior to land application. Under the current regulations, only incidental storage on the day of application is allowed. Extended storage increases the potential for runoff concerns and odor concerns. The Department believes that, in most cases, 30 days should be sufficient for operational flexibility, without increasing the risk for runoff.

361-2.5(b)(l)
Comment: We believe that the term "injected" used in numerous places in this table should be changed to state "injected or incorporated" to allow incorporated semi-solid biosolids to be spread with the same setbacks as liquid biosolids. Fundamentally, there is no additional risk to the listed features from incorporated semi-solid biosolids than there is for injected liquid biosolids, and the stated separation distances are adequately protective of those features.

Response: In some cases, injection is a requirement from federal biosolids regulations. In other requirements, direct injection is recognized as less likely to cause runoff and odor concerns compared to surface application with subsequent incorporation because incorporation can occur anytime within 24 hours of application.

361-2.5(e)(2)
Comment: Value to soil improvement goes beyond just Nitrogen and Lime value, Organic Matter can also improve soil characteristic and its ability to grow crops; we propose to that there is a requirement for Organic Matter content of greater than 40%.

Response: The Department does allow other benefits, such as organic matter, to be used as justification for land application if sufficient documentation is presented. This is found in paragraph 361-2.5(e)(2), "…or provide sufficient documentation to demonstrate that the material is a benefit to the soil or plant grown."

361-3 Composting and Other Organics Recycling Facilities

General
Comment: The regulations should explicitly allow the DEC to require groundwater monitoring wells if groundwater impacts are suspected at any type of facility (exempt, registered or permitted.)

Response: The regulations allow the Department to impose measures on a case specific basis to monitor and protect groundwater resources.

Comment: Unpackaged finished product (such as compost and mulch products) stored on site need to be regulated to protect against groundwater contamination.

Response: All site operations, including product storage, are subject to Department review and evaluation.

Comment: We urge the Department to consider allowing a greater proportion of food waste be allowed for use in a digester under this exemption. Anaerobic digesters can provide many benefits to farms and their local communities, but can also be distributed energy generation sites to produce renewable energy in rural areas. In addition to advancing the Governor's renewable energy goals, this change also helps meet the

Department's goal of reducing organic food stream waste and keeping it out of landfills. We request that the Department consider increasing the exemption level so that the amount of non-manure waste must not exceed 65 percent of the total volume of waste placed in the storage facility or anaerobic digester. This would provide some flexibility for farms as research and
organic waste diversion systems develop over the next several years.

Response: The Department supports the use of anaerobic digesters on farms for the treatment of manure and other organics such as food scraps. The regulation of digesters on larger farms is divided between the CAFO permit and the Part 361 regulations. The CAFO permit governs digesters on farms that accept no more than 50 percent non-manure. Those farms that accept more non-manure are subject to Part 361. Part 361 does not prohibit the acceptance of larger amounts, but requires registration or permitting depending on the size.

Comment: The requirement for handling materials on surfaces that prevent leaching into groundwater should be expanded to VOWM vegetative organic waste management facilities. Due to the particular sensitivities involving contamination of groundwater designated as a sole source aquifer, consideration should be given to having the impermeable surface requirement for counties that have such a designation regarding their groundwater.

Response: There are hundreds of yard trimmings composting facilities in the State and it has not been the Department's experience that an impermeable surface is necessary to protect groundwater resources. However, understanding the sensitive aquifer source on Long Island, the regulations include a requirement that registered and permitted facilities must submit a plan to address potential runoff concerns to the Department's satisfaction which could potentially include the use of additional measures to prevent potential groundwater impacts.

Comment: All public drinking water and private wells and surface water bodies beyond 800 feet that could potentially be impacted from site activity should be identified.

Response: The Department believes that identifying those wells nearest the site, which would be impacted first, is sufficient.

Comment: An Exempt facility causing groundwater and/or surface water quality to exceed groundwater, drinking water or surface water standards, in an area with a designated sole source aquifer, should be required to cease accepting waste.

Response: A facility that violates the Department's regulations is subject to enforcement action by the Department. There are a variety of enforcement tools available to the Department and the remedy for a regulatory violation would be based on the site specific issues involved.

Comment: If impacts to public or private wells are identified as a result of Exempt, Registered or Permitted site activities, the facility owner should be required to mitigate the impacts. If such impacts are from an Exempt or Registered facility, the facility should be required to obtain a permit.

Response: See answer, above. A facility that violates the requirements of the regulations is subject to enforcement action by the Department including a variety of options based on the site specific issues involved.

Comment: On Long Island, SCDHS has monitoring wells located 1,500 feet downgradient of a VOWM management site that exhibits water quality impacts above standards. Language should be revised to indicate that regulated activities must not have the potential to impact potable water wells, surface waters, etc.

Response: For exempt yard trimmings composting facilities, paragraph 361-3.2(a)(3) prohibits the violation of groundwater standards by the facility. For registered and permitted facilities, subdivision 360.19(b) precludes groundwater impacts.

Comment: There needs to be a clear, unequivocal statement that all facilities (exempt, registered and permitted) covered under 361-3 and 4 should expressly be prohibited from causing impacts to groundwater quality that exceed groundwater or drinking water standards. There should also be a similar statement relative to dust and odors.

Response: There are standards in both Part 360 and in 361-3 and 361-4 that prohibit facilities from impacting groundwater and surface water standards.

361-3.2
Comment: For compost operations, the proposed change to the regulation should allow the use of seed materials and/or inoculant to accelerate the composting process and for odor control.

Response: The regulations do not prohibit the use of seed materials or inoculants.

361-3.2
Comment: Larger materials screened from the compost (tailings) should be incorporated back into the composting windrows.

Response: Screenings can be recycled into the active composting pile. The size restriction only applies to the compost product that is distributed for use.

361-3.2(a)
Comment: Please clarify that the statement regarding the 36-month limitation for storage, found in Subpart 361-3.2(a), applies only to waste that has yet to be composted.

Response: The 36-month restriction applies to both the uncomposted material and the resultant product. Material accepted must be composted and moved off-site within 36 months.

Section 361-3.2(a)(1)
Comment: In the text of 361-3.2 (a)(1), the reference to 360.14(b)(1) may be intended rather than the reference to
360.14(c)(1).

Response: That is correct. Thank you. The reference has been adjusted in the final regulation.

361-3.2(a)(5)
Comment: We appreciate that the exemption in 361-3.2 (a)(5) has been included.

Response: Comment noted.

361-3.5(a)(5)
Comment: Since section 361-3.5(a)(5) states that precipitation coming into contact with yard trimmings or compost is not considered leachate, it is unclear why this section is referring to the quantity of leachate generated based upon an intensity of precipitation ("rainfall intensity of one-hour").

Response: The referenced citation, 3.5(a)(5) is to precipitation at an exempt facility, whereas the reference to rainfall intensity concerns permitted facilities. Although the amount of precipitation at an exempt facility would not be regulated as leachate, the regulations provide that it must be managed and must not enter a surface water body. Precipitation that has come into contact with the larger amount of material at a permitted facility is considered leachate and must be managed in an appropriate manner.

361-3.2(b)
Comment: "A composting or other organics processing facility that accepts no more than 3,000 cubic yards of yard trimmings, either processed or unprocessed, per year. This quantity does not include tree debris materials that are not intended for composting. For these facilities, precipitation, surface water, and groundwater that has come in contact with yard trimmings or the resultant product is not considered leachate; however, it must be managed within the site and must not enter a surface waterbody or a conveyance to a surface waterbody, or cause a violation of water quality standards promulgated in Part 750 of this Title."

What is the justification for exempting facilities processing less than 3,000 cubic yards of material per year? Are these facilities less likely to negatively impact the groundwater, neighbors or the environment?

The contact waters that results when precipitation, surface water, and groundwater comes into contact with yard trimmings or the resultant product, needs to be defined.

The following should replace the second part of the third sentence, after the word "however": "it [run-off?] must be managed within the site and must not enter a surface waterbody or a conveyance to a surface water body, to groundwater, or cause a violation of water quality standards promulgated in Part 750 of this Title, or Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations."

Response: The exemption for 3000 cubic yards of yard trimmings at a composting facility has been in regulations for over a decade. These facilities are less likely to impact neighbors, compared to those facilities that manage greater amounts. The regulatory language concerning precipitation management has been reviewed by water quality staff within the Department and is sufficient to provide the needed controls.

361-3.2(c)(2)
Comment: We disagree with new criteria, and would prefer to reinstate the current criteria as stated in 360-5.3(b)(2)(ii). It precludes the use of other potentially good materials (Short paper fiber, leaves, possibly some papers or cardboards, etc.).

Response: The criteria precludes the use of contaminated wood as a bulking agent or amendment. The other materials mentioned would not be considered bulking agents or amendments, they are considered the composting material.

361-3.2(d)(7)(i) and (ii)
Comment: Proposed regulations set forth at 361-3.2(d)(7)(i) and at 361-3.2(d)(7)(ii) mistakenly assume that there exists some form of privity between a receiving compost facility and the generator of the incoming SSO material. This is a wrong assumption which lacks foundation in the reality of the marketplace.

Commercial compost facilities typically accept SSO from transporters and/or transfer facilities, but not directly from generators of SSO. Consequently, there is no basis by which a compost facility would be able to provide as part of a permit application "a list of all types of generating facilities and the type and approximate quantity of wastes that will be collected from each type of generator." [see: 361-3.2(d)(7)(i)]

Likewise, where a compost facility solely maintains contractual arrangements with transporters and/or transfer facilities, there is no basis by which a compost facility would be able to satisfy the proposed regulatory requirement to include as part of a permit application "a copy of any agreements or information concerning what can be accepted from the generator and the collection containers that will be used." [See: 361-3.2(d)(7)(ii)].

These proposed requirements are not workable. We respectfully propose that the proposed language be deleted. In the alternative, we propose the inclusion of language of limitation by which the proposed permit requirements are expressly imposed only in those instances where there exists a direct contractual relationship between the compost facility and the generator of SSO.

Response: It is expected that the facility, even if the food scraps are provided from a transporter, can obtain general information on the source of the material (grocery stores, colleges, etc.). The second requirement requires a copy of any agreements, etc that exists. If they do not exist, this should be explained in the permit application, with an explanation of the arrangement with the transporter concerning what will be accepted.

361-3.2(e)(7)(iii)
Comment: A minimum freeboard of 5ft should be required for surface impoundments.

Response: The 2 foot freeboard is similar to the requirements that apply to large manure storage structures and are appropriate in this case as well.

361-3.2(e)(7)(iii)
Comment: This requirement for separation of the liner system from bedrock and seasonal high groundwater elevation should be no more than a minimum of 5ft.

Response: The requirement dictates a minimum of 5 feet between the liner system and bedrock and seasonal high groundwater. The suggested change would allow less than a 5 foot separation.

361-3.2(e)(8)
Comment: This requirement to enclose unloading, storage and composting areas is not applicable to a yard waste processing facility.

Response: Agreed. The requirement was carried over from the current regulations and does not apply to yard trimmings composting. Revisions to the final regulations has been made to clarify this understanding.

360-3.2(e)(10)
Comment: The proposed regulatory requirement with regard to odor is vague and over-broad, and as such, could lead to arbitrary and capricious administration. No clear guidance is provided to the regulated community to quantify or describe the odor levels "to be expected from a typical facility." We recognize that odor is inherently a subjective impact and the difficulty which that creates for the Department. However, a single individual's sensitivity – often instigated by that person's unfamiliarity with typical agricultural odors – can, does and will lead to regulatory and enforcement uncertainty. Perhaps referencing a "public nuisance" rather than a "private nuisance" will yield a

more manageable regulatory standard. In that instance, off-site odor would be actionable only if it creates a nuisance for a majority of receptors.

Response: The requirement that odor control can be compared by the Department to a well-run facility is a standard that exists in the current regulation and has been found to be workable in practice.

360-3.2(e)(11)
Comment: The way we interpret this provision is in a manner consistent with past regulatory practice, whereby the term "facility", is applied to mean the area of a permitted site in which receiving, processing, composting and storage activities occur. We respectfully encourage the Department to clarify its intent in a manner consistent with our interpretation and past practice.

Response: The Department did not modify the final regulation in response to this comment. However, the interpretation in the comment is correct.

361-3.2(e)(11)
Comment: Separation distances should be 500ft for SSO and 1000ft for other waste.

Response: The separation distance requirements are consistent with criteria in the current regulations and based on the Department's experience in regulating this practice, the separation distances in the final regulations are sufficiently protective.

361-3.2(e)(15)
Comment: Composts that are produced specially for horticultural use are well aged and this fully composted material should not be limited to 24 months storage if kept in a curing piles away from the composting material and should not exceed 10000cy at any time.

Response: The storage time restriction applies to the finished compost product. If the compost is being further processed for a particular market, the time restriction would not apply until the desired compost product is developed.

361-3.2(e)(16)
Comment: This requirement should be decreased to biweekly if the non-compostable material or unacceptable product does not exceed 40 cubic yards.

Response: The requirement has been revised in the final regulations to clarify that a longer period of time is sufficient for smaller amounts. However, the amount is limited to 15 cubic yards per week.

361-3.2(e)(21)
Comment: We do not agree and do not understand what the state is worried about here. This should be allowed if material is blended/mixed.

Response: The provision prohibits the blending of sand, etc with compost to meet pollutant standards. As long as the sand, etc. is added after the compost has been sampled, there is no prohibition on the addition of these materials for product use needs.

361-3.3(a)(1) (and also 361-3.5(a)(13)(i) and 361-4.3(14))
Comment: "The facility must have a written runoff plan that is acceptable to the Department that outlines the methods that will be used to prevent runoff from entering and leaving the site and minimizing the movement of organic matter into the soil under the site." The following should be added to the end of the above sentence, after the word "site": ", or cause impacts to groundwater or surface waters that result in a violation of groundwater, drinking water, or surface water quality standards."

Response: Part 360 has criteria concerning the control of runoff as well, which applies to all registered facilities.

361-3.3(b)(7)
Comment: What is the justification for the 200 foot distance from a potable well? SCDHS has monitoring wells located 1,500 feet downgradient of a VOWM management site that exhibits water quality impacts above standards. This language should be revised to indicate that regulated activities must not have the potential to impact potable water wells, surface waters, etc.

Response: The facility must not cause a violation of groundwater quality standards at any location, including under the site. The 200 foot separation is meant to control any impacts to the well due to erosion or other runoff issues that could affect the well.

361-3.3(e)(7)
Comment: The requirement that certain types of materials (biosolids, msw, etc.) activities be conducted on "surfaces that minimize leachate release…" should be expanded to vegetative organic waste management. The commenter references upcoming or existing laws in California, Iowa and Illinois as examples that NY should follow. Further, similar to biosolids, animal manure can have similar concerns, thus animal manure should be regulated at commercial vegetative organic waste management facilities.

Response: The Department is not aware of any other state regulations that require all yard trimmings composting to be performed on a pad with leachate collection and management. The Part 360 series regulations, in most cases, do not regulate the management of manure. Manure management from larger animal farms is managed under the Department's Concentrated Animal Feeding Operation (CAFO) program.

361-3.5(a)(1)

Comment: What is the significance of 6 inches per hour, and what is the origin of this reference? Considering the sandy soils on Long Island, perhaps monitoring wells should be required at all permitted facilities in Nassau and Suffolk Counties.

Response: Six inches per hour represents the typical permeability of sandy soils. The need for monitoring wells is evaluated by the Department on a case specific basis.

361-3.9 Tables 4 & 5
Comment: We believe the categories presented in these tables are too small and result in unnecessary analytical work and expense. Essentially, the upper limit applies to any facility that generates one truckload of material per day. We would recommend using the same testing categories and frequencies as used for Tables 2 & 3 of this section, with the potential for frequency reduction based on low metals content.

Response: The frequency on these tables have not changed from the current regulations. Very few facilities are required to analyze at the highest frequency. An established facility with a track record of compliance does have the option of applying for a variance to reduce the sampling frequency.

361-4 Mulch Processing Facilities
Comment: The new regulations for wood waste processing facilities are just that "new". The regulations establish for the first time space and volume requirements, yet fails to even attempt to discuss, in the supporting document, the impacts of these changes. The supporting documents do not address the underlying costs to the communities and businesses that must now comply with the regulations, nor does it attempt to address the cost of these regulation on the tax-payers of the State.

Response: The regulations have been developed with the intent to balance the impact on existing facilities and to provide environmental protection. In addition, transition provisions are included in Part 360 to allow time for existing facilities to come into compliance. Facilities located on Long Island should not see a significant cost impacts since the Department has been working with facilities to comply with similar standards. For facilities in other areas of the State, the cost should be limited unless the facility is storing mulch in very large piles, since the regulations primarily affect the way the piles are arranged on a site and require temperature monitoring at minimal cost. Those facilities that will need additional land area since the large piles must be reduced in size will incur the cost associated with the need for additional land or reduced throughput.

Comment: The use of leaves and grass clippings should be allowed for the production of mulch.

Response: The regulations allow the processing of leaves into mulch. Grass clippings are high in moisture content and readily biodegradable and are not amenable to mulch production.

Comment: The safeguards provided in the rules to Long Island communities from mulch processing facilities should be extended to other communities which rely on sole source aquifers. The rules should also incorporate water quality testing requirements and liner use for facilities in Nassau and Suffolk Counties consistent with legislation passed by both house of the state legislature.

Response: The regulations for all areas of New York State are the same except the pile height restrictions differ on Long Island. Due to the prevalence of fire incidence and population density on Long Island, more restrictive piles sizes are required. The need for controls related to groundwater quality protection are site specific and the regulations give the Department the authority to impose the necessary controls.

361-4.2(b)
Comment: What is the justification for exempting sites less than 2 acres? Relatively small sites that are located upgradient of a private well could potentially cause an impact to that well. For example, a 1.1 acre compost site in Moretown Vermont was determined to be a likely cause of elevated manganese in a private well (significantly above the drinking water standard, see attached). Language should be added that a site occupying no more than two acres may be exempt, provided there is no potential to impact potable water wells.

Response: In general, the potential impact from solid waste facilities is impacted by the size of the facility. The solid waste regulations tend to exempt smaller operations because the potential for harm is limited. Any solid waste facility that impacts groundwater quality is subject to enforcement actions by the Department.

361-4.2(b)
Comment: The stipulation of 10,000 cy does not delineate limitation. Does this mean 10,000 cy at any one time, annually.

Response: The 10,000 cubic yards is the total amount of material on-site at any time.

361-4.2(b)
Comment: The exemption limit for mulch facilities should be 5000 cubic yards. Exempt facilities should still be inspected by the NYSDEC. 10000 cubic yards at any one time for the exemption is too large a facility.

Response: Under the existing regulations, all mulch facilities from clean virgin wood are exempt. For a new regulatory program, providing an exemption for those that are typically two acres are less is appropriate. Even exempt facilities must adhere to the pile size criteria.

361-4.2(b)
Comment: Exempt facilities should not be permitted to accept yard trimmings or wood debris that is considered storm debris from an area designated as a disaster area.

NYSDEC solid waste permitted facilities are engineered, designed and constructed to mitigate and offset the environmental exposures that come with storm debris. It is impossible to prevent construction and demolition debris ingredients and hazardous waste ingredients from being blended into yard trimmings and wood debris. The proposed definition of “wood debris” requires being “originates from wood product manufacturing or other sources and does not include construction and demolition debris.

Response: All mulch processing facilities are required to verify that material accepted at the facility complies with the standards outlined in the regulations.

361-4.2(b)
Comment: Exempt facility should be still inspected by the NYSDEC.

Response: The Department can inspect exempt facilities to determine compliance with the exemption criteria.

361-4.3(a)(3)
Comment: 3 months excluding winter months.

Response: Twelve months is allowed to account for market fluctuations.

361-4.3(a)(4)
Comment: Windrow size and shape – Need better understanding. The size should be a semi-circle or similar. Should be 365 days not 180, excluding winter months. Materials processed 180 days during fall will not be sold until next spring, this is standard practice.

Response: The regulations specify that the pile must be triangular in shape. The 180 day restriction applies to ground material. Unground material can be stored longer and then ground before distribution.

361-4.3(a)(10)
Comment: We disagree, compacting piles should be allowed to reduce fire risk.

Response: Compaction has shown to increase the potential for fire in the storage of mulch.

361-4.3(a)(11)
Comment: Firefighting equipment should be on site and ready to be used, equipment can be fire hydrant or water truck with at least 2000 gallons capacity. In addition, a designated loader with key box and a source for refilling water.

Response: Firefighting equipment on-site is not required and not necessarily needed if the facility is properly operated.

361-4.3(a)(14)
Comment: Distance required as minimum horizontal separation distance (in feet) from property line – should be 150' as minimum.

Response: To reduce impact the regulations also include separation requirements to homes, etc.

361-4.5
Comment: "…Also, the facility must have stormwater controls that minimize the potential for organic matter to reach groundwater and surface water resources." Is the "stormwater" referenced in this section the same as the "run-off" discussed in Comment #9? If not, the word "run-off" should be added to the sentence along with "stormwater".

Response: For clarity, the term run-off has been added to this provision.

361-5 Construction and Demolition Debris Handling and Recovery Facilities

General Comments

Comment: We request clarification of the registration requirements of this Part regarding when and what type of facility must register with the Department. It is our interpretation of the draft rule (Section 360.14) that using a site, under ownership of the generator, to stockpile materials is allowed at a non-registered facility (360.14(b)). Such facility is exempt from this Part, so long as the owner actively manages the material (e.g., separates into material types) for ultimate further use.

Response: Waste may be managed on the site of generation or on another site under the same ownership or control as the site of generation without the need for a registration or permit. This activity is exempt under 360.14(b)(1) of the proposed revisions.

Comment: Please clarify that subpart 361-5.1 does not apply to transportation projects where materials are processed onsite for reuse as part of the project.

Response: Management of waste at the site of generation is exempt under 360.14(b)(1).

Comment: In New York City, DSNY requires all C&D Non-Putrescible Transfer Stations to obtain a permit and these facilities are required under the terms of their City permits to remove any recyclable materials and transfer any remaining waste to an authorized disposal site within 48 hours of receipt of the waste. These facilities face very tight space constraints. Due to this and the City's more restrictive permit requirements, these facilities should not have to enclose or cover unprocessed C&D debris. Therefore, we

recommend that C&D debris handling and recovery facilities operating in NYC be exempted from the enclosure or covered storage area provisions in Section 361-5.3(f)(ii).

Response: The transitions requirements found in Section 360.4 state that retrofitting of existing facilities is not required to meet new regulatory requirements.

Comment: Certain of the regulations could conceivably require existing facilities which have operated for years to be redesigned at great cost to the owner which may prevent them from applying for a permit entirely.

Response: The transitions requirements found in Section 360.4 state that retrofitting of existing facilities is not required to meet new regulatory requirements.

Comment: We are concerned to see that the DEC gave yet another concession to industry in the latest revisions to Subpart 361-5: the enclosure requirement for C&D handling and recovery facilities now exempts concrete, masonry material, asphalt, pavement, brick, rock and fill material processing. The crushing of these products in open air in neighborhoods already overburdened with solid waste facilities contributes in large part to the terrible air quality and high asthma rates suffered by residents in environmental justice communities. The exemption of so many materials from the enclosure requirement essentially renders this purported community protection meaningless.

Response: Enclosure requirements are more appropriate for demolition wastes and constructions wastes that are more likely to impact human health and the environment if managed outside of an enclosed building. However, subdivision 360.19(g) requires that all facilities must control dust so that it does not constitute a nuisance as determined by the Department, and must undertake any and all measures as required by the Department to maintain and control dust at and emanating from the site.

Comment: To what degree of training will a DEC inspector have to have to visually condemn a pile without doing any physical analysis?

Response: Department staff receive appropriate training and oversight to effectively enforce the Part 360 regulations.

Comment: The Transition provision provides that facilities that are exempt, registered, or permitted prior to the effective date of NYSDEC's new rules are not required to comply with the design requirements of Subpart 361. We recommend that Section 361-5.4(a) specifically refer to the Transition provision of Section 360.4(b)(4) to make it clear that existing C&D Debris Handling and Recovery Facilities do not have to retrofit their facilities to conduct all receiving, processing, and sorting activities within an enclosed building. We suggest that NYSDEC revise Section 361-5.4(a) to add the new text underlined below: Section 361-5.4 (a)~~*Except for the registered facilities identified in paragraphs 361- 5.2(a)(1), (2), and (5), a*~~ *All receiving, processing, and sorting activities*

must be conducted in an enclosed building unless otherwise specified in this Subpart or the Transitions provision of 360.4(b)(4).

Response: The final regulations have been revised to make this clarification.

Comment: 361-5.4(a) provides, "All receiving, processing and sorting activities must be conducted in an enclosed building unless otherwise specified in this Subpart." Concrete and asphalt pavement are subsequently exempted, but
asphalt millings are not exempted. Is this a clerical error? If not, it will be the death knell for RAP.

Response: This was an oversight. Asphalt millings have specifically been added to the list of material in this provision to clarify that they are considered to be equivalent to asphalt pavement.

Comment: Both the initial material brought in and the final products produced at this facility are inert and do not produce noxious odors, result in vector problems or similar types of concern as other C & D recycling facilities. As such, grouping facilities handling only aggregate products with other types of recyclable products makes no sense and imposing the same operational constraints make it difficult for most aggregate facilities to comply.

Response: The regulations were initially drafted and have been revised to appropriately regulate various types of solid waste. Specific requirements for concrete, asphalt, fill material, and similar wastes have taken the nature of those wastes into account.

361-5.4(b)
Comment: For sites with certified scales, volume measures should not be required. Using Department-supplied conversion factors does not validate the scale weight.

Response: This requirement is not burdensome and provides consistent data to the Department. The language in the revised regulations has been retained.

Comment: Paragraph (b) requires that all waste be measured in tons, which would require all trucks to be weighed on a scale. Traditionally in the RUCARBS business, the inbound material is measured in cubic yards. This volume is converted to tons in accord with the formulas provided by the NYSDEC for the Annual Report. Section 361-5.4 (b) could be changed to state the following: (b) All waste and recovered material delivered to and leaving the facility must be weighed or otherwise measured and recorded in cubic yards and/or tons.

Response: The language as written provides flexibility in the method of measurement.

C&D Debris and Beneficial Use

361-5.2
Comment: From longtime experience in this industry, we know that almost all milled asphalt pavement currently goes to a Part 361 C&D handling/recovery facility for processing back into a useable product. This material stream would be in jeopardy because, in the first instance, the industry would not understand whether the RAP meets the BUD definition. And, it would be unclear if the limitations of Part 361 apply to the RAP, even if it is a BUD.

Response: The BUD regulations in 360-12.1(c)(2)(viii) and (ix) and have been revised to allow broader use of standards and specifications established by the state or municipalities for use of asphalt millings and asphalt pavement. RAP processed to meet a state or municipal specification or standard will meet the pre-determined BUD requirements.

361-5.2 and 5.3
Comment: We request clarification regarding if and how the BUD exemption applies to Subparts 361-5.2 and 5.3, which deal with Registered vs Permitted Facilities that store RAP and RCA.

Response: The final regulations have been revised to establish a pre-determined BUD for asphalt pavement and millings received at an asphalt pavement manufacturing facility. No registration or permit would be required. Asphalt pavement and millings received by a facility permitted or registered under Subparts 361-5.2 or 5.3 which meets or is processed to meet a municipal or state specification or standard may be stored without time limitation at the facility. Unprocessed asphalt pavement would have a 365 day storage limit, but the final regulations have been revised to allow longer storage with Department approval.

Comment: The proposed Part 360 Regulations will add a significant cost due to changes in operation as well as permitting and record-keeping costs to hot mix asphalt producers. The increased cost and restrictions in handling asphalt and millings will be a factor in determining if continued acceptance and reuse of millings is cost-effective. Because millings are voluntarily used as a direct replacement in hot mix asphalt to reduce costs and energy use, increasing the cost of millings will ultimately lead to an overall reduction in its reuse. Asphalt pavement manufacturers should be exempt from 361-5 because we do not “extract” recyclable or reusable materials.

Response: The final regulations have been revised in 360.12(c)(3)(x) so that asphalt pavement and asphalt millings received at an asphalt manufacturing plant for incorporation into an asphalt product is considered a pre-determined beneficial use and no registration, permit or other Part 360 authorization is required for the facility.

Threshold for Registered C&D Debris Handling and Recovery Facilities

361-5.2(a)(1)-(7)
Comment: Many commenters argue that the 500 tons per day (weekly average) threshold to be eligible for a registration is much too low. They argue that typical construction projects generate much more material than that, which would force facilities to apply for permits. As an example, the State Environmental Quality Review Guidance states that indications of significant adverse project impacts include a substantial adverse change in traffic levels. A numerical example of a substantial adverse change is identified in the NYC CEQR March 2014 Technical Manual which specifies that an increase of up to 50 vehicle trip ends per hour is not considered an adverse impact. Considering a passenger car equivalent coefficient of 2.0 for 20 ton load/truck, this equates to 12 trucks entering a facility per hour. Therefore, over an eight hour day (short for the waste industry), a facility would process 96 trucks which equates to 1920 TPD of recyclable material.

Response: The Department has concluded that a 500 ton per day limit based on a weekly average is a reasonable threshold to require a Part 360 permit to operate. This threshold not only takes into account the materials coming into a facility but also the amount of material, and associated truck traffic for material that will be processed on site and sent off-site as product or for disposal. Transition requirements under Section 360.4 provide one year for a facility to submit a complete permit application to the Department.

Comment: The limit to allow for Registration of facilities instead of requiring a Permit is 500 tons. This is a low limit. However, we understand the agency's concerns. We ask that those of us who are currently operating with a registration, are licensed by NYCDOS and have an approved waste control plan be given a 'priority' permit review over a facility application that is not yet in operation. The financial impact to our industry, customers, facility, employees, subcontractors and ancillary economic beneficiaries is unmeasurable.

Response: The Department will review permit applications and issue applications as they are received however, the transition requirements in 360.4(f) establish that a registered facility which is required to obtain a permit under the new regulations has 365 days to submit a complete application to the Department, and further states that the facility must remain in compliance with the requires of the facility's registration until a permit is issued by the Department.

Comment: Some commenters argued that the 500 ton per day threshold for C&D debris registrations is too high, arguing that most current permitted facilities do not receive 500 tpd on a weekly basis and totaled annually. They suggest that registration facilities should be capped at 100 tons per day otherwise a permit should be required and state that this provides an unfair competitive and financial disadvantage to permitted facilities. It is suggested that in the event this regulation is accepted; permitted

facilities should be approved to reduce these ingredients be lowered to a registration. It was stated that this rollback allows many more facilities to bypass the more rigorous oversight that a permit imposes. This oversight is especially needed in urban environments where even smaller facilities exist next to and impact environmental justice communities.

Response: The Department has concluded that a 500 ton per day limit based on a weekly average is a reasonable threshold to require a Part 360 permit to operate. Registered facilities must meet the same operating requirements under Section 360.19 as permitted facilities.

Comment: The commenter requests registration be extended to facilities who "dispatch" (broker direct hauls) of less than 500 tons per day of General Fill Material as defined in 360.13 from a generating site to a receiving site without stockpiling at a third location.

Response: Registrations are required for facilities rather than activities. However, paragraph 360.9(b)(6) prohibits any person from acting as a broker or otherwise arranging for the disposal of waste at a facility unless the facility is exempt or authorized under Part 360.

361-5.2(a)(1)
Comment: "General Fill" was added to the 500 tons per day (tpd) threshold for a registered C&D processing facility. With respect to the above-mentioned mine reclamation activities involving clean RUCARBS, this will cause thousands of tons of clean RUCARBS to be directed to landfills rather than allowing them to be beneficially used for mine reclamation. The 500 tpd threshold is restrictive for sites importing material for reclamation.

Response: The final regulations have been revised to establish a separate registration for facilities which manage general fill and for facilities which manage restricted-use fill or limited-use fill. Further, the reuse of solid wastes in reclamation at a mine is covered under a beneficial use determination where the 500 tons threshold would not apply.

Separate Registrations for Asphalt Pavement and Concrete/Soil/Bricks

361-5.2
Comment: The rule will require Registered facilities to accept soil/concrete/bricks separately from asphalt. This would require contractors to separate the material on site. This would never happen. Road jobs, where concrete is excavated with the attached layer of asphalt, do not have the space or time to remove the asphalt from the concrete. Every facility currently receives some asphalt attached to the concrete. They remove the asphalt in their facility before they process the concrete. Let this continue - the facilities don't want the asphalt in their product either.

Response: Considering state regulations, New York City regulations, and comments from facility operators, it is clear that the preferred management method is to separate asphalt pavement from soil, concrete, and other road construction wastes. The general operating requirements in 360.19(c)(4) takes into account circumstances where facilities receive waste which is not authorized under their registration or permit, in which case the unauthorized waste must be segregated and removed within seven days or a different period authorized by the Department. It should also be noted that a facility may apply for multiple registrations, so a single facility may be registered to receive both concrete and similar materials as well as asphalt pavement, though these materials are expected to be received and managed separately. Given these allowances, the activity described in the comment can continue under the proposed regulations.

361-5.4(f)(5)
Comment: This section states, "General fill, limited-use fill, and restricted use fill must be stored and managed separately." What does this mean? Why are these fill materials different than RUCARBS? Additional clarification is needed on the intent of this section to help the regulated community determine compliance applicability.

Response: Based on public comment the final regulations have been revised to remove this requirement. The intent of the regulation was to prevent mixing of wastes with different contamination levels. However, in light of the restrictions on reuse for more contaminated fill that were already in the revised regulation, and the need for testing on reuse, the prohibition on mixing was deemed superfluous.

Sampling and Analysis

361-5.4(e)
Comment: Clarification is needed: Section 360-5.4(e) states: " With the exception of facilities authorized under paragraphs (2), (3), (4), (5) and (7) of subdivision 5.2 of this Subpart, any fill material or residue leaving the facility must be analyzed for contaminants identified in section 360.13 of this Title." However, Paragraph (7) of Subdivision 5.2 includes facilities that receive a combination of some or all wastes listed in paragraphs (1) through (6). 360-5.4(e) excludes facilities receiving paragraph (1) material from the exemption since (1) is not listed, but then includes this material under (7). Which requirements govern? (6)

Response: The final regulations have been revised to clarify which facilities are required to analyze fill material and residues.

Comment: If all material received by facilities is received in conjunction with analyticals, there is no reason for duplicative analyticals a few days later. As the material is received, processed, and stored in separate flows, there is no logical basis for additional testing.

Response: It is the facility's responsibility to ensure that the material that they distribute meets regulatory requirements. Sampling is the best way to validate that the facility is in compliance. However, the final regulations have been revised to clarify that only material which is intended for reuse should be sampled.

Comment: The sampling requirements for fill leaving a Part 361-5 facility are entirely too vague. Sampling requirements should be uniformly required for all facilities to ensure equal competition. The sampling requirements cannot be left for interpretation for each permit application. The sampling requirements would then become a subjective determination between different facilities within a given NYSDEC Region or by could be different based on each Regional Manager's interpretations of this statement.

Response: The final regulations have been revised to clarify sampling requirements for C&D debris handling and recovery facilities.

Comment: The requirement to chemically test loads of recycled material leaving a facility is cost prohibitive, inefficient and unnecessary. The material entering the facilities listed are all considered clean, non-contaminated. Thus, how can the material leaving the facilities be anything else but clean. Material is coming in and leaving the facility all day long, every day. Storing piles of tested material will waste considerable storage space, and if a customer asks for a material not already tested, they would have to wait for the tests to be performed and reported before the material could leave the facility. If there was a real concern, don't mix general fill (clean) with limited-use or restricted-use in the same facility.

Response: The final regulations have been adjusted to provide for separate registrations for general fill and for limited-use and restricted-use fill.

Comment: The "contamination" identified in 360.13 is improper as stated above. No basis for sampling "residue", if it leaves as a waste and not for reuse.

Response: The final regulations have been revised to specify that only fill material and residue leaving the facility for reuse must be analyzed.

Storage Requirements for C&D Debris Handling and Recovery Facilities

Comment: Additionally, it is unclear if these quantity limits are averaged over 365 days a year. Our business is highly seasonal and one day's volume is not the same as the next. We question what basis the limits are grounded upon. If we are recycling the material, there should be no limit on quantities.

Response: The final regulations have been revised to allow storage beyond 365 days with Department approval.

Comment: Existing transfer stations in New York City do not have the capacity to handle the enormous increase in the volume of material to be handled. At the same time, the proposed rules limit the amount and volume of storage at transfer facilities, effectively reducing their capacity. Material must be removed within 180 days, any material other than clean fill must be received and processed in an enclosed building and stored in a "covered area" for no more than 30 days, and piles are limited both in size and volume.

Response: Enclosure requirements exclude concrete, asphalt pavement and millings, brick, rock, fill material, roofing shingles, and unadulterated wood. And the final regulations have been revised to allow storage beyond 365 days with Department approval.

361-5.4(f)(1)(i)
Comment: Storage time frame limits for unprocessed asphalt are unnecessary. Asphalt is a high value product and long-term storage of it is counter-productive because its use immediately reduces costs and energy use for the hot mix asphalt producer. Put another way, since the cost of asphalt millings is less than producing virgin hot mix, the financial incentive is to reuse millings and not incorporating as much of it as possible in every hot mix job increases the cost of hot mix asphalt to the producer.

Since the hot mix producers already incorporate as much recycled asphalt as they can, implementation of these stockpile storage limits will effectively reduce the storage capacity at asphalt plants and cause asphalt to be hauled to other, further away locations.

Response: A pre-determined BUD has been added in 360.12 for asphalt pavement and asphalt millings received at an asphalt pavement manufacturing plant. Therefore, the requirements of 361-5 do not apply to asphalt manufacturing facilities.

361-5.4(f)(1)(i)
Comment: The assertion that stockpile limitations are necessary because the storage of processed C&D materials could impact surrounding communities fails to factor in that these facilities are already regulated and not exempt from local zoning, which, if the local municipality deems necessary, can restrict certain aspects of the operation or require mitigation measures to reduce the potential for environmental impact.

Response: While it may be true that operations could also be restricted by local law, the Department remains obligated to appropriately regulate solid waste management facilities in a manner that prevents or mitigates potential impacts.

361-5.4(f)(1)(i)
Comment: Storage time frame limits for unprocessed asphalt are unnecessary because asphalt is inert and storage longer than one year does not pose any additional environmental impact than storing the same material for less than one year.

Response: The final regulations have been revised to allow for a longer storage period with Department approval.

361-5.4(f)(2)
Comment: This section states that C&D debris must not be stored in excavations or below normal grade level of the facility. Response to Comment on Pg. 210 states that "Below normal grade means below the prevailing naturally occurring or constructed grade of the ground surface… The regulations have been revised to clarify this requirement." The revised regulations do not, however, clarify that storage of C&D debris on mine floors is exempt.

Response: Storage on mine floors is not exempt by definition. However, if a C&D debris handling and recovery facility is located within a mine, the floor of the mine would be the prevailing constructed grade of the ground surface.

361-5.4(f)(3)
Comment: 361-5.4(f)(3) provides that stockpiles must be separated by a minimum of ten feet. With regard to millings and concrete, there is no logical reason for this; it is a complete waste of land.

Response: The final regulations have been revised to remove the pile separation requirements for concrete, asphalt pavement or millings, brick, and rock.

Financial Assurance

361-5.2
Comment: Registration facilities do not require financial assurance and will be a liability for the State.

Response: At present, the Department has not imposed financial assurance requirements on registered facilities. This decision is due to several factors including type of waste being handled, the size of such facility, and the overall potential for registered facilities to pose adverse environmental impacts. To date, registered facilities have not been a financial liability to the State. However, as the Department implements and enforces the final regulations, as written, there will be performance record on which to base future decisions about financial assurance. l.

361-5.4(h)
Comment: The financial security requirements if applied to Subpart 361-5 facilities will be either too costly or impossible to obtain from normal sources and completely unnecessary for this type of operation.

Response: Financial assurance is appropriate for facilities which manage wastes which may be difficult or expense to clean up during closure. The Department has limited the

financial assurance requirements to only permitted facilities and the amount of financial assurance required will be tailored to the size of the facility.

Comment: Section 361-5.4 (h) indicates that ONLY permitted facilities require financial assurance. This blanket exemption for Registration Facilities from financial assurance seems to be arbitrary and does not appear to protect the interests of the citizens of New York State nor the environment.

Response: Part 360 regulations allow for the Department to require financial assurance at any registered facility on a case-by-case basis. However, as explained above, the decision to not require financial assurance for registered facilities is based on the degree of risk actually posed by these facilities. To date, registered facilities have not been a financial liability to the State.

Tracking Documents

361-5.6
Comment: First, requiring the tracking document to be returned to the shipping facility makes this a manifest system, not just tracking. The final receiver has 2 weeks to return the document to the originator. What if they don't. Will the generator have to go get it? Who gets the violation? This just adds administrative headaches to the generator, and opens up the requirement to unnecessary police actions.

Response: This requirement is intended to identify the locations where certain types of solid wastes leaving C&D debris handling and recovery facilities are ultimately used or disposed. Enforcement of the requirement will depend on the nature of the violation. However, the regulations do not impose on the generator any requirement to retrieve a form completed by a receiving facility, if the receiving facility fails to return the form within two weeks.

Comment: Our computer generated ticket system allows for the receipt and delivery of materials to flow smoothly. We could work together with the Department to insure specific information is included on the document that is created at the POS (point of sale) this allows us to maintain a database that is easily accessible, can generate reports and is a cloud based solution that allows for secure backup. The agency can then request a random sample of reports or documents at any time.

Response: Comment noted.

361-5.7
Comment: (a) All material leaving a registered or permitted C&D debris processing facility, and any other material if required pursuant to a Department-approved remedial

plan, must be accompanied by a C&D debris tracking document prescribed by the Department…

While, SUBPART 364-2 EXEMPTIONS states that the following transport is exempt from Part 364, including the requirement for a tracking document:

(b)(6) C&D debris and historic fill in quantities less than or equal to 10 cubic yards in any single shipment

This introduces an apparent conflict. Would a C&D shipment of less than or equal to 10 cubic yards leaving one of the facilities described in Section 361-5.7(a) require a tracking document as required by that section or be exempt from the tracking document requirements as indicated in Part 364

Response: Section 361-5.6 requires tracking documents accompany fill material, residues, and material which does not meet the requirements of a BUD. If this material leaves a C&D debris handling and recovery facility in any volume, a tracking document would be required.

Comment: The tracking methods as proposed by the DEC will make this processing method unmanageable. The onerous and excessive tracking will force our company to cease recycling and waste reduction activities, as it will no longer be economically feasible for our target market- primarily governmental agencies and infrastructure contracting firms.

Response: Tracking documents are required only for those wastes that the Department considers to have the potential to adversely impact human health or the environment. However, the Department will make every effort to minimize the amount of information that must be recorded on the proscribed form.

Comment: There is no way to track product coming from one State job versus another State job, or from which commercial project to where it will ultimately be placed in a new parking lot, road, driveway or other legitimate use. Likewise, there is no way to separately weigh the material as it leaves the site, since by necessity the RAP will be mixed with virgin aggregate and liquid asphalt. The same applies to recycled concrete product which is all placed into one stockpile, crushed and then sold as item 4 for various projects.

Response: A tracking document under 361-5 is not required for recycled asphalt pavement or recycled concrete aggregate.

361-7 Metal Processing and Vehicle Dismantling Facilities
Comment: Scrap metal facilities storing over 1000 CY outdoors must obtain a registration. This would be a pile of metal only 40' x 40' by 20', which is a very small facility. It will add numerous facilities to the DEC inspection requirements. Additional

staff will be needed for inspections and reviews. It is recommended to make the limit 10,000 cubic yards.

Response: The Department is prepared to oversee the scrap metal facilities that will be registered under this provision.

Part 362-1 Combustion Facilities and Thermal Treatment Facilities
362-1.1(a)
Comment: This definition does not recognize thermal heat- transfer technology(s) that react in the absence of oxygen. The proposed definitions only relate to combustion in the presence of oxygen. As per definition (227) Refuse-derived fuel (RDF) is used a s feedstock in a thermal treatment facility. There is no regulatory distinction for a MSW post collection separation facility that manufactures an organic/biomass prepared fuel that has removed all recyclables and prepared into a specification driven product versus a RDF feedstock product that has been picked up curbside, dumped on a tipping floor, pushed up in a pile and inserted into a combustion process utilizing air or oxygen.

Response: This section provides examples of processes that are regulated under the Subpart, but it is not an exhaustive list. Any solid waste which is processed by thermal treatment, regardless of pre-processing or the amount of oxygen present during treatment, is subject to the Subpart.

362-1.5(b)(7)(ii)
Comment: We had previously commented on the proposal that restricts the acceptance of radium-226 at levels greater than 25 pCi/g. Based on the Departments response, we believe that under the proposed requirements, we will be able to continue using currently installed fixed radiation detectors to screen incoming waste for radiation exposure (at a setpoint of 2-5 times background) and not radiation concentration. When the scale radiation detector alarm is triggered, further investigation is required. We interpret this to mean that we can accept waste that could potentially have a radium-226 concentration greater than 25 pCi/g, however it cannot be processed. We are requesting that 362-1.5(b)(7)(ii) be changed to state "Waste with a concentration of radium-226 in excess of 25 pCi/g cannot be processed". In addition, if we are interpreting the proposed regulation correctly, we do not need to identify the specific radiological isotope each and every time the scale radiation alarm is triggered to meet the radium-226 requirement, but we are able to segregate radioactive waste and allow to decay; and little decay is apparent (as compared to more common quick decaying radiological isotopes commonly used in the medical field), then isotope identification would be necessary. Based on this, isotope identification (specifically radium-226) is not required for all radiation alarms. Please confirm that this would be the case.

Response: Wastes which trigger the radiation detector can be accepted and evaluated according to the facility's waste control plan in order to determine whether or not the waste may be accepted at the facility. It is also true that isotope identification is not necessary in every case. The final regulations have been revised to clarify this requirement.

362-1.5(b)(7)(vi)
Comment: Facilities should have a requirement to maintain personnel awareness of radiation procedures. We propose the following revision. "The radiation detector must be calibrated at least annually, and documentation describing the calibration must be

maintained at the facility. Facility personnel must be trained annually in proper daily calibration and detection and response procedures.

Response: General operating requirements found at 360.19(l) require that the facility must train staff to manage the type and quantity of wastes handled by the facility. This provision therefore requires staff training for radiation detector at those facilities that are required the use them.

362-1.5(c)(2)(ii)
Comment: We are requesting that "Tests much be conducted at least four, but no more than eight, months apart" be changed to "Tests must be conducted at least eighteen, but no more than twenty-eight, months apart" since the testing requirement is biennially.

Response: The regulations are intended to require that testing be done twice per year. The language has been adjusted in the final regulations to clarify the frequency as biannually .

362-2.3(d)(7)
Comment: We are requesting that the 24 hour notification requirement be changed from "...reported to the Department within 24 hours" to "...reported to the Department within one working day. The requirement to notify the Department within 24 hours of each instance of which the radiation alarm is triggered has been included in the proposed regulations, however it is not clear what information needs to be provided to the Department within 24 hours. Does the information that is required to be "recorded" need to be reported? If so, please specify that the information must be reported and not just recorded. Historically, this information has been reported in the quarterly waste reports, not with initial notification to the Department.

Response: The requirement is for simple notification to the Department and does not necessarily include the information that is required to be documented and recorded.

Part 362-3 Transfer Facilities

362-3.1
Comment: Per 360.2(b)(63), the Department revised the definition of "construction and demolition debris handling and recovery facility" to remove the term "handles." Similarly, Section 362-3.1 should be revised to be consistent with the terms used in 360.2(b)(63) and read "processes and separates."

Response: The final regulations have been revised to make this adjustment.

362-3.5(b) and Part 361-5.4(a)
Comment: We appreciate the clarification within the transition rules that retrofitting of existing buildings is not required to meet the new design and construction requirements

for transfer or materials processing facilities. However, in some cases, it is unclear how these facilities will meet the new operating requirements for these types of facilities without retrofitting of existing structures. Please clarify that existing facilities with outdoor operations or buildings that are not completely enclosed will be grandfathered in and will not require retrofitting of existing infrastructure to continue external operations.

Response: As specified in the transition provisions found in 6 NYCRR 360.4, existing facilities will not be required to retrofit existing infrastructure to continue external operations.

362-3.5(b)
Comment: The reference to odor control needs clarification. Odors should not affect offsite receptors. There will be onsite odors including at the tipping floor. The response to comments acknowledges this understanding. Please make it clear in the regulation.

Response: The final regulations have been revised to include this clarification.

Comment: DEC is requiring that all transfer station processing needs to occur in an enclosed building, but it did not separate the difference between commercial waste and residential waste. Does an open-style canopy, pole-barn-style residential drop-off facility meet the regulations? People can separate recyclables and bags of trash where those go, and we're able to easily haul those away. We do not think that a completely enclosed, covered, sided building is necessary in all cases. And we really encourage the Department to take a look at that and allow exemptions for residential drop-off areas to not be in a fully enclosed building.

Response: The final regulations have been revised to clarify that residential drop-off areas may operate outside of an enclosed building.

Comment: The revised regulations require permitted transfer facilities to conduct tipping, sorting, processing, compaction, storage, loading, and related activities in an "enclosed building." This is a change from the current regulations that require operations to be conducted in an "enclosed building or covered area." While this does not require retrofitting of existing infrastructure (per the transition requirements, 360.4(b)(4)), we are concerned that this is overly burdensome for larger (permitted) transfer facilities that have a separate residential drop-off area. Similar to the language in 362-3.5(h), we request that a separate residential drop-off area (meeting the thresholds of a registered transfer facility) at a permitted transfer facility, be exempt from the requirement that operations be conducted in an "enclosed building.

Response: The final regulations have been revised to clarify that residential drop-off areas may operate outside of an enclosed building.

362-3.5(d)

Comment: What is meant by "cleaned"? Is daily wash down required? Can cleaning be done in sections or must the floor be free of waste? It is not always practical to clean the tip floor at the end of the operating day due to various facilities' specific operational conditions. For example, there are haulers who finish their routes late in the day and arrive just before closing time. It is not possible to clean the floors with these loads present. The unintended effect of this would be that haulers would store waste on packers overnight, or transfer stations would limit hours. Request that current language be retained (once daily tip floor cleaning.)

Response: This provision was included to reduce the likelihood of nuisance odors. The final regulation has been adjusted to allow the Department to adjust the requirement on a case-by-case basis.

362-3.5(e)
Comment: Section 362-3.5 should include an exemption for a C&D transfer station or contaminated soil transfer station. A suggested change could be as follows:
(e) Radioactive waste detection procedures and requirements. Permitted transfer facilities, from which waste is transported out of state, other than contaminated soil transfer stations and C&D transfer stations for which the Waste Control Plan includes Department-approved screening requirements disallowing the acceptance of radioactive wastes, must meet the following requirements.

Response: The regulations have been revised to clarify that only transfer stations which handling MSW or drilling and production waste must utilize radiation detectors.

Comment: Please revise this section to make clear that a vehicle found to set off a radiation detector can be temporarily stored and re-measured (see 362-3.5(e)).

Response: Wastes which trigger the radiation detector can be accepted and evaluated according to the facility's waste control plan in order to determine whether or not the waste may be processed at the facility. The final regulations have been revised to clarify this requirement.

362-3.5(f)
Comment: We appreciate the flexibility allowed by increasing the timeframe for storage, however, the removal of transfer containers when full will still cause operational issues. Transfer containers realistically cannot he moved immediately when full. If this occurs when transfer trucks are not available or when a receiving facility is not open, the transfer facility would be subject to a violation until the receiving facility can accept the waste. Provisions need to be made to allow outdoor staging of full, covered trailers awaiting transport to the final disposal destination. Transportation delays due to breakdown or weather are a common occurrence. We believe that this can be solved on a case by case basis if odors or other vector issues prove to be an issue or by requiring the full trailer be moved the next business day.

Response: The final regulations have been revised to require that containers be removed from the facility by the end of the next business day after the container becomes full.

Comment: With the new radiation detection program, a waste collection vehicle with putrescible waste onboard may need to be impounded at the site until the detection level returns to background. It is suggested that trailer staging be conducted on a hard surface with appropriate run on/runoff control and that time limits be set. For waste collection vehicles that trigger the radiation detection alarm and subsequently return to background levels, require the load be deposited in the transfer station within the next business day, but otherwise suspend any time limits until then.

Response: Staging of vehicles or containers received at the facility which trigger a radiation detector must following the waste control plan rather than the requirements of this provision.

362-3.5(h)
Comment: We're very concerned about some of the requirements with scales, especially for transfer and recycling facilities, in particular. We think that weighing things is very important, but there are some customers where it just doesn't make a lot sense where there is some very, very large infrastructure that needs to be invested in order to comply with that regulation. So we just want to make sure and highlight to the DEC, we appreciate there was some movement in the Draft regulations that allow an exemption for residential and non-commercial customers, but there is also some very small commercial customers that it may make more sense to have a flat rate as opposed to having everybody go over the scale, and we think that is something that we just need a little bit more flexibility on, recognizing the interest is to know what the total tonnage is, not the double count or overcount, and it's all going to be weighed at a destination facility.

Response: The regulations do not require that a facility install a scale; rather, they require that all wastes entering or leaving the facility, with exceptions, are weighed. A facility may utilize another facility or commercial scale to meet this requirement. In the event that that is not possible, the facility may petition the Department for a variance.

362-4 Household Hazardous Waste Collection Facilities and Events
362-4.2(a)(1)
Comment: We urge NYSDEC to amend Section 362-4.2(a)(1) to allow events to be held at least 20 days within a calendar year or provide a carve-out for New York City, which needs multiple events to serve its over 8 million residents in its five different boroughs. Again, the City, through DSNY, will host 11 SAFE Disposal Events in 2017, collecting and safely recycling or disposing of residential waste requiring special handling, like hazardous household cleaning supplies, thermometers, unwanted medicines, and e-waste. In 2018, DSNY hopes to expand the number of events above 12. The size of New York City and the fact that many of its residents do not have access

to automobiles require multiple events. The frequency of these events allows DSNY to serve more residents in the five boroughs and to safely handle more materials.

Response: The final regulations have been revised to 24 collection events per year under a registration.

Comment: The commenter urges Governor Cuomo to continue his leadership, demonstrated by New York's fracking ban, in eliminating our reliance on dirty fossil fuels and transitioning to a hundred percent renewable energy.

Response: The comment is beyond the scope this rulemaking effort.

Part 363
Comment: The commenter calls on Governor Cuomo to ban fracking waste in landfills, to ban fracking waste in sewage treatment plants, to ban fracking waste on roads and to ban fracking waste, period.

Response: These comments have been addressed in the previous Responsiveness Summary associated with this rulemaking.

Comment: The commenter urges DEC to prevent the expansion of out-of-compliance landfills.

Response: Regulatory compliance has been and continues to be of the utmost importance to the Department, regulatory compliance is addressed on a site-specific basis and will continue to be done so under these regulations.

363 Table 2B: Baseline Parameters
Comment: The commenter objects to the addition of per-and polyfluoroalkyl substances and 1,4-dioxane to be monitored on a regular basis. These would more appropriately be included in contingency monitoring. These parameters are technically difficult and expensive to test for. If there is no indication of landfill impacts in the groundwater what is the point in including these parameters yearly or semi-annually.

Response: These are emerging contaminants and will be added to expanded parameter list in the final regulations where they will be tested for annually when a landfill's leachate is tested. If detected, then the landfill's contingency monitoring would be required for these parameters.

363 Table 3A: Expanded Parameters
Comment: Radionuclides testing should be waived for landfills that have had radiation detectors in place and have not received any radioactive waste.

Response: The Department has concluded it is appropriate to test landfill leachate for radionuclides and will remain to be included in the expanded parameter list in Table 3A in the final regulations.

Part 363 and 364
Comment: The commenter is concerned about TENORM, (Technologically Enhanced Naturally Occurring Radioactive Material) being considered to be an exempt material

pursuant to the provisions on Part 364-2.1(b)(14) and that by virtue of this citation would be allowed to be disposed of in a landfill.

Response: The provision cited by the commenter does not relate to disposal of TENORM. TENORM is considered a regulated radiological waste and is prohibited from disposal in New York State landfills without specific approval by the Department.

Comment: The commenter raises issues with drill cuttings generated out of New York State being disposed of in the State's landfills, indicating that the drill cuttings should be considered to be radiological wastes since the cuttings have come in contact with drilling fluids and in turn should be considered 'contaminated' and likewise be considered to be TENORM and should not be disposed of in the State's landfills.

Response: This matter has been evaluated by the Department and it has been determined that drill cuttings are not technologically enhanced naturally occurring radioactive material (TENORM) and are considered a solid waste and may be disposed of in a landfill under these regulations. It is also incorrect to presume that all drill cuttings and drilling fluids are radiologically contaminated. The proposed regulations, including those in proposed Part 360, include formation-specific controls to prevent naturally occurring radioactive material from becoming TENORM. However, based on the Department's experience, there is no basis on which to prohibit the disposal of drill cuttings generated out of state.

Comment: The commenter raises issues with the required portal monitoring for radiological waste materials not being enough and is asking that actual sampling for radiological material to be done per truck load of waste.

Response: Load specific sampling would be extremely onerous and costly to implement and are not warranted, environmentally. The Department has carefully evaluated the use of portal monitors for detection of regulated radiological wastes at the State's disposal facilities and has established that the proposed requirements offer an adequate level of detection of errant radiological wastes that are prohibited from disposal.

Part 363

Comment: The commenter cites a letter from the DEC regarding a specific New York State landfill that has been accepting drill cuttings and that also has radiation detectors and whereby it is reported that the detectors had not once been triggered. The commenter indicates that in Pennsylvania, fracking waste triggered radiation detectors over a 1,000 times in 2013 alone. The commenter speculates that the lack of detections in New York State is due to a lack of oversight, ignorance in how to correlate the tower sensors, regularly broken or offline equipment, eluding to the detectors being ineffective and is calling for all radioactive waste to be banned from the States' landfills and that DEC should adopt the EPA's definition of TENORM.

Response: The commenter fails to understand that in Pennsylvania landfills are allowed to accept TENORM and accordingly it would be expected that radiation detectors would be triggered since higher levels of radiological activity is associated with TENORM. The DEC acknowledges that certain oil and gas wastes that are generated during the gas extraction process can be classified as TENORM and are subject to regulation under the Department's regulations at 6 NYCRR Part 382 and are prohibited from disposal in Part 360 landfills without specific approval from the Department. To ensure this waste is properly disposed, the proposed regulations included requirements for radiation detectors to screen all wastes received for disposal and to determine the concentration of radioactivity in the waste for those waste which exceed the detector alarm set points.

Part 363
Comment: DEC's response that the hazardous waste determination is "outside the scope of rulemaking" is not a sufficient answer when public health is at stake. Just because Congress arbitrarily decided that hazardous material from the oil and gas industry is not hazardous, does not mean that New York can ignore the issue. The most appropriate resolutions for DEC to include is a clear, unambiguous prohibition of the receipt of out-of-state fracking waste, including drill cuttings, at New York facilities.

Response: The commenter is referring the hazardous waste exclusion that specifically excludes solid wastes from oil and gas development as being a hazardous wastes. This federal exclusion has been adopted under the State's hazardous waste regulations at 6 NYCRR Part 371.1(e)(2)(v). The revision of these provisions of the State's hazardous waste regulations is beyond the scope of this rulemaking. After careful consideration of the regulations it has been determined that drill cuttings, including those which are generated out-of-state, have been determined to be a solid waste under the State's solid waste management regulations.

Part 363
Comment: The commenter referenced a recently issued five-year permit renewal permit for a C&D debris landfill and stated that they did not think that DEC should issue any permits to extend the life of landfills, whether they be municipal landfills, private landfills or C&D landfills, unless there is a well-advertised public hearing in the municipality where the landfill is located or proposed and a 90-day public comment period. The commenter stated that it is unacceptable that dump permit renewals could be slid through under or between the cracks by DEC. With this landfill, no noise impact study has ever been done. Diesel exhaust has not been measured along with the residential areas on the routes to the landfill.

Response: The requirements governing permit procedures and processes for a site specific solid waste management facility as mentioned in this comment are covered under the provisions of 6 NYCRR Parts 617 and 621 and are not intended to be directly subject to this rulemaking.

General
Comment: The commenter raises concerns for a gas pipeline expansion project in the Capital District that will supply gas to Connecticut gas users. The commenter raises issues associated with maintaining the gas pipeline with potentially harmful organic materials and voices comments relative use of fossil and nuclear fuels for energy.

Response: These comments are not relevant to and are beyond the scope of this rulemaking process.

Part 363
Comment: The commenter expresses appreciation that the Department modified its position on alternative daily cover use at landfills. In the previous version, there was an arbitrary 20 percent blanket approach for use of all landfill alternative daily cover regardless of their site design or the nature of the alternative daily cover material. The commenter thinks that it is fantastic that the Department is taking a more site-specific and not a blanket approach. Not everything is the same.

Response: The Department agrees that the use alternative operating cover can help to conserve natural soil resources by using certain waste stream derived materials that have been approved for use by the Department and is best assessed on a site-specific basis and as a matter of the disposal facility's permitting process.

Part 363
Comment: The commenter raised issues with proposed regulations allowing for the siting of new expanded landfills at sites of existing, old, substandard landfills absent the same standards required of new landfill applications as proposed in the revisions stating they believe that this is a significant oversight. The commenter cites concerns that the existing landfill does not have an acceptable liner or leachate collection system, or existing waste is in direct contact with bedrock and saturated in ground water or in close proximately to surface waters that may be used as municipal drinking water supplies and cases where the existing site may be a listed inactive hazardous waste site. The commenter believes the proposed regulations fail to address these environmental and potential health hazards without mitigation if the new landfill expansion were to be approved under the proposed regulations.

Response: The proposed regulations treat existing landfill expansions the same as the current regulations do. The current and proposed regulations require all municipal solid wastes to be disposed in landfills to meet the double-liner requirements of the final regulations. Under both the current and proposed regulations,landfill expansion projects are subject to provisions of both 6 NYCRR Part 617 and 6 NYCRR Part 360 and are carefully evaluated on a site-specific basis to ensure that public health and the environment are protected.

Part 363

Comment: The commenter raises issues associated with a local landfill expansion project drawing reference to the fact that the local landfill being an older landfill operation whereby the older operations began before the newer regulatory requirements and alleges the existing local landfill is grossly non-compliant with the existing regulations and that stringent enforcement of the current regulations should happen before the Department devotes substantial resources to finalizing the regulations.

Response: The commenter fails to recognize that the landfill in question has complied with the regulatory requirements for closure and operation under the various applicable versions of the regulations. The on-going permitting activities at the landfill are subject to its own permitting procedures pursuant to both 6 NYCRR Parts 617 and 621 and are beyond the scope of this regulatory rulemaking process.

Part 363

Comment: Current Section 360-2.12 requires that a site selection study and site selection report, including alternative site analysis, must be submitted as part of a complete application for new landfills and lateral or vertical expansions of existing landfills proposed to be located on sites that do not exhibit the characteristics identified in current Section 360-2.12. The commenter requests that this provision be revised to require that the alternative site analysis must be based on actual physical characteristics of alternative sites, rather than a mere supposed economic benefit of a particular site to an applicant. The revision should explicitly state that economic benefit alone is not an acceptable justification for a landfill siting decision. In the context of the current local landfill expansion application, the commenter states that the applicant failed to provide any meaningful discussion of alternatives but claims that the proposed action is the only feasible one. The sole justification for this contention is monetary; namely, the wholly unsupported statements that the town must expand the facility in order to maintain its financial viability and that customers of the current landfill would suffer dramatic increases in solid waste disposal cost if the proposed expansion is not approved. These assertions are specious and completely lacking any factual basis. Most importantly, no comprehensive site selection process has even been attempted, and there has been no effort to identify and evaluate a reasonable range of alternative sites as required by Section 360-2.12. Such a subversion of the intent of the regulation should be prevented by appropriate amendment of Section 360-2.12 to specifically limit the use of economic factors in the site selection process and require specific financial evidence of any claimed economic factors.

Response: The proposed regulations, standing alone, do not authorize any specific landfill or landfill expansion. Instead, the final Part 363 regulations are designed to specify the siting requirements for an application for a permit and identifies the standards for the detailed technical information that must be submitted in support of a landfill application. While the Department's existing regulations required a siting study, the siting study and alternatives analysis was determined to be redundant to the alternatives analysis conducted pursuant to the State Environmental Quality Review Act

(SEQRA). Because the SEQRA process already addresses issues such as local land uses and community character, the need for a redundant siting study is not necessary in Part 363.

Part 363
Comment: The commenter raised issue with a local landfill expansion project being sited within a hundred feet of the Mohawk River. The commenter indicated that he remembered about 25 years ago, Norman Nosenchuck, who worked in the Division of Solid Waste, he assumed he is retired by now and hoped he was still alive. The commenter proclaimed that Mr. Nosenchuck announced that DEC was no longer going to allow landfills to be sited next to rivers in New York State. The commenter proclaimed that he read articles about siting landfill near rivers in the newspapers and requested the Department not allow an expansion of that local landfill.

Response: The commenter failed to recognize that the proposed local landfill had undergone its own public hearing and permitting process and as such these comments are beyond the scope of this rulemaking process.

363 CCR Rule
Comment: The United States Environmental Protection Agency (USEPA) engaged in a lengthy rulemaking process regarding the regulation of coal combustion residuals (CCR). The CCR Rule imposes restrictions on existing impoundments based on location, design, operating criteria, including hydraulic capacity requirements, groundwater monitoring, and corrective action and imposes retrofit and closure requirements. The Proposed Part 360 revisions lack such a tailored approach to CCR. The Proposed Part 360 rules would impose duplicative and conflicting requirements; thereby imposing added costs without corresponding benefits. Accordingly, the Department should exempt CCR that is subject to the CCR Rule from the Proposed Rule, develop a record for any deviations from the CCR Rule, allowing an opportunity for comment, and obtain EPA's approval of its plan to adopt 40 CFR Part 257.8

Response: The Department is fully aware of USEPA's CCR Rule and has determined that both the current and final regulations exceed the new federal requirements. The Department has shared both the current and proposed regulations with USEPA's Region 2 staff for their review and comment and discussions with them indicate that they concur.

C&D Debris Landfills
Comment: The commenter recommends the requirements for a liner be eliminated for placement of certain C&D materials that meet all of the exemption requirements of Part 363-2.1(h) except for an exceedance of the 5,000 cubic yard limit. Otherwise, please clarify why a liner is necessary for a larger quantity of materials considered inert when this requirement is not necessary for lesser quantities.

Response: The Department is encouraging the reuse and recycling of C&D debris materials and has restricted the size of the disposal facilities that would be allowed for certain C&D debris wastes without the need for liner systems. If a larger disposal facility for these select C&D debris materials is sought, the Department has determined based on assessment of landfills that a liner system affords the added protections to groundwater quality from these long-term disposal facilities. The commenter also fails to acknowledge the expanded predetermined BUD for what is considered exempt C&D debris that ceases to be waste when used as fill in accordance with the final provisions of section 360.13.

Section 363-1.1(a)
Comment: This section should be revised to specify that new or more stringent requirements introduced in this Part, and that were not included in the previous version of Part 360, apply to proposed landfills and/or proposed modifications to permitted landfills. Changing the design and/or performance requirements of permitted landfills may require costly redesign and/or reconstruction of numerous components to meet the new or more stringent
standards. Existing landfills that are already permitted, and which have had no modifications to the design since issuance of the permit, should be held to the performance standards in place at the time they were permitted. We suggest that the subject text be revised as follows: “In addition to the requirements contained in Part 360 of this Title, this Part applies to new landfills that are not currently permitted, existing landfills both active and inactive, proposed but as-yet unpermitted lateral and vertical expansions of existing landfills, or landfills undergoing subsequent development and proposed but as-yet unpermitted modifications to existing landfills.”

Response: The concern expressed by the commenter was already addressed by the transition rules specified in revised section 360.4. The phrase “in addition to the requirements contained in Part 360…” is a reference to section 360.4, which directly addresses the commenters concerns.

363-2.1
Comment: We acknowledge the revisions provided for the placement of generated materials during nighttime hours as described in Subpart 363-2.1(i), specifically, "Placements that are associated with night work projects may be conducted during other than daylight hours, when the placement is concurrent to the project work and adequate lighting is provided at the placement site." Please confirm our interpretation of "concurrent" to mean anytime during the project construction phase.

Response: The proposed regulations had been clarified to eliminate the commenter’s concern with the addition of exemption 363-2.1(i) for state and municipal projects. Therefore, no change to the final regulations was made as a result of this comment.

Part 363-2.1(e)

Comment: Commenter supports the addition and inclusion of “drill cuttings generated by air- or water-based drilling methods” in the onsite exemption at § 363-2.1(e), which was previously limited to mining related materials. Drill cuttings generated by air- or water-based drilling methods are low hazard, low risk earthen materials similar to mining overburden, and as such are appropriate for inclusion in this exemption.

Response: Comment noted.

363-2.1(h)
Comment: Adding "general fill" to the list of materials that can be disposed of without a permit raises concerns about its disposal in the NYC Watershed because "general fill" can contain a variety of contaminants at elevated concentrations.

Response: General fill has been defined as material that meets the requirements of Table 2 in Section 360.13 and has been determined to be free of contaminants and would be suitable for use as fill in sensitive environments such as the NYC Watershed.

363-2.1(h)(2)
Comment: Please consider the elimination of the restriction of placement to daylight hours in Part 363-2.1 (h)(2) when placement is conducted concurrent to night work and adequate lighting is included for such placement.

Response: The concern expressed in this comment has been addressed by the addition of a new exemption for waste produced from state and municipal highway projects in new subdivision 363-2.1(i). This exemption does not include a restriction on the time of day during which waste can be accepted.

363-2.1(h)(3)
Comment: The commenter supports the revised changes by stating that the prohibition of the disposal of residue from C&D debris handling and recovery facilities in exempt landfills is helpful because such residues may look like harmless soil but can contain harmful contaminants. Requiring the waste to be placed above the seasonal high groundwater table and prohibiting its placement in surface water bodies is more protective than the current regulation. The 5,000 cubic yard limitation over the lifetime of an exempt landfill facilitates enforcement based on visual inspection of the volume of material.

Response: Comment noted.

363-2.1(h)(5)
Comment: The economic damage to this provision to the City of New York will far transcend the impact of all other provisions combined, albeit after a few years. This is compounded by the policy justification. It is beyond dispute that there is every economic incentive to avoid such disposal so that such disposal is already at a minimum. Thus, it is irrational to believe that by simple fiat the DEC can force the industry find "new" and

previously hidden recycling options. The final bit of irrationality is that all of this is done, not to protect upstate from unclean material. It is done to prevent the use of clean fill.

Response: The Department disagrees with the commenter that the cited provision has been required to "prevent the use of clean fill". The Department's existing regulations did not cap the amount of C&D debris that could be disposed, and this allowance encouraged the dumping of hundreds of thousands of cubic yards of unprocessed concrete, brick and other waste on open land. What the commenter classifies as "clean fill" is also often mixed in with historic fill and material that would not be considered uncontaminated C&D debris. By imposing a cap on the amount of material that can be disposed without any processing or reclamation, the express intent of the regulation is to address the issues created by unlimited disposal. While the City of New York may incur extra costs for the processing and disposal of waste created by development, those costs are necessary to prevent the impacts created by the lack of regulation over this waste stream. The comment also fails to recognize the substantial efforts made by the Department in drafting sections 360.12 and 360.13, to minimize costs to the regulated community. Under these provisions certain construction and demolition debris materials can cease to be considered a solid waste when put into commerce with little or no regulatory burden. The only cost incurred is the cost to confirm, through testing, that the material truly is "clean fill."

363-2.1(h)(5)
Comment: This section states, "no more than a total of 5,000 cubic yards of waste is received during the lifetime of the facility." This would prohibit mine facilities from importing uncontaminated C&D debris for use as reclamation backfill. Thus, thousands of tons of C&D debris will be forced into landfills. Is uncontaminated C&D debris used for mine reclamation considered "recycling" and thus, exempt from the Parts 360 and 363 regulations? Clean C&D debris (RUCARBS) being used for reclamation under an approved mined land use reclamation permit should be specifically exempt from the Part 360 and 363 regulations.

Response: The Department disagrees. The commenter fails to acknowledge that uncontaminated C&D debris is subject to Section 360.13 as a predetermined beneficial use determination and cease to being considered a waste when used as fill which could qualify as fill for mined land reclamation. In essence, the 5,000 cy cap is intended to apply to waste that is disposed without any processing or reclamation, which would blend these materials into the surrounding environment in a way achieved by permitted mines who comply with their approved reclamation plans.

363-2.1(i)
Comment: It seems excessive to require a clean fill material imported into a permitted facility for lack of a reason other than lack of a BUD-able location for re-use, should be immediately declared a potential hazard and require analytical testing prior to its departure. This is a huge expense, and may ultimately, due to the burden placed on the C&D Recovery Facility, make it such that C&D Recovery Facilities may not accept clean

soil. The Department has arbitrarily decided that the single largest producer of CARBS as well as potentially the single largest consumer of CARBS is exempt from the regulations. Why is it that the single largest advancement in establishing this market and supporting the markets continued advancement is exempted from these requirements? Almost all of the materials generated with a highway ROW project meet these definitions, yet the government gets a pass. The DEC's supporting documents, specifically the EIS, does not even acknowledge this situation. At a minimum, the impacts of un-controlled disposal along all highway ROW's should be assessed in comparison to the now regulated community. What happen to lead by example!

Response: The exemption for CARB material from state or municipal highway projects was included only within highway rights-of-way or municipally owned properties. The Department continues to encourage recycling and beneficial use of construction and demolition debris of any kind, but extended the exempt disposal allowance in this provision due the control and on-going management which state agencies and municipalities maintain over their properties.

363-4.2(b)

Comment: As described in our comment to Part 360.16(b), we believe that the use of "detailed construction drawings" under the application requirements of this Part misrepresents the intent of ECL and may be incorrectly interpreted to require the submission of construction bid documents which demonstrate conformance with New York State Building Code. Detailed construction drawings or construction level detail of project elements outside the purview of this Part are not necessary to enable an application to be understood by the Department, ascertain the potential environmental impacts, and to demonstrate compliance with Parts 360, 361, 362, 363, and 365, and Subpart 374-2 of this Title. We recommend that the sentence "If the landfill is to be constructed in stages, the initial application must contain the conceptual design for the entire landfill and the detailed construction drawings for the initial stage to be constructed" be removed and replaced with language similar to "If the landfill is to be constructed in stages, the initial application must contain the conceptual design for the entire landfill and that drawings for the initial stage of construction contain detail sufficient to demonstrate compliance with the relevant Parts of this Title".

Response: The level of detail required for the engineering plans submitted in support for a landfill application has not been changed from the current regulations and are by no means meant to demonstrate conformance with New York State Building Code. However, with that said, landfills are complicated and sophisticated disposal facilities that need thorough and careful evaluation by Department engineers to ensure that they will perform as designed so both the current and final regulations stipulate the minimum level of detail that is required to support the facility's application that will support Department staff's review of the application.

363-4.2(b)(3)&(4)

Comment: The proposed regulations contain multiple references to 100-foot square grid. Since all the engineering design work is currently performed with computer design tools, specific production of a grid drawing or grid table would seem to be unnecessary. Rather, it would seem to make sense that these requirements be modified to state that the surfaces be created with a minimum accuracy equivalent to the use of a 100-foot square grid.

Response: The use of the 100 foot grid system exists in the current regulations. In the Department's experience, the interpolation of bedrock and soil lithology surfaces has been known to vary, when compared to supporting documentation, even with the use of a 100 foot grid system. The 100 foot square grid is the appropriate level of detail for a landfill application and conveys the level of attention required by engineers and hydrogeologists who prepare permit application supporting documents and as such the language in the regulation has been retained.

363-4.2(b)(14)
Comment: Often, multiple potential areas are available for use as staging areas by a contractor and the final selection is left to their discretion. Additionally, the location(s) of construction staging areas is likely to change as a
landfill is developed. For these reasons, the inclusion of "plans detailing" the construction staging area in the Engineering Drawings is premature and not useful. Instead, the requirement should be to depict the location of potential staging areas, and not to depict details pertaining to them. Accordingly, we suggest revising the subject text as follows: "the location of potential staging areas that may be used ~~plans detailing the construction staging area if proposed~~, and plans detailing the facility entrance area including gates, fences, and signs."

Response: The Department disagrees. Landfill construction routinely involves major construction activities involving the need for storage of vast volumes of construction materials and heavy equipment. Understanding that most landfill operations in the State are now large regional disposal facilities that normally generate significant traffic during normal operations and understanding that many landfill sites are surrounded by sensitive environments and environmental monitoring points, the Department believes having these staging areas located on the plans by the design engineer rather than the construction contractor is appropriate. The wording has been left unchanged.

363-4.2(c)
Comment: In addition to the content specified, Operational Drawings should also depict temporary adjustments to infrastructure needed for that particular stage of development. For instance, the overall leachate conveyance system is often not constructed until later in the life of a landfill. Thus, in earlier stages, temporary lines may be used to convey leachate to the site's holding tanks/treatment plant. This could also apply to other types of utilities such as
leachate head reporting and pump control systems, active gas collection, and groundwater suppression systems. We suggest adding the following text as 363-

4.2(c)(4): “Layout and details depicting the phasing of utilities that are to be constructed in stages, concurrent with landfill development.”

Response: The suggested text was not added, as the revised regulations at subdivision 363-4.2(b) already required all of the information asked for by the commenter.

363-4.3(a)(2)
Comment: The word “typically” should stay – otherwise the report will become obsolete in months as specific equipment is regularly changed out at operating landfill facilities. Furthermore, the selection and purchase of a specific piece of equipment at the time of permitting is not practical.

Response: The Department understands the need to have some flexibility here and while the word “typically” was removed it was not the intent of these provisions to have the applicant provide specifications of select equipment at time of application, but to instead provide a general description of the equipment needed to operate the facility. This response should clarify the intent of this requirement and no change was made to the final regulations.

363-4.3(b)(3)
Comment: This requirement will apply to virtually every landfill in the state and liner systems already have a proven track record having experienced much larger settlements. Therefore, some discretion in determining whether a monitoring program is needed should be allowed.

Response: These provisions are only meant to apply to new subsequent landfill developments, new landfills or expansions to existing landfills. In these cases the monitoring plans will only be triggered when predicted settlements are more than one foot. The Department has determined that these monitoring plans are necessary due to the importance the engineered gradient of leachate collection and removal system has on the landfills overall containment system performance.

363-4.3(b)(2)
Comment: Where flow is confined and controlled in a leachate collection pipe, requiring a minimum pipe slope of one percent is unnecessarily restrictive and will reduce the ability for sites to appropriately maximize airspace for a given commitment of resources to much needed landfill capacity. It is recommended that the post-settlement slope in leachate collection pipe valley areas be supported by design calculations, similar to those used in sewage pipe sizing (e.g., Ten States Standards) where the slope can be varied by pipe size because the larger the pipe the greater partially full flow capacity is without increasing the height of leachate in the system.

Response: The minimum 1 percent slope for pipe valleys is a critical factor in the design of a landfill’s leachate collection and removal system that directly affects the

collection systems long-term efficiency. This has been a long-standing requirement of the existing landfill regulations and the comment does not acknowledge how such a change could impact the landfill containment system performance if modified. Landfill leachate collection and removal systems are different from sewer systems. Leachate collection and removal systems are not accessible for repair as a sewer is and are required to operate throughout the active life and post-closure period of the landfill warranting more rigorous design standards.

363-4.3(c)(3)(i)
Comment: The subject text discusses bearing capacity assessment and minimum required factors of safety with respect to bearing capacity. However, 363.4.3(c) is titled "slope stability analysis." To avoid confusion, we suggest instead including the subject text in a new article as 363.4.3(b)(4) since that section is more closely related to bearing capacity and settlement.

Response: The Department has reworded the the title of paragraph 363-4.3(c) of the final regulations to address the comment.

363-4.3(c)(3)(ii)
Comment: The types of loads to which this minimum factor of safety applies is unclear. Since the section discusses short-term nature, it is assumed the Department intends for this factor of safety to apply to slope stability with construction equipment loading. We suggest that the subject text be revised to clearly indicate the type of loading to which this factor of safety applies.

Response: These provisions apply to short-term loading conditions experienced during construction and for early operations asking for the "maximum anticipated transient loads." The Department agrees that these early loading conditions will be temporary, given that the slope stability conditions will improve as wastes are interred which buttress the landfill's side slopes as the operation advances. The final regulations have been clarified.

363-4.3(d)(1)(i)
Comment: Rather than an "earthquake inducing the maximum horizontal acceleration," a design earthquake should instead be specified based on the latest USGS seismic hazard maps or a site-specific seismic hazard study. The design earthquake should correspond to the event with the probability defined in 363.4.3(d). We suggest revising the subject text as follows: "A pseudo-dynamic analysis that demonstrates all long-term containment structures are designed to retain a minimum factor of safety of 1.0 using a seismic coefficient (expressed as a fraction of the acceleration of gravity) equal to one-half the free field peak ground acceleration at the site for the design earthquake ~~(i.e., the earthquake inducing the maximum horizontal acceleration in the lithified earth)~~ **as defined in subdivision (d) of this section, unless otherwise approved by the Department**."

Response: The final regulations have been revised to clarify how the design earthquake is defined to be consistent with the applicable federal requirements of 40 CFR Part 258.

363-4.3(d)(1)(ii)
Comment: A displacement analysis that limits the calculated permanent seismic deformations to less than 12 inches (not the 6 inches currently referenced) using an appropriate deformation analysis should be allowed, consistent with Subtitle D guidance.

Response: The latest Subtitle D guidance known by the Department is dated 1995 and more recent analytical methods and new and improved materials of construction can be used or specified in certain instances where a deformation analysis is required, whereby seismic induced deformations can be minimized. The Department has determined it is most appropriate to require landfill liner system designs subjected to seismic conditions limit deformations to 6 inches rather than maintaining the old federal threshold for deformation of 12 inches ensuring that all liner systems approved by the Department will be protective of groundwater resources.

363-4.3(e)(1)
Comment: Aside from article (i) in this section, the state of waste progression and/or closure is not specified under which the landfill should be assumed. As the Department is aware, greater waste thickness and the presence of intermediate and/or final cover will greatly reduce the rate of leachate generation. Additionally, the volume of leachate produced will be affected by the presence of intermediate and/or final cover. We suggest that articles (ii) and (iii) be revised to specify under what state of development the landfill should be assumed to be in for the evaluation.

Response: These evaluations under (ii) and (iii) are intended to consider the portions of the landfill which is still operational and that do not have intermediate or final material placed and those landfills which may have recently undergone subsequent development. The provisions of 363-4.3(e)(1)(ii) and (iii) in the final regulations have been clarified to reflect this.

363-4.3(e)(1)(iii)
Comment: It is not clear what is intended by the request for an evaluation of the impacts from a 500-year storm. If the design criterion is something less than the 500-year storm, then the evaluation will show that the system is not adequate. For instance, what if a 500-year storm were to cause some temporary ponding of leachate that has no impact because of effective liner performance, but for a short time exceeds the head buildup criterion for leachate? If the Department is interested in the potential impacts, it is recommended that evaluations for the 500-year storm be required/described in the Contingency Plan. And, that the criteria for the evaluation be an assessment of potential

failure that would cause an unacceptable risk. Also, the duration of the 500-yr storm should be specified.

Response: The assessment of the anticipated impacts on the landfill's leachate collection and removal system from a 500 year storm and discussion of mitigating measures to the impacts was intended to be asked for in subparagraph 363-4.3(e)(1)(ii); and, subparagraph 363-4(e)(1)(iii) is asking for the design engineers estimated increase in leachate generation caused by a landfill expansion or subsequent development. The final regulations have been clarified to reflect this intent.

363-4.3(e)(3)
Comment: The flow in the secondary leachate collection and removal system typically originates from multiple sources, including leakage through the primary liner (as the subject text implies), leakage of pore water from the
secondary soil liner through the secondary geomembrane, and depending on the design elevations of the landfill floor, leakage of groundwater through the secondary liner system. We suggest that the subject text be revised as follows: "An estimate of the maximum daily leachate head on the primary liner system and the maximum daily volume of leachate collected."

Response: The final regulations have been clarified to address the comment.

Comment: We suggest that a new article be included as 363.4.3(e)(4) to more comprehensively address calculation of flows in the secondary leachate collection and removal system as follows:
"An estimate of the maximum daily volume of liquid expected in the secondary leachate collection and removal system, considering inflows from all anticipated sources."

Response: The provisions of paragraph 363-4.3(e)(3) in the final regulations have been modified to address this comment.

363-4.3(f)
Comment: It is not clear what is intended by the request for an evaluation. If the design of the stormwater/runoff system is based on something less that the 500-year storm, then the evaluation will presumably show that the system is not adequate. We suggest that the subject text be revised to explain specific concerns that the Department has with respect to such a storm event, and that the evaluation be required as part of the Contingency Plan. Additionally, stormwater basins detention/retention basins should be required to safely manage a 100-year, 24-hour design storm without sustaining damage.

Response: The final regulations have been clarified to address this comment.

363-4.6

Comment: As previously stated in our September 2016 comments, radionuclide testing should not be limited to expanded parameters, and testing should occur on a more frequent basis for both expanded and baseline parameters. We again implore the Department to require leachate monitoring for both baseline and expanded parameters in both the primary and secondary collection systems is conducted on at least a quarterly basis. All landfills should have baseline testing for radionuclides to ensure waste with high levels of NORM is not entering the facility and to track if waste with NORM is posing a problem.

Response: Comment noted. The final regulations have retained the expanded parameter requirement that landfill leachate will be analyzed twice annually for radionuclides. Furthermore, the proposed regulations also require that all groundwater and surface monitoring locations be sampled at any time a new parameter is added to expanded parameter list.

363-4.6(a)
Comment: Landfill operators do not control separation of wastes and cannot address how organic waste will be reduced. If reduced disposal of organic wastes is desired, it should be addressed in the Planning section of the
regulations (Part 366) and not within landfill related sections.

Response: Comment noted, however, the landfill sustainability plan is meant as a flexible and voluntary plan that a landfill operator can propose to help support sustainability efforts. For example, a number of landfills have adjacent yard trimmings composting operations and are encouraged to have a sustainability plan that provides the landfill operator with the regulatory framework to allow for these activities to take place.

Part 363-4.6(a)
Comment: We appreciate the reduced frequency of sustainability plan updates in this version of the draft regulations. However, we still believe this does not belong under the landfill regulations, and that the frequency of plan updates is an unnecessary burden to landfills owners and operators. Operation of a landfill inherently comprises most of these items, as it is in operators' best interest to conserve airspace, create a stable waste mass, minimize emissions, and conserve natural resources. Developing a plan that will essentially mirror the operations and maintenance manual is redundant. In addition, this requirement is in direct conflict with the new categorization of alternative operating cover as a waste in Part 363-7.1(b)(4). A landfill cannot simultaneously minimize incoming AOC to satisfy a permit condition and maximize the use of AOC on-site to minimize such materials' disposal as waste or the use of virgin soils as cover. We respectfully request that this requirement be removed, or the frequency of updates be further reduced to during permit renewals, as with the updates of operations and maintenance manuals.

Response: The Department disagrees that the requirement to update a facility's sustainability plan should be removed altogether.

363-4.6(c)(3)
Comment: Please clarify how this information will be used, both moving forward with new permits and with existing facilities. In-place waste density is already tracked and reported on the facility annual report, although it is sometimes calculated as an airspace utilization factor rather than an in-place density. Will this now be compared to data included in permit applications, some decades old which did not establish a maximum waste density? Values used for waste density may vary throughout permit applications, since higher values are not necessarily the most conservative for every calculation. For instance, to make a conservative estimation of site life and airspace, a lower value might be used than the waste density used to calculate bearing capacity or subgrade settlement. Please clarify if this value is in-place waste density and not overall landfill loading as seems to be indicated in the text. There is no definition of waste density from which to base an accurate calculation of this parameter. We remain concerned that exceeding the in-place waste density included in permit application documents is not necessarily indicative of an issue, given the factors of safety applied to these calculations. We strongly recommend the allowance of additional investigations and/or loading calculations to determine whether an actual problem exists, especially in cases of existing sites where maximum in-place waste densities have not been established. The "sudden increases in waste mass density" which the Department refers to as adversely affecting stability in the previous comment response document do not occur overnight and allowances should be made for increased waste densities (often caused by employing heavier waste compactors utilizing the latest technology wheels and in cab GPS density level technology) if they do not negatively affect landfill infrastructure components or overall stability.

Response: The landfill structural integrity analysis prepared by the landfill designer uses a design density for the waste mass to ensure stability and adequate performance of the landfill's liner and leachate collection and removal system. While these analyses are typically conservative, they are prescribed by the design engineer on a site-specific basis. As the commenter points out, the waste stream density can be highly variable, and as such the Department requires the landfill operator be aware of their maximum design density and to monitor the incoming wastes for significant changes in waste density; ensuring the landfills structural integrity will not be impaired.

363-4.6(f)
Comment: The Facility Manual's Environmental Monitoring Plan [363-4.6(f)] requires the sampling and monitoring of groundwater, surface water, sediment, leachates, and water supply wells. We suggest that sampling and monitoring of air quality be required in this section.

Response: Air quality monitoring required at landfills is covered by 6 NYCRR Part 201and as such are beyond the scope of this rulemaking.

363.4.6(g)(5)(i)
Comment: Please clarify in the regulations that data validation is only required once per year on baseline groundwater events.

Response: Data validation of baseline or expanded parameters are required on all analytical data at a rate of not less than 5 percent of data generated. So data validation could exceed being done at a frequency of more than once per year.

363-4.6(h)
Comment: The commenter is concerned about the addition of per and polyfluoroakyl substances to the baseline parameter list. Specifically, the commenter questions how upper control limits for these substances will be determined since we did not test for them prior to waste disposition at our landfill.

Response: As with all emerging contaminates, the action values will develop as more data comes available. It is important to obtain this data on a broad scale for all landfills to establish baseline characteristics. The Department will develop guidance to assist with the analysis requirements of these emerging contaminants.

363-4.6(h)
Comment: The proposed revisions do not provide an explanation, or background, for including
per- and polyfluouroakyl substances (PFAS) and 1,4-Dioxane in the baseline parameters list, and how testing for these 'emerging compounds' will be implemented under environmental monitoring programs for operational and closed landfills. Further, there was no discussion of PFAS and 1,4 Dioxane in the June 2017 comment response document. However, we understand that in March 2017, NYSDEC filed a Notice of Adoption *for* amendments to 6 NYCRR Part 597, Hazardous Substances Identification, Release Prohibition, and Release Reporting which finalized the addition of perfluorooctanoic acid (PFOA-acid, Chemical Abstracts Service (CAS) No. 335-67-1), ammonium perfluorooctanoate (PFOA-salt, CAS No. 3825-26-1), perfluorooctane sulfonic acid (PFOS-acid, CAS No. 1763-23-1), and perfluorooctane sulfonate (PFOS-salt, CAS No.2795-39-3) to the list of hazardous substances at 6 NYCRR Section 597.3. PFAS compounds and 1,4 Dioxane do not have specific New York groundwater standards, but rather are non-specific organic contaminants with a standard of 50 micrograms per liter (ug/L or ppb). The USEPA has set a health advisory limit of 70 nanograms per liter (ngfL or ppt). NYSASWM believes that clarification and guidance is needed relative to several aspects of landfill construction, monitoring, and closure by adding these parameters. Some landfills have been operating, or have been closed, for decades, and establishing a monitoring program for these parameters may be problematic. How will existing water quality, and upper control limits (UCLs), be determined for these parameters at these facilities? Approved landfill monitoring equipment and materials may also contain PFAS and may result in false positive results that are not related to landfill operations - how will these potential scenarios be

addressed? We do understand that the Department is planning to revise this requirement to apply only to expanded parameters. We also understand that the requirement is solely for data collection.

Response: The requirement to test for these emerging contaminations was moved from the baseline parameter table to the expanded parameter table in the final regulations. As with all emerging contaminates, the action values will develop as more data becomes available. It is important to obtain this data on a broad scale for all landfills to establish background water quality characteristics. The Department will develop guidance to assist with the analysis requirements of these emerging contaminants.

363-4.6(h)
Baseline Parameters
Comment: 1,4 Dioxane and PFAS: What are the required reporting limits for constituents with no groundwater standard? Which PFAS compounds will be included in the analytical suite and how will the list be determined? What is the expected response if these constituents are verifiably identified in groundwater samples? Finally, the inclusion of these compounds into established monitoring programs may prove problematic in regards to establishing background and statistical limits.

Response: As with all emerging contaminates, the action values will develop as more data becomes available. It is important to obtain this data on a broad scale for all landfills to establish background water quality characteristics. The Department will develop guidance to assist with the analysis requirements of these emerging contaminants.

Comment: We recommend that the DEC add language to not only require landfill leachate and surrounding groundwater be tested for radium-226 and radium-228, but also specify a standard for analysis of the samples, sample and test leachates and groundwater on a regular basis, and require the results of the analysis be reported to DEC and made publicly available.

Response: Per the proposed regulations **r**adionuclide testing will be required in the expanded parameter analyses testing, which is performed on landfill leachate twice a year. Furthermore, the proposed regulations also require that all groundwater and surface monitoring locations be sampled at any time a new parameter is added to expanded parameter list.

363-4.6(h) Table 3A
Comment: Table 3A: should include Radon, Polonium210 and Lead 210. This tracks the full progeny of Radium 226. More attention to the actual decay products of Radium 228 for testing should be routine.

Response: Comment noted. No changes have been made to the final regulations.

Comment: Protocol EPA 901.1 M should be required for liquids with high total suspended solids and the 30 day Hold Period should be required as part of the protocol duration.

Response:

363-4.6(i)(3)
Comment: While we appreciate the Department's inclusion of a specific time frame for video inspection requirements, we believe that this should not be a mandated approach to maintenance.

Response: Comment noted. Due to the critical importance of a landfill's leachate collection and removal systems the Department included the video inspection requirements as proactive monitoring of the performance of these components. The facility manual's leachate management requirements in subdivision 363-4.6(i) requires biennial video inspections of key leachate collection and removal system pipes at a minimum. It is known that some landfill operators do video inspections more frequently.

363-4.6(j)(4)
Comment: We appreciate the DEC's revision to provide additional clarification. We suggest that the last sentence is modified as follows: "use of horizontal gas collection line, or a management plan to mitigate odiferous wastes that are determined to be contributing to off-site odors."

Response: Comment noted, clarification to include mitigation of odiferous waste was made.

363-4.6(n)
Comment: This comment was not addressed by the Assessment of Comments. Please reconsider: Facilities should have a requirement to maintain personnel awareness of radiation procedures.

Response: Subdivision 363-7.1(q) in the revised regulations already included a requirement for personnel to be trained on the radiation detection system procedures.

Comment: The plan should require detection and tally of all radioactive emissions alpha, beta, gamma. Consideration should be given to the anticipated contributions of progeny. Radon being collected in landfill gas and discharged from flares and or generator stacks should be included in detection plans. Radon in wet wells and or any potential worker exposure location should be regularly monitored. Where radioactivity had been disposed of in a landfill, sediments and biota at discharge points should be examined for bioacumulation and comparison to background. This level of monitoring should be part of the routine monitoring.

Response: Comment noted, the proposed regulations include radionuclide testing in the landfills environmental monitoring plan.

363-5.1

Comment: The comment relates to proposed removal of the requirement for a landfill site selection study. Although minimum siting criteria would nominally still be maintained, the lack of any site selection study would fail to provide any assurance whatsoever that the best available site was selected. Furthermore, it would allow for completely extraneous factors to direct site selection rather than a comparison of relative suitability. It is also unclear how the elimination of this requirement might conflict with review under the State Environmental Quality Review Act which would typically still mandate preparation of an Environmental Impact Statement and its critical alternatives analysis.

Response: The Department has evaluated the historical use of the site selection study requirement in the current regulations and found that little or no additional public health or environmental benefit was gained through the use of the site selection studies. The Department's evaluation found that the site selection study is generally redundant to the conservative landfill siting restrictions contained in these regulations. Furthermore, the discussion of alternatives under the provisions 6 NYCRR Part 617 has to be accomplished as part of the permitting process and duplicates the site selection report requirement in the existing regulations.

Comment: DEC Staff has proposed that the Siting Requirements to be set forth in Section 363.5-1 with respect to soil types not apply to expansion of existing landfill sites. This approach makes no sense and flies in the face of the purpose of establishing meaningful siting criteria in the first instance. The Department's policy should be to compel the closure of old landfills that had not been constructed and operated with proper regard for the protection of water resources and the environment. The Department should not adopt the proposed Section 363.-5.l so long as it includes the exemption from soil type criteria for the expansion of existing facilities. To take this approach will encourage the continued operation of landfill facilities that were sited without regard to the need to protect groundwater and surface water resources.

Response: The Department now has over 30 years of comprehensive groundwater and surface water quality monitoring data at landfills that have been successfully located in various environmental settings all across the State. This monitoring data conclusively supports that double-lined landfills that have been designed, built and operated in accordance with the State's regulatory requirements are protective of water quality with no known incidents of leachate leakage from the engineered liner systems. However, the Department still maintains in the proposed regulations conservative landfill siting restrictions to ensure that landfills are sited in areas that are appropriate for landfill development. The Department's existing regulations as well as the final regulations do not prohibit the siting of a new or expanded landfill next to older unlined landfills since these locations may meet the technical landfill requirements. If so, these

existing locations can be a suitable location for the landfill, and may be preferable to locating the landfill in a greenfield location. Nevertheless, permitting decisions on a specific project are made on a case-by-case basis.

Comment: The discussion pertaining to proposed Subpart 363-5 provides no analysis of the impacts which may arise by exempting expansions of existing landfills from soil type requirements. The assertion in the DSGEIS that possible impacts will be addressed as individual applications are reviewed overlooks the actual experience at the local landfill, where groundwater contamination and potential impacts to the Mohawk River have been acknowledged for decades and, yet remain unaddressed and unresolved.

Response: The commenter fails to distinguish the difference between the degree of leachate containment of the modern portion of this double-lined landfill and older now closed portions of the old unlined landfill operation. The Department has carefully evaluated the landfill siting requirements contained in subpart 363-5 and finds them to be far more conservative than federal or neighboring state's landfill siting requirements. As in all site specific landfill permitting procedures the individual site specific impacts for the proposed action are subject to its own separate EIS for the case at hand and are not within the scope of the rulemaking process.

363-5.1(a)(2)
Comment: Terms like 'clay rich' and 'attenuate and absorb contaminants' do not adequately describe the requirements of this section in Engineering terms – which would be required to make a determination for siting. They are also ambiguous. Suggest re-writing with appropriate and specific engineering or geological terminology.

Response: The terms characterizing the soil conditions in this provision have been clarified in the final regulations to address this comment.

363-6.1(d)
Comment: As the current state of practice is to transfer destabilizing forces through liner system components and to the subgrade via interface shear strength, it is unclear why the subject text would seek to "minimize shear stresses." Doing so would necessarily impart tensile forces in the geosynthetics, which is generally not a recommended approach. Additionally, the overall liner system stability is driven by the interface with the minimum, not maximum,
friction angle. Perhaps the Department included maximum friction angle for the purpose of calculating tensile forces within the geosynthetics. Regardless, by advocating for the elimination of tension in the geosynthetics altogether, the discussion of minimum/maximum friction angles is moot. We suggest the subject text be revised as follows: "Any geomembrane, geosynthetic clay liner (GCL), geosynthetic drainage layer, geocushion or other geosynthetic material installed on landfill side slopes must be designed **to transfer anticipated destabilizing forces to the landfill subgrade by interface shear strength and to eliminate or minimize, to the extent practicable,**~~.~~

~~minimize shear stresses and to withstand~~ the **generation of** ~~calculated~~ tensile forces acting upon the geosynthetic materials. ~~At a minimum, the~~ **The** design must consider ~~the maximum friction angle of any soilgeosynthetic or geosynthetic-geosynthetic interface, along with~~ seepage forces expected in the side slope soil drainage layer in the primary leachate collection and removal system, to ensure that overall slope stability is maintained and to meet the factor-of-safety requirements specified in paragraph 363-4.3(c)(3) of this
Part."

Response: While the Department did not adopt the suggested text, the Department has clarified the text of the final regulations to address the commenter's concern.

363-6.3
Comment: The subject text should clarify whether the groundwater separation requirement includes or excludes the localized depressions forming the sumps of the landfill cells. Additionally, the use of groundwater suppression systems should only be required until sufficient waste is in place to overcome the hydrostatic uplift on the bottom of the liner system.

Response: The proposed regulations have been clarified to address this comment.

363-6.4
Comment: The subject text should clarify whether the bedrock separation requirement includes or excludes the localized depressions forming the sumps of the landfill cells. Additionally, the subject text references an exception in 363.6.11(a)(4). However, the language in that section specifically identifies components "outside the landfill liner system." Thus, it is unclear why that exception is referenced for application to the landfill liner system itself.

Response: The text of these provisions states that the separation is between the base of the constructed liner and bedrock. This refers to lowest most point of the landfill's liner system which would include the sump areas.

Comment: Given the documented performance of double composite landfill lining systems, a hydraulic conductivity of backfilled materials of 1x10-6 cm/sec represents a reduction in permeability from previous Part 360 siting criteria and is unduly restrictive. We recommend that the Department retain latitude in approval of the backfill material

Response: The final regulations have been adjusted to address the commenter's concern.

363-6.5(b)
Comment: A term like 'clay rich' does not adequately describe the requirements of this section in Engineering terms. Suggest re-writing with appropriate and specific engineering or geological terminology.

Response: The final regulations have been clarified to address this comment.

363-6.6 General
Comment: The Department should adopt the precautionary principle in rulemaking in general, but in the area of landfill regulation, Part 363 should require a comprehensive analysis of landfill leachate and development of pretreatment standards for leachate to ensure that leachate treated at POTWs does not result in plant upsets, contamination of wastewater sludge or discharges that will imperil or degrade surface and drinking waters. This is particularly important in light of the Department's proposal to reduce cover depths from 24" to as little as 12" and doubling the distance between geomembrane seam testing from 500 to 1,000 feet. We note these criteria for Long Island Landfills are more stringent and are not proposed to be relaxed.

Response: The Department routinely requires landfill leachate be comprehensively analyzed for the expanded parameters detailed in Table 3A in final regulations. Beyond the landfill leachate analysis being performed by the landfill operator on a routine basis, historically wastewater treatment facilities also separately evaluate landfill leachate quality data before acceptance by these treatment facilities. The Department believes that under both the existing and final regulation, there is an abundance of leachate quality data generated to ensure that it is adequately treated. The commenter's reference to reduction in barrier protection layer thickness not applying to landfills on Long Island is due to the fact that warm season vegetation is typically specified for landfills on Long Island and that this particular vegetation establishes root zones that need greater barrier protection layer thicknesses to ensure final cover system stability. The commenters reference maintaining the 500 foot frequency for destructive testing of geomembrane field seams for landfills on Long Island is a typographical error and will be corrected in the final regulations to reflect the same 1000 foot testing frequency as required by all landfills across the State.

363-6.6 General
Comment: The commenter strongly disagrees and recommends removal of the volume threshold for requiring a liner for the placement of inert materials (materials previously considered exempt C&D) at a facility.

Response: The commenter fails to recognize the Department is encouraging the inert C&D debris be reused as fill material and that a predetermined beneficial use determination has been proposed those materials which were previously considered exempt C&D debris materials to be used as fill under section 360.13 of the final regulations without any regulatory burdens. The large scale disposal of C&D debris materials which often contains less inert materials needs to be disposed of in properly lined landfills to be protective of groundwater resources and such the volume threshold remains in the final regulations.

363-6.6(a)

Comment: The text should be revised to allow for the use of GCL as a substitute for some or all of the two feet of low-permeability soil in the secondary liner system on cell side slopes. The use of GCL can decrease construction time and cost due to the difficulty of placing, compacting, smoothing, and maintaining clay liner on side slopes. Additionally, GCL has been demonstrated to be unaffected by exposure to freezing temperatures, thereby eliminating a concern identified by the Department in 363.4.3(a)(3)(v). We suggest revising the subject text as follows: "Except as otherwise described in this Part, all landfills regulated under this Part must have a double composite liner system that consists of a primary leachate collection and removal system, a geocushion, a primary composite liner constructed of a geomembrane liner and a GCL, a secondary leachate collection and removal system, a geocushion, and a secondary composite liner system constructed of a geomembrane liner and two feet of low permeability soil. **For locations with a slope less greater than 10%, GCL or other equivalent to two feet of low permeability soil may be used with approval of the Department.** The landfill must be designed and constructed to meet or exceed the following liner system requirements:"

Response: The Department maintains reliance of the lower most two-foot thick low permeability soil barrier in the secondary composite liner system because of its physical durability when compared to relatively thin GCL or other geosynthetic material. A two-foot thick clay barrier as the lowermost component of the double-liner system provides for greater service life when compared to geosynthetic materials. In the case of a catastrophic event such as a landfill fire or a major failure of the liner system, the two foot thick low permeability soil layer is the last barrier to contamination entering the environment and would provide needed environmental protection.

Comment: The performance function/requirement of the geocushion does not appear to be defined. The assumption is that the geocushion is intended to provide the geomembrane with puncture protection from the drainage aggregate since higher permeability drainage layers are proposed. Some additional guidance on the intended function would be beneficial.

Response: The specific performance functions for the geocushion are discussed under the provisions of section 363-6.9 of this Part. The liner system description in this subdivision was meant to only illustrate the various liner system components.

363-6.6(a)(1)(i)&(ii)
Comment: The revised language in these sections remains inconsistent with the industry standards for HDPE geomembranes. The replacement of "minimum" with "or thicker" does not change the meaning of these sentences. As proposed without a negative tolerance, this requirement would require a non-industry standard "special run" geomembrane for all sites, increasing costs to facilities for construction with no environmental benefit. Current GRI GM 13 standards for HDPE geomembranes requires HDPE to be manufactured with a thickness of 60 (nominal -5%) mils, which is what landfills have been installing in recent years with no adverse impacts to the

environment. We understand the Department views "nominal" as including a negative tolerance of 5%, consistent with industrial production standards. We believe this should be made clear in the regulations.

Response: Both the existing and final regulations have always set out the “minimum” requirements for the components of a landfill’s liner and final cover systems from a general perspective. That is, if a design engineer needed to or wanted to specify an 80 mil HDPE liner they should be able to do so without the need for a variance since it is thicker than the 60 mil HDPE (that nominally measured) that is required. It is within that context that the regulations stipulate the minimum thickness for the geomembrane. Under both the existing and the revised final regulations the Department accepts both the positive and negative tolerances for HDPE geomembrane liner thickness as referenced in the current and any future GRI GM 13 industry standard. No changes are necessary in the final regulations as this response defines the Department’s position on what in meant as “nominal” thickness.

363-6.6(a)(3)
Comment: It does not appear that a response was included in the Assessment of Comments, please consider our previous comment: There should be an allowance of time for the leachate depth to recede back to acceptable levels after a 24-hour, 25-year storm event, as in the current regulations.

Response: The Department views this concept as an operational issue and the provisions of paragraph 363-7.2(f)(2) allows the exceedance of the 12 inch head requirement for a period during and following a storm event of up to 7-days.

363-6.6(a)(4)
Comment: While DEC has made clear it has an expectation that the secondary system will be fully redundant, 1000 gpad is unnecessarily conservative when applied over an entire site. The 1000 gpad equates to an equivalent infiltration rate of 13.5” per year or roughly typical infiltration rates in the northeast, including New York, without any restrictions. What this means is that the primary liner system must fail everywhere on an entire site. Given the CQA/CQC requirements and other design provisions (e.g., geotechnical) in the regulations, this is implausible. An alternative approach might be to assign the 1000 gpad rate to a subarea of a site, assuming that failure at a local scale is more probable than complete primary liner failure. Even a 10% – 25% failure assumption would provide significant redundancy.

Response: The new design criteria for the secondary leachate collection and removal system has been added since the existing regulations did not specify any such criteria for the landfill designer. The hydraulic capacity of 1000 gpad provides the design engineer with the minimum requirements for a conservatively designed secondary leachate collection and removal system that would be capable of handling an extreme failure of the upper liner system. The 1000 gpad hydraulic loading requirement is based

on a typical landfill's operating leachate flow in the primary leachate collection and removal system. No changes are necessary in the final regulations.

363-6.7(a)(1)
Comment: Commonly available GCLs have permeabilities several times lower than the specified value in the subject text. Perhaps the 1x10-7 cm/s permeability was intended to achieve equivalence to the primary compacted soil liner specified in the current Part 360 regulations. If so, the subject text should specify that "flux" through the GCL must be equal to or less than that of a compacted soil liner having a permeability of 1x10-7 cm/s and a thickness of 18 inches in order to achieve technical equivalence to the primary soil liner of the current Part
360 regulations.

Response: The commenter is correct that the referenced permeability was to ensure that the GCL had at least the equivalent permeability of 6 inches of compacted soil liner required in the original regulations. Due to the significant specification of GCLs in primary composite liners in landfill designs and the problems and complications of constructing a 6 inch thick low permeability compacted soil layer in the primary composite liner, the Department has substituted the requirement for the compacted soil liner for the GCL in the regulations. The Department agrees that today's GCL manufacturers provide products with permeabilities several times lower than the specified value and as such the text of final regulations has been clarified to address the commenter's concern.

363-6.7(b)(1)(i)
Comment: The slope requirements are already specified in 363.4.3(b)(2) and apply to the grading of the subgrade surface, not the GCL, which will simply be placed upon whatever slopes were created by the subgrade. Consequently, we suggest deleting all discussion of minimum and maximum slopes in the subject text.

Response: The Department disagrees. The specification of the minimum and maximum slopes for the construction of the various liner and final cover system components, such as the GCL or geomembrane, is a critical factor in ensuring the liner system designed by the engineer is actually constructed in the field and that it will perform as intended, and as such will be part of the landfill's final construction certification report. No changes were made as a result of the comment.

363-6.7(b)(1)(iv)
Comment:
Moisture is present in the atmosphere and the requirement as written is not possible to meet. The text should be revised to indicate 'contact with water.' Also, the text should be revised to specify whether the 60 day
timeframe is measured as calendar days or business days. Does installation refer to the date that the GCL is installed or the date that the overlaying geomembrane installation

is completed including all testing and finishing? Can the 60 day period be waived with a variance for side slopes where erosion of the soil cover may occur prior to placement of waste? Longer periods may be necessary and provision for a longer period should be made provided the GCL is not
compromised. We suggest revising the subject text as follows: “The GCL must not be installed during a precipitation event. Installed GCLs must be covered by the approved geomembrane by the end of the day it is
installed and must be loaded with at least one foot of soil within 60 calendar days of installation. **For slopes in excess of 25% the requirement for placement of soil cover may be waived with prior authorization from the Department. Side slope locations not covered with soil must be adequately ballasted and anchored against uplift and movement.** Any GCL that comes into contact with water after it is installed and before it is covered with an approved geomembrane must be evaluated by the project engineer to determine that the material properties are compliant with specifications.”

Response: The final regulations have been clarified to address the concerns raised by the commenter.

363-6.7(b)(2) and 363-6.8(b)(2)

Comment: The slope requirements are already specified in 363.4.3(b)(2) and apply to the grading of the subgrade surface, not the soil liner, which will simply be placed upon whatever slopes were created by the subgrade. Consequently, we recommend deleting all discussion of minimum and maximum slopes in the subject text.

Response: See above response to comment on 363-6.7(b)(1)(i).

363-6.8(c)(3)(iv)(b)
Comment:
For air testing of dual-track thermal fusion seams, there is no test unit number on the test needle gauges. Additionally, vacuum boxes used to test extrusion welds are typically not given identifying numbers. Consequently, we recommend deleting the requirement to document the test unit number.

Response: The final regulations have been clarified to address this comment.

363-6.10(a)
Comment: We appreciate the addition of allowing test methods with a pH closer to landfill leachate, however the response to this comment was not clear, the Department stated that they would accept ASTM 03042 as an "appropriate testing method." Is it the Department's intention that the "appropriate test method" referenced in 363-6.10(a) will still be ASTM 03042 using the stronger acid not representative of landfill leachate? Please clarify that a modified test method using an acid representative of landfill leachate would be considered "appropriate" by the Department.

Response: A modified test method using an acid representative of landfill leachate would be considered to be "appropriate" by the Department when conducting test method ASTM 03043.

363-6.12(a)(1)(i) and (a)(2)((i)
Comment: This factor of safety is still outside typical engineering design factors and is overly conservative. A typical factor of safety would be 2.0. As indicated in the comment response document, this factor of safety is on top of engineering reduction factors to account for intrusion, creep, and biological and chemical clogging. An overall factor of safety of 2.0 is more than sufficient in addition to these reduction factors to account for a long life of the geosynthetic drainage layer in a landfill liner system. Even with the reduced factor of safety of 3.0, in addition to the reduction factors, many geocomposites will be required to be tri-planer type geocomposites (i.e. sole sourced), thereby adding significant construction costs. Many sites have successfully utilized bi-planer geocomposites. We do not see the need for this excessively high factor of safety. If it is the Department's intention to mandate higher-cost tri-planer geocomposites, that should be explicitly stated and allow the design engineers to make determinations as to appropriate factors of safety.

Response: The Department has reduced the factor safety from 10 in the draft regulations to 3 in the revised and final regulations based on the comments received. The critical nature of these components in the landfill's containment system design and the need for these systems to operate throughout the landfills operating and post-closure life in the Department's opinion warrants a minimum factor of safety of at least 3. Other design factors such as drainage layer gradient and slope length to collection pipes and fill depths are other means to affect hydraulic design outcomes to address sole source concerns.

363-6.10(b)(2) and 363-6.11(c)
Comment: The slope requirements are already specified in 363.4.3(b)(2) and apply to the grading of the subgrade surface, not the soil drainage layer, which will simply be constructed upon whatever slopes were created by the subgrade. Additionally, the slope requirements specified in the subject text are not consistent with slope requirements specified in 363.4.3(b)(2). Consequently, we recommend deleting all discussion of minimum slopes in the subject text.

Response: See above response to comment on 363-6.7(b)(1)(i).

363-6.12(a)(1)(i)
Comment: The factor of safety proposed in the subject text should be defined. Specifically, it should be clarified whether this is a "drainage factor of safety" to account for uncertainties in flowrates but not other reductions due to creep, chemical clogging, and biological clogging, or whether this is an overall lumped factor of safety that combines the drainage factor of safety with the aforementioned reduction factors. If the

former, the suggested value is overly conservative. Values for drainage factor of safety recommended in literature (e.g., "Designing with Geosynthetics," Koerner, "Drainage Design Manual," GSE Environmental) range from 2.0 to 5.0. For consistency with published design procedures where a drainage factor of safety is kept separate from reduction factors and to avoid confusion, We suggest revising the subject text as follows: "For hydraulic flow capacity calculations, the design engineer must use ~~a factor of safety of at least three~~ an appropriate drainage factor of safety, which shall be no less than 2.0, and consider the reduction in transmissivity due to creep, biological clogging, and chemical clogging."

Response: The Department has reduced the factor safety from 10 in the draft regulations to 3 in revised and final regulations based on the comments received. The critical nature of this component in the landfill's containment system design and the need for these systems to operate throughout the landfills operating and post-closure life is basis for the Department's stipulating that factor of safety of at least 3 for hydraulic flow capacity and the design engineer should consider the reduction in transmissivity due to creep, biological clogging, and chemical clogging in the design. The final regulations have been clarified to represent these concerns.

363-6.12(a)(1)(i) and (2)(i)
Comment: 363-6.12(a)(1)(i) and (2)(i) now require a factor of safety of at least 3 after employing various
reduction factors in the design calculation. Acceptable engineering practice only requires a factor of safety of 2. See the US Army Corp of Engineers Unified Facilities Guide Specification for Geosynthetic Drainage Materials, Section 31 05 20, Page 6. A global factor of safety of 2 is used in their specification updated January 2016. Richardson and Zhao recommend a global factor of safety between 2 and 3 (GEOSYNTHETIC FUNDAMENTALS IN LANDFILL DESIGN, Proc. of Int. Symp. on Geoenvironmental Eng., ISGE2009. September 8-10, 2009, Hangzhou, China). Recommend this section be changed to require a minimum design factor of safety of 2.

Response: See above response to previous comment.

363-6.12(a)(1)(iii)
Comment: Since the subject language is specific to final cover systems, it should be moved to 363.6.12(a)(2)(iii).

Response: The final regulations have been clarified to address comment.

363-6.12(a)(2)(i)
Comment: The factor of safety proposed in the subject text should be defined. Specifically, it should be clarified whether this is a "drainage factor of safety" to account for uncertainties in flowrates but not other reductions due to creep, chemical clogging, and biological clogging, or whether this is an overall lumped factor of safety that combines the drainage factor of safety with the aforementioned reduction factors. If the former, the suggested value is overly conservative. Values for drainage factor of safety

recommended in literature (e.g., "Designing with Geosynthetics," Koerner, "Drainage Design Manual," GSE Environmental) range from 2.0 to 5.0. For consistency with published design procedures where a drainage factor of safety is kept separate from reduction factors and to avoid confusion, we recommend revising the subject text as follows: "For hydraulic flow capacity calculations, the design engineer must use ~~a factor of safety of at least three~~ an appropriate drainage factor of safety, which shall be no less than 2.0, and consider the reduction in transmissivity due to creep, biological clogging, and chemical clogging."

Response: See the response to comment for the provisions of 363-6.12(a)(1)(i) above.

363-6.12(a)(2)(ii)

Comment: The approach specified, known as the "unit gradient method" is conservative in that the impingement rate of liquid on the geocomposite presumes the saturation of the final cover soil layers overlying the geosynthetics, regardless of whether the local design rainfall is capable of saturating the final cover soil layers. Although conservative, the unit gradient method may be appropriate for final cover side slopes where an under designed drainage layer could result in a veneer failure of the final cover soil layers. However, the unit gradient method is unnecessarily conservative for plateau areas, where the mild slopes are unlikely to result in slides, even in the presence of saturated conditions and some amount of head build-up above the drainage layer. Rather than requiring the same, conservative design approach everywhere, the text should be revised to only require the use of the unit gradient method in areas where the build-up of liquid head above the geonet core would create a slope stability concern. Specifically, we recommend revising the subject text as follows:

"The hydraulic design of the geosynthetic drainage layer should be performed using the saturated hydraulic conductivity of the barrier protection layer**, unless it can be demonstrated that the build-up of liquid head above the core of the geosynthetic drainage layer will not result in a slope stability factor of safety less than the minimums required in 363.4.3(c)(3)(iv). In all cases, the hydraulic design of the geosynthetic drainage layer of the final cover installed on 33% landfill sideslopes should be performed using the saturated hydraulic conductivity of the barrier protection layer.**"

Response: The Department generally agrees with the comment and has determined that the existing text of the proposed regulations addresses the commenters concern's and will be retained in the final regulations..

363-6.16(a)(1)(ii)(h)

Comment: The revised language in the proposed regulations remains inconsistent with GRI GM 13 standards for HDPE geomembranes or GRI GM 17 standards for LLDPE geomembranes. Both GRI GM 13 and GRI GM 17 allows HDPE and LLDPE to be manufactured with a nominal thickness minus 5%. As proposed in the draft regulations, this requirement would require a non-industry standard "special run" geomembrane for

both materials. If it is not the Department's intent to require special run material for landfill liner and capping systems, the negative tolerance needs to be included. We understand the Department views "nominal" as including a negative tolerance of *5%,* consistent with industrial production standards. We believe this should be made clear in the regulations.

Response: See response to comment on 363-6.6(a)(1)(i)&(ii), above.

363-6.17(a)
Comment: Warm and cool season vegetation should be defined in the subject text or in the definitions section.

Response: The terms warm and cool season vegetation is widely known by those who design landfill cover systems. Basically the concern is that warm season vegetation generally have aggressive root systems that have been known to clog drainage layers used in a landfill's final cover system design that can threaten the veneer stability of the cover system. So in cases where the warm season vegetation is needed to survive due to the climate setting, the minimum barrier protection layer thickness needs to be at least 18 inches thick as required under the regulations. If cool season vegetation is specified, then the barrier protection soil thickness can be reduced to 12 inches since their root systems are not as aggressive and typically stay within the 6 inch topsoil layer. No changes were made to final regulations.

363-6.19(e)
Comment: We view the requirement for electrical resistivity testing of the secondary liner to be an unnecessary unfunded mandate. There is undoubtedly a significant increased construction cost associated with this additional testing. There is also an added cost of further construction delays with the added coordination and delay which is not easily calculated. While we acknowledge that electrical resistivity testing is a useful construction quality control tool to determine the quality of liner installation, it is not warranted by the quality and integrity of existing New York State landfill liner systems. The Department's assertion that ALRs are not good indicators of liner system performance is concerning. Historically, this has not been the case in New York State. Please explain the purpose of monitoring and reporting secondary leakage rates if not for the purposes of monitoring liner system performance. In addition, the presence of groundwater suppression systems underlying most landfill liners are a tertiary protection of the environment, as these are also monitored and sampled to ensure the continued function of the liner system. Environmental monitoring and secondary ALR data from landfills across the state gives no indication of poor liner system performance.

Response: The Department disagrees with the assertion that the cost associated with performing electrical resistivity testing (ERT) is a "significant increased construction cost". The cost of performing ERT as prescribed in the proposed and final regulations is a very small cost when considering the overall cost of constructing a landfill. The commenter fails to provide any substantial evidence as to how much of a delay

performing ERT as proposed in the regulations will cause when the testing is being added to the landfills Construction Quality Assurance (CQA) Plan whereby the testing can be integrated in the landfill's construction schedule. The commenter also does not point to any alternative CQA testing requirements which addresses that conventional CQA testing of geomembrane installations only assesses area of the field seams accounting for only a mere five percent of the installation and that ERT can address 100 percent of installed geomembrane for performance robbing defects that would otherwise go undetected. The comment that questions the Department's previous response to comments saying that allowable leakage rate (ALR) monitoring is not a good indicator of the overall double-liner system performance is being taken out of context. The Department's response simply states the fact the ALR monitoring (while an important factor in how landfills are monitored in New York State) only assesses the performance of the landfill's upper primary liner – not the lower secondary liner system. However, understanding the significant benefit that ERT brings to the CQA plan in helping to greatly improve the overall constructed quality of any liner installation and considering the fact that 97 percent of all liner defects happen during construction, the Department is requiring ERT be included into the CQA plans for building both the landfill's upper and lower liner components. The Department realizes the performance of the State's double-lined landfills has been superb. However, when considering that these liner systems have to last throughout the landfill's active life and beyond the landfill's post-closure period, we should strive to build these containment systems using the best available technology to best ensure acceptable long-term performance.

363-7 General
Comment: Rock cuttings from oil or gas well drilling should not be allowed in construction and demolition debris landfills. Cuttings do not meet the definition of a construction or demolition debris. Furthermore, cuttings are often mixed with drilling fluids and contain drilling fluid chemicals and naturally- occurring radioactive material.

Response: Drill cuttings are soil and rock, both of which are considered to be included as construction and demolition debris under both the existing and final regulations. Furthermore, the final regulations only allow drill cuttings that are generated using either air or water drilling fluids to be disposed of as construction and demolition debris.

363-7.1(a)(1)
Comment: If external slopes will be permitted to exceed 33% on an interim basis, will it also be permissible to exceed plateau final grades on an interim basis with the same stipulation that the interim slope is stable and will return to permitted final grades prior to closure?

Response: Typically landfills have maximum fill height restriction that are established in the landfill's permitting documents. If that maximum fill height is not exceeded, a proposal could be considered as part of the landfill's demonstration that would involve a closure plan modification and the necessary supporting documentation for the Department's technical and administrative evaluation and approval. No changes were

made to the final regulations as the commenter's proposal would be allowable under the final regulatory version framework.

363-7.1(a)(3)
Comment: A distance greater than six feet is necessary to help prevent soil and groundwater from being contaminated by drilling and production wastes.

Response: The Department is imposing the six foot separation of drilling waste from the leachate collection removal system and ten foot separation from of drilling waste from the final cover because it believes that the prescribed distances are more than adequate to prevent both soil and groundwater from being impacted by the interred drilling wastes. The language within the final regulations has been retained.

363-7.1(a)(4)(vi)
Comment: When waste loads trigger radiation alarms at a facility, the landfill is required to document the date, name of the hauler, origin of the waste, truck number, detector reading, and disposition of the waste. Text should be added to this section to require that the information be reported to the DEC and that the pubic be notified.

Response: The proposed regulations require Department notification and becomes part of the facility's operating records that would be available to the public. These occurrences would be handled in accordance with the landfill's operation plan.

363-7.1(a)(5)
Comment: If a load triggers the sensor, blending or mixing of that load, at the site, with other materials to dilute the result should be prohibited.

Response: The appropriate procedures for responding to radiation detector trigger events will vary on a facility-specific basis in accordance with the facility's operation plan. Accordingly, the Department will review and approve radioactive waste detections plans on a facility-specific basis. The blending of a regulated radioactive waste with other solid wastes at the landfill would be a violation of the regulations and is not be allowed.

Comment: NYSDEC should revise the definition of Construction and Demolition Debris in Part 360.2(b)(62) to specify that oil and gas-related drill cuttings are not allowed at C&D landfills, i.e., to read "C&D debris includes fill material, demolition wastes, and construction wastes, and excludes cuttings and other wastes generated through oil and gas production." Given that drill cuttings and drilling and production waste is still permissible for disposal at C&D facilities under these regulations, at a minimum, these detection units should also be required at C&D landfills.

Response: The operating requirements of paragraph 363-7.1(a)(5) requires fixed radiation detectors at C&D debris landfills if they accept drilling wastes.

363-7(a)(5)
Comment: Radiation detection mandated by the proposed regulations is inadequate to protect water supplies and public health. It does not comply with EPA standards for technologically-enhanced NORM. A better action is to ban HVHF wastes from NYS landfills.

Response: Technologically-enhanced-NORM in New York State is regulated radiological waste which is prohibited from disposal in the State's landfills without approval from the Department. The final regulations also require that certain solid waste management facilities, including landfills to install fixed radiation detectors to prevent handling or disposal of regulated radiological wastes.

363-7.1(a)(5)(i)
Comment: Waste loads should be monitored for alpha,beta and gamma radiation. Loads should have undergone testing in a lab prior to acceptance at a landfill.

Response: Analytical analyses of every load of waste delivered is not a practical means of monitoring wastes coming to a landfill for disposal and as such no changes were made to the final regulations. Radiation detectors will identify any radioactive wastes, and subsequent evaluation will determine whether or not the wastes are acceptable for disposal.

363-7.1(a)(5)(ii)
Comment: Between 2 to 5 times background is too large a range. Why not just set it at a set number? 2 would be reasonable and provide maximum protection. Or just say it must be below 5.

Response: The requirement for radiation detectors and the establishment of trigger set points in the range of two to five times background was originally set in permit conditions for landfills accepting drilling wastes from high-volume hydraulic fracturing well development in other States. This was established primarily as a means of excluding other oil and gas related wastes containing processed and concentrated Naturally Occurring Radioactive Materials from disposal in NYS landfills. The proposed regulatory requirement for radiation detectors at all Part 360 facilities is based on the need to detect a wide range of possible sources of radioactive contaminants in solid waste, not only those from oil and gas development waste. Given experience in New York the Department is has determined to retain the proposed triggers levels being between 2 to 5 time background.

363-7.1(b)(4)
Comment: In section 363-7.1(b)(4) AOC is to be reported to the Department as "waste received"; instead this should be changed to "AOC received". The use of the term "waste" in this case creates multiple issues associated with existing town permits, community host agreements, waste acceptance limits, and other possible unintended conflicts. WMNY requests that there be a clear and concise definition that AOC is not to

be counted toward the site's permitted waste volume and can be reported to the Department as approved AOC.

Response: The Department realizes that wastes received and approved to be used as alternative operating cover material helps to save natural soil resources from being consumed by a landfills normal daily operation and has modified the language of the final regulations to address the commenter'[s concern.

363-7.1(b)(4)
Comment: Please clarify how this new requirement will be implemented. Alternative daily cover and other beneficial use materials are already reported in the facility annual reports, why are they now being categorized as waste received? Is it the Department's intention to reduce each facility's permitted tonnage by the amount of AOC now required to be identified in the facility's permit and reported as waste received? The way this language has been revised leaves that issue unclear. The comment response document indicates that this AOC tonnage limit will be incorporated into facility permits upon renewal or modification based on a justification of AOC required for individual operations. Please provide guidance on what constitutes sufficient justification of this tonnage. Many facilities make payments to host communities based on the amount of waste received. If AOC is now to be classified as waste, this could represent a significant increase in cost to facilities which budget based on expected incoming waste, not AOC received at lower tip fees. This will encourage disposal of these materials as waste rather than beneficial use as identified in 363.4.6(a). In turn, this will ultimately drive up the cost of remediation projects, such as "Brownfield" cleanups. We understand AOC will still be treated as a separate category of landfill material, not changing or applying to permitted waste acceptance tonnage or daily limits.

Response: Alternative operating cover is waste that is received and approved to be used as alternative operating cover. The final regulations have been modified to address the commenter's concerns (see above response). The final regulations will allow each landfill to establish individual thresholds for receipt of both alternative operating cover material and general waste materials on landfill-specific basis based on their operational needs.

Part 363-7.1(b)(4)
Comment: Please clarify that the "waste received" reference in 363-7.1(b)(4) is in fact alternative operating cover received and that it will be a separate limit (i.e., additional amount) from currently defined waste tonnage limits in individual facility permits. For consistency, the Department should maintain use of "alternative operating cover" rather than categorizing this stream as waste.

The comment response document indicates that this AOC tonnage limit will be incorporated into facility permits upon renewal or modification based on a justification of AOC required for individual operations. Please provide guidance on what constitutes

sufficient justification of this tonnage. Will factors such as existing agreements, availability of borrow materials, and suitability of alternative materials be considered? Many facilities make payments to host communities based on the amount of waste received with BUD materials or ADCs typically treated a different way under the agreements). The use of the term "waste" in this case creates multiple issues associated with existing town permits, community host agreements, waste acceptance limits, and other possible unintended conflicts. This could represent a significant increase in cost to facilities which budget based on expected incoming waste, not AOC received at lower tip fees. This will encourage disposal of these materials as waste rather than beneficial use as identified in 363-4.6(a). In turn, this will ultimately drive up the cost of remediation projects, such as "Brownfield" cleanups.

At a minimum the language characterizing this material as "waste received" should be removed from the regulation. We propose the following changes in bold:

Alternative operating cover approved pursuant to subdivision 363-6.21(c) of this Part must be identified in the facility's permit as a separate annual tonnage **from solid waste** and be reported as **alternative operating cover received**.

Response: See the above two responses.

Comment: Our current Part 360 Facility Operating Permits contain a pre-approved beneficial
use determination listing for materials that are permitted as use for daily cover at the site. It is imperative to maintain this permit condition, as we have entered into multiple long-term agreements that are based upon the use of these materials as operational cover. Thus, we request that these site-specific permit approvals continue to run through the term of the permit, at which time we can re-apply during the permit renewal process (i.e. the 180-day expiration/phase out provision will not apply to these permits).

Response: The transition requirements in the provisions of section 360.4 address the commenter's concerns.

363-7.1(e)
Comment: Air quality monitoring should be mandated if community members are requesting it. Air testing should include but not be limited to H2S, VOCs including BTEX and particulate matter including fine particulates at 2.5 microns.

Response: The air quality monitoring of emissions from landfills is regulated pursuant to the provisions of 6 NYCRR Part 201 which are implemented by the Department's Division of Air Resources and are beyond the scope of this rulemaking.

Part 363-7.1(e)
Comment: We do not oppose active early landfill gas collection and control, however we do not believe that exacting and prescriptive pipe spacing specifications are

appropriate or warranted. The NSPS “Gas Collection and Control” (GCCS) plans or the gas system development plans that are already in place were designed to both collect gas and control odors. These plans have been engineered for the facility life with header and laterals placement, pipe and compressor sizing, well spacing in accordance with radii of influence, and control infrastructure.
Based on our extensive gas collection experience, there are other equal, if not better, commonly employed methods for early collection, such as “build as you fill” vertical slip form gas collection wells which allow better long-term performance and serve to capture gas early in its generation phase. The new requirement needs to be for early gas collection and should be left to the discretion of the system designer to develop a compliant system meeting the air and solid waste regulations with respect to the site conditions.

Response: The Department agrees with the commenters concern that the NSPS Gas Collection and Control plans can have different and other innovative gas collection system designs approved under the NSPS program to control landfill gas and odor emissions. However, the Department has in a number cases received odor complaints from NSPS regulated facilities and in many of these cases the landfill operator needed to install horizontal gas collection systems in order to effectively control odors. The Department maintains its belief that these systems are relatively easy and inexpensive to install and as such provide a proactive solution to helping landfill operations to maintain effective odor controls should odor problems arise from the landfills operating area.

Comment: WMNY does not support prescribing gas system designs with exact and prescriptive pipe spacing requirements. NSPS "Gas Collection and Control" (GCCS) plans or the gas system development plans are already in-place with design requirements engineered to collect gas and control odors. These plans have been engineered for a specific facility and include site specific requirements for header and laterals placement, pipe and compressor sizing, well spacing/radius of influence distances, and control infrastructure. Although they do serve a purpose in gas collection, horizontals should not be mandated nor solely relied on for gas collection, particularly at a prescriptive spacing. The new requirement should provide for early gas collection and should be left to the discretion of the system designer to develop a compliant system meeting the air and solid waste regulations with respect to the site conditions. Horizontal gas collectors are just one means, but not necessarily the best, to accomplish this objective.

Response: See above response.

363-7.l(e)(1)
Comment: In our experience landfill gas can be sufficiently collected with 40-foot vertical spacing. In addition, this regulation as currently written, makes no distinction between solid pipe and perforated pipe. Therefore we recommend DEC consider the following changes: “In landfills which receive putrescible waste, horizontal landfill gas

lines must be installed in the waste mass at a horizontal spacing of not more than 40 feet and a vertical spacing of not more than 40 feet and shall terminate perforation at least 40 feet from the exterior slope of the waste mass."

Response: See above response.

363-7.l(f)(7)(i)
Comment: A longer time frame than 24 hours should be allowed here, for the cases of weekends and holidays. Does this require that the Department be notified in writing within 24 hours of discovering the exceedance?

Response: The Department understands that due to weekends and holidays, notification within 24 hours of detection of an exceedance is at times difficult. While wanting the earliest notification as practical to occur, the final regulations have been revised to clarify this requirement.

Comment: Considering that the requirement is based on a rolling 30-day average, it may not be possible to meet the notification requirement in the timeframe specified. By definition, the exceedance would be based on the prior 30 days or monitoring. Additionally, a 24-hour notification timeframe will be very difficult to meet, especially considering that the data is constantly recomputed as part of the rolling average process and to allow the facility time to verify that the data is, in fact, accurate. We suggest revising the subject text as follows: "notify the Department in writing within ~~24 hours of the exceedance~~ 72 hours of determination that the allowable leakage rate has been exceeded;"

Response: See above response.

363-7.1(h)(1)
Comment: The sudden revision to 363-7.1(h)(1) prohibiting leachate recirculation in landfill cells without "active gas collection and destruction" was introduced without explanation in either the revised DGEIS or the Assessment of Public Comment documents. There does not appear to be a comment in the latter document suggesting this change. The landfill gas that might be collected at this early stage of decomposition will present problems for landfills that collect gas and use it to generate electricity, for example. This early gas will be low quality methane gas with higher amounts of air than these power plants are willing to accept. It might require a separate destruction mechanism that may be difficult to timely permit given current Title V issues with the Department. The revision fails to account for the increased need to send this additional leachate offsite for treatment, including impacts of additional hauling. Of course, cost impacts are not considered. Recommend this revision be removed from the citation.

Response: It has been the Department's experience that leachate recirculation into the landfill's waste mass can result in a rapid onset of landfill gas generation. Literature on landfill bioreactor operations which encourage leachate recirculation to reduce the

pollution potential of the interred waste via rapid decomposition supports this fact. In an effort to ensure that landfills can effectively control odors, these provisions were included in the rulemaking and will remain in the final regulations.

Part 363-7.1(h)(1)
Comment: Please clarify the reasoning for requiring active gas collection and destruction for cells with leachate recirculation when the active gas collection and destruction requirement was stricken from other sections of the previous draft and replaced with only the requirement that collection infrastructure be installed. The sudden revision to Part 363-7.1(h)(1) prohibiting leachate recirculation in landfill cells without "active gas collection and destruction" was introduced without explanation in either the revised DGEIS or the Assessment of Public Comments documents. The landfill gas that might be collected at this early stage of decomposition may present problems for landfills that collect gas and beneficially use it, such as to generate electricity. This early gas is often low quality with low methane content and higher air content than that which can be used successfully in these beneficial use projects. This could require a separate destruction mechanism, such as a flare, that may be difficult and time consuming to permit. This could also increase the costs for hauling and offsite leachate treatment if areas are not available to be used for recirculation. Site personnel and/or design engineers should be allowed discretion to determine whether or not an issue, such as off-site odors, exists that would warrant the implementation of active gas collection in these scenarios, with the understanding that appropriate collection infrastructure will be installed for future use once gas quality stabilizes. We request that the added clause requiring active gas collection and destruction to be in place be removed from Part 363-7.1(h)(1) and the section returned to its content as written in the first draft.

Response: See the response to the above comment.

363-7.1(h)(1)(iii)
Comment: It is unclear from the subject text as written whether this is a requirement that must be met prior to initiating leachate recirculation or whether this is something that must be done during the first 12 months of recirculation.

Response: This requirement applies to the previous 12 months of a landfill's request for authorization to recirculate leachate. The requirement calls for a demonstration that the landfill's primary liner leakage rate for the past 12 months was less than the allowable leakage rate of 20 gpad. It would be inappropriate to allow leachate recirculation and the increased hydraulic loading to a landfill that was experiencing difficulties in meeting the regulatorily required allowable leakage rate.

363-7.1(l)
Comment: We recognize DEC's desire to implement restrictions on management of non-friable asbestos. However, we strongly recommend DEC consider working with the Department of Labor to first change the handling and management requirements at the generator's site during demolition, before changing the requirements for disposal. We

believe this section should be reviewed for consistency with other regulations to ensure generators, contractors, transporters and disposal facilities understand the requirements.

Response: Non-friable asbestos has been allowed to be disposed in landfills in New York State. These provisions merely acknowledge the current practice and sets forth basic requirements to help keep asbestos fibers from being produced via landfill operations. The regulation of handling and management of non-friable asbestos at the point of generation is beyond the scope of this rulemaking, however, the Department does work closely with the NYS Department of Labor on these matters.

363-7.1(1)
Comment: This comment was not sufficiently addressed. Please clarify that the removal of "compacted" from the previous draft's prohibitions for non-friable asbestos handling will allow for the handling of non-friable asbestos as C&D debris. The requirement is too restrictive as currently written. Non-friable asbestos is currently handled as C&D debris and there is no need to place limitations on its handling prior to it being covered. In addition, how will this requirement be enforced? Currently, disposal facilities rely on waste manifests and screening performed by the generator to determine the presence of friable asbestos in waste. If non-friable asbestos is required to be handled in a similar fashion, will characterization and manifests be required at the waste generation point'? Will disposal facilities be liable for these determinations made by generators if material is found to contain non-friable asbestos that was not characterized as such? If so, the likely outcome is that all C&D debris will need to be handled as asbestos containing waste, dramatically increasing handling costs and, in turn, tipping fees for C&D material, resulting in burdening many small business waste haulers. We request that subdivision 363-7. l(l) be deleted in its entirety. We understand that non-friable asbestos will continue to be handled as C&D at transfer stations and landfills that do not process such waste.

Response: The Department changed the word “compacted” to “crushed” in the proposed regulations to more accurately align the language with the routine management practices of non-friable asbestos being disposed in landfill. This is intended to control purposeful “crushing” or size reduction of non-friable asbestos containing waste by a landfill operator and not the routine operational compaction of the waste at the landfill.

363-7.1(o)
Comment: Oversight of handling, tracking, and disposal of radioactive waste material from pipelines must be
included in regulations. Radon and its decay products accumulate along the interior of the pipelines and are removed at pigging stations. The industry’s own publication guidelines fully acknowledge that radionuclides such as Lead-210 and Polonium-210 can be found in pipelines’ scrapings as well as sludge accumulation in other pipeline infrastructure.

Response: The regulations governing pipelines that distribute gas are beyond the scope of this rulemaking. However, the proposed and final regulations require landfills, combustors and transfer facilities that send waste out-of-state to have radiation detectors to ensure errant regulated radiological waste materials will be detected and prevented from being illegally managed at these facilities.

Comment: NYSDEC has not sufficiently studied the potential adverse environmental impacts of allowing mixed fluid and solid wastes at landfills. The Department could preclude the need for such study by banning the acceptance of mixed wastes as suggested above. If the Department chooses not to address mixed fluid and solid wastes from oil and gas development sites, it must provide a reasoned explanation for its determination, which considers the potential for mixed liquid and solid oil and gas wastes to contaminate landfills and their leachate systems.

Response: Solid waste is already well defined in both the Environmental Conservation Law as well as the existing regulations and the proposed Part 360. The statutory definition excludes sewage as well as substances in gaseous form and would already include those wastes that have a moisture content but which are not highly diluted liquids. In light of the fact that waste typically found in municipal solid waste landfills contains moisture, landfills built to modern standards are well equipped to handle solid waste that is not one hundred percent solid. In addition, the existing regulations and the revised regulations already specified a moisture content for acceptable waste. The Department also disagrees with the statement that the Department has not considered the environmental impacts of disposing of waste produced from the oil and gas industry. The proposed regulations appropriately identify the different waste streams from oil and natural gas production intended to be regulated by the Department including drill cuttings, flowback, and production brine. While the comment collectively refers to all waste from the oil and gas industry under one umbrella term, the Department's regulations take a more specific fact-based approach by identifying each waste stream separately. To that end, the Department evaluated each waste stream and finds that the disposal of drill cuttings does not pose the potential for any adverse environmental impact and included regulations to make clear that the disposal of flowback is prohibited. The commenter suggests that the oil and gas industry is mixing flowback and production brine in with drill cuttings in order avoid the disposal prohibition. The disposal of drill cuttings in New York state landfills is not a new activity and there is no evidence to suggest the practice theorized by the commenter is occurring. While the Department is not obligated to evaluate potential impacts from hypothetical scenarios, there are a number of a regulatory provisions contained in the revised regulations that address these concern. Those provisions include the need for a waste tracking form for drilling and production wastes - - whose definition is not limited to liquids - - the requirement for radiation detection monitors and the moisture content regulation discussed above, among others. Therefore, the concerns addressed by the commenter are already addressed in the proposed regulations.

360-7.1(o)(7)
Comment: LLRW "Processed and concentrated" would include Marcellus and Utica Shale cuttings if the term were clearly defined and applied.

Response: The Department has previously concluded that drill cutting are not considered “processed and concentrated” under the Part 380 regulations.

Part 363-7.1(o)(7)
Comment: § 363-7.1(o)(7) prohibits the disposal (in Part 360 regulated landfills) of “concentrated naturally occurring radioactive material (NORM) waste …. as defined in Parts 380, 382, and 383 …. that are required by Parts 380 and 383 …. to be disposed of at a Part 383 permitted facility.” The terminology “concentrated naturally occurring radioactive material (NORM) waste” is not actually defined in existing Parts 380, 382, or 383, but it is essentially defined to mean TENORM waste in the April 5, 2017 proposed revisions to Part 380. However, it is not entirely clear as to when TENORM (i.e. concentrated NORM) waste is subject to Part 380 versus when it may be subject to Part 360. We do not object conceptually to the statement in § 363-7.1(o)(7) that concentrated NORM (i.e. TENORM) waste that is subject to Parts 380 & 383 is prohibited from disposal in Part 360 landfills, but there needs to be a clearly articulated distinction between when such waste is subject to Parts 380 & 383 versus Part 360, which does not currently exist in either the proposed Part 380 or proposed Part 360.

Response: As part of the rulemaking associated with Part 380, the Department proposed a definition for TENORM. Decisions about whether waste is classified as NORM or TENORM are determined under Part 380 and therefore outside the scope of the Part 360 series rulemaking.

Part 363-7.1(o)(8)
Comment: § 363-7.1(o)(8) prohibits the disposal (in Part 360 regulated landfills) of any waste with a Radium-226 (Ra-226) concentration > 25 pCi/g, however the background documents contain very little technical basis of rationale for this relatively low limit. The only explanation API could find is a couple simple statements in the Assessment of Comments document, which on page 330 says that Federal health risk assessments (unidentified) have concluded that 50 pCi/g is a safe concentration of radiation for disposal in solid waste landfills and therefore, the Department has chosen to limit the concentration of radioactive material to 25 pCi/g in order to ensure that landfills do not constitute a threat to human health or the environment, and a similar statement on page 5 which refers to an un-named Argonne National Laboratories health risk assessment which found 50 pCi/g to be an acceptable level. Given the significance of a Ra-226 concentration limit prohibition, DEC should provide a much more complete risk assessment and analysis of why 25 pCi/g is being proposed, and why 50% of the stated “safe” and “acceptable” concentration was arbitrarily chosen rather than using the safe/acceptable level itself.

It is also unclear what landfill disposal options would exist for wastes containing Ra-226 concentrations > 25 pCi/g, but which are still below classification as low-level radioactive waste. Since Part 360 regulated landfills would be prohibited, it would seem that Part 380 may apply, but there are no corresponding applicability criteria in Part 380 that in any way refer to wastes containing > 25 pCi/g of Ra-226.

The commenter requests that the proposed 25 pCi/g Ra-226 prohibition limit either be clearly justified with an appropriate risk assessment, or that it be removed, or in the alternative that it be increased to the 50 pCi/g level referred to as safe in Assessment of Comments document. Regulatory prohibition limits such as this should be based on appropriate technical risk assessments and analysis, which are clearly referenced, allowing for review. That sound technical basis appears to be lacking with regard to the proposed 25pCi/g Ra-226 limit. (46)

Response: The Department's establishing the disposal threshold was not an arbitrary action in that the Department recognizes the ANL recommendation is based on a risk assessment used for guidance on radiologically contaminated sites as a remedial threshold. The Department decided to establish the 25pCi/g as a disposal threshold since it believes any materials with radiological signature at that level or higher should not be disposed of in a landfill regulated under these provisions.

360-7.1(o)(8)
Comment: 25pCi/g is half the acceptable level cited in a report that uses very specific quantities and thickness and cover. Why only Radium? Radon, Polonium 210 and Lead 210 should be considered.

Response: The 25pCI/g threshold is conservatively established and is intended to preclude disposal for any radiological material that exceeds this threshold. No changes have been made to the proposed regulations.

360-7.1(o)(9)
Comment: Drill cuttings can be up to 80% moisture and that moisture can be drilling fluids and or brine from the formation containing Radium, Radon, Polonium 210 and Lead 210, which are alpha, beta and gamma emitters. During decay the 25pCi//g could be exceeded. There is no provision for identifying that.

Response: While the Department is not obligated to evaluate potential impacts from hypothetical scenarios, there are a number of a regulatory provisions contained in the revised regulations that address the scenario for drill cuttings being up 80 percent moisture. Those provisions include the need for a waste tracking form for drilling and production wastes - - whose definition is not limited to liquids - - the requirement for radiation detection monitors and the moisture content regulation discussed above, along with landfills being prohibited from taking wastes that are more than 20 percent moisture, among others. Therefore, the concerns addressed by the commenter are already addressed in the proposed regulations.

363-7.1(o)(9)
Comment: The DEC should prohibit municipal landfills and wastewater treatment plants from accepting oil and gas drilling and development waste entirely. Although this draft includes a prohibition against disposal of fracking fluids, these fluids are often combined with other materials to make them "solid waste" and/or identified as "construction/demolition" waste, both of which will circumvent DEC's attempts to prohibit this disposal. Prevention is the only guarantee for the protection against these wastes, and New York should prevent potential exposure by fully banning these disposal methods for all oil and gas drilling and development wastes.

Response: As stated above in response to a similar comment, the Department evaluated the different types of wastes produced from the oil and gas industry, including the nature of waste already accepted at landfills. Based on this analysis, the Department incorporated regulatory limits based on the specific waste stream. For Part 363, specifically, this included limits on where drill cuttings may be placed in landfills and a prohibition on the disposal of flowback and production brine. A global prohibition on all wastes from the oil and gas industry being received at municipal landfills was not warranted. The regulation of wastewater treatment plants is beyond the scope of this rulemaking.

Part 363-7.1(o)(9)
Comment: § 363-7.1(o)(9) prohibits the disposal (in Part 360 regulated landfills) of "fluids produced from an oil or gas production well, including flowback water and production brine," but there is no sound technical basis provided in the background documents for this specific prohibition. The only explanation provided appears to be that this is simply a response to commenters who opposed disposal of certain oil and gas wastes in New York, without any accompanying technical support. API disagrees with adding this specific prohibition with no sound technical basis or justification articulated in the background documents, though we do recognize that elsewhere in the regulations, free liquids and bulk liquids are already prohibited [at § 363-7.1(i) and § 363-7.1(o)(5) respectively], so a separate prohibition on fluids from oil and gas production wells would appear to be duplicative and unnecessary. API recommends that § 363-7.1(o)(9) be removed. The addition of § 363-7.1(o)(9) prohibiting the disposal of "fluids produced from an oil or gas production well, including flowback water and production brine" has not been demonstrated to be necessary, given the § 363-7.1(i) and § 363-7.1(o)(5) prohibitions against free liquids and bulk liquids, nor has it been separately evaluated and justified as necessary for the protection of human health or the environment.

Response: .The comment is correct that free liquids were already prohibited from disposal at permitted landfills. However, based on public comment on the proposed and revised regulations, it was apparent that the general public was unaware that liquids produced from a completed production well qualified as free liquids. To the extent that the revised regulations provide that clarification, the regulations accomplish the purpose of keeping all persons who manage solid waste aware of their regulatory

obligation. Since the regulations continue, appropriately, to allow for the disposal of drill cuttings, it is also beneficial to distinguish between the waste streams which are permitted to be managed in the State from those wastes which are not. To the extent that the commenter is correct that the regulation is redundant, the comment is noted.

363-7.1(o)(9)
Comment: As a logical extension of the Governor's ban on high-volume hydraulic fracturing gas development in New York State, the proposed regulations should ban importation of all out of state waste from this drilling process, solid or liquid, for treatment, disposal or beneficial use.

Response: As indicated above, the Department disagrees with the premise that all waste from the oil and natural gas industry should be prohibited from either reuse or disposal. Every commercial and industrial sector present in the State produces a variety of waste streams. In adopting regulations for the management of solid waste, the Department must apply the principles of the state solid waste management plan and the management hierarchy to the oil and gas industry as the Department would for any other industry. Beneficial use of production brine, which would be allowed provided the applicator meets the conditions provided in Section 360.12, not only implements the State's management hierarchy but does so while minimizing the impacts of such reuse.

360-7.1(p)
Comment: Drilling and production wastes that contain radioactivity should not be planned for dilution/mixing at the landfill site to reduce pCi/g or moisture content. The potential impacts of radiation due to bioaccumulation do not ultimately get reduce by mixing. Bio-accumulation negates dilution as a solution to pollution.

Response: Drilling and production waste mentioned in this subdivision is referring to nonhazardous industrial solid wastes which would not represent a threat to public health or the environment because they being interred for disposal within an environmental containment system that is specifically designed to prevent a release of these materials and therefore pose little or no threat to bioaccumulation to the surrounding ecosystem. The proposed regulations have numerous safe guards that require materials to be appropriately classified for disposal as a solid waste. This includes existing requirements for the leachates generated to be carefully analyzed for acceptance to wastewater treatment plants as well as air emissions from landfills to be carefully monitored and evaluated.

363-7.l(s)
Comment: This section does not include a time period for financial assurance or guidance on how long to plan for. DEC's Assessment of Comments cited section 360.22, we recommend a reference citation is included in this section.

Response: Section 360.22 is referenced in this paragraph.

363-9.5
Comment: The revised rules removed the requirement for active gas collection and destruction. The commenter urges the Department to reconsider in light of climate change issues.

Response: Almost all of the municipal solid waste landfills in the state already have installed active landfill gas collection and destruction components as part of their operations. The regulations require that new landfills or expansions be designed and constructed with horizontal gas collection lines installed in the waste mass. These requirements are equally protective of the environment as the originally proposed requirements.

363-9.6(a)
Comment: The subject text should address severability. That is, not all of the post-closure care components will be able to be reduced and/or terminated at the same time. Thus, the subject text should clarify that the owner or operator may present demonstrations for specific components at the appropriate time to request associated reductions in post-closure care.

Response: The Department agrees with this comment and believes that the language of subdivision 363-9.6(a) in the regulations provides the flexibility sought in this comment.

363-9.6(a)(1)(vi)
Comment: The emission of gas from any landfill will decrease over time. Operation of an active gas collection system is appropriate only for a certain length of time following closure, and is a function of the landfill's gas emission curve. After that point, there may be insufficient landfill gas collected to operate the flare or gas-to-energy plant. At that point, or perhaps even sooner, the active gas collection system would be turned off and future landfill gas emissions would be released to the atmosphere through the passive gas venting system. Although the proposed regulations for custodial care acknowledge this, the subject text, as written, does not allow for transition from the active gas collection system to the passive gas venting system during the post-closure period. We recommend revising the subject text as follows: "Any installed active landfill gas collection system must be maintained and
operated until such time that the landfill gas generation rate is unable to sustain operation of the flare and/or the gas-to-energy plant. From that point forward, the passive gas venting system will function to manage landfill gas. Landfill gas captured by the active gas collection system must be destroyed in a flare or equivalent equipment in accordance with Parts 201, 208 and 212 of this title."

Response: The Department agrees with the approach to the described in the comment when it comes to ending the need for active gas collection and destruction. However, this comment goes beyond the scope of this rulemaking as these actions would need to

also comply with landfill emission requirements in the provisions of Parts 201, 208 and 212 of this title.

363-9.6(a)(1)(vii)
Comment: We believe inspections following every 5-year, 24-hour storm event to be too frequent. For many landfills in the State, this is a rainfall of less than three inches in 24 hours. It is not our belief that storms of that magnitude would adversely impact final cover system integrity and therefore do not warrant inspections. We respectfully requests revising the rainfall event frequency to 25-year, 24-hour storms.

Response: The Department has long-established that the 25-year, 24-hour storm as the design storm for landfill final cover systems. Understanding that the landfill final cover system is also required to be inspected quarterly throughout the post-closure period and based on experiences gained under the current regulations, the final regulations have been clarified to address this comment.

363-9.6(b)(1)(vi)
Comment: By definition, custodial care represents reduced risks. Therefore, routine inspections should be much less frequent than annual. We suggest requiring inspections every 5 years in the custodial care period.

Response: The Department understands that some flexibility is needed with respect to custodial care due to landfill specific circumstances. The final regulations have been adjusted to impart some flexibility to account for the individual environmental characteristics of each landfill upon entry into the custodial care period.

Comment: Regarding inspections following seismic events, since Section 363-4.3(d) requires the demonstration that the landfill will be stable during seismic events up to and including the design seismic event, inspections relating to seismic events should only be necessary following events whose magnitude exceed that of the design event. We suggest elsewhere in this letter that the design seismic event be clearly identified in 363.4.3(d). A reference could therefore be included pointing back to that section in the subject text.

Response: The Department believes that the currently proposed language allows for more latitude in defining the seismic custodial inspections on an individual basis best addressing the final cover systems condition upon entering the custodial care period.

Comment: Regarding inspections following major rainfalls, both current and proposed landfill regulations require that drainage features be designed to accommodate flows from the 25-year storm, 24-hour storm. Considering this
design basis, it is unclear why an occurrence of a much less intense storm, such as a 5-year, 24-hour event, would warrant an inspection. Instead, we suggest that event-related inspections would only be needed should the event exceed the established

basis for the cover system design for that particular facility but in no case should be more frequent than the regulatory design guidance of the 25-year, 24-hour storm.

Response: The final regulations have been clarified to address this comment.

363-9.6(b)(1)(vii)
Comment: Similar to the frequency for inspections, We suggest reducing routine reporting for landfills in custodial care to once every 5 years, unless issues have arisen which necessitated corrective action or there has been a change to end use.

Response: The Department understands that custodial care decisions will need to be made on an individual landfill basis and adjusted the provisions of paragraph 363-9.6(b)(1) in the final regulations to address the commenter's concern.

363-9.6(a)(1)(vii)
Comment: Routine inspections should be specified on a more frequent basis immediately following closure, and then diminishing to a less frequent basis, concurrent with the risk of failure. As currently written, the post-closure period requires routine inspections every quarter for the duration of the post-closure period, which seems excessive. Once final cover vegetation has become established after the first few years following closure, an annual inspection basis would be more appropriate.

Response: The final regulations have been clarified to provide some flexibility to address the individual landfill condition differences.

363-10.3(c)(6)
Comment: In order to calculate custodial care cost estimates, a timeframe for custodial care must be specified. Although it is understood that the timeframe may be site-specific, at least a minimum timeframe for all facilities should be specified and that timeframe used for the custodial care cost estimate. Since the term is used in many other locations within the regulations, the minimum timeframe might be best presented in the definitions section of Part 360.

Response: For financial assurance calculation purposes, a 30-year rolling average should be used for financial assurance calculations, as is specified in proposed Section 360.22.

363-11.4(a)(6)
Comment: Refers to section 363.12.5 of this Subpart; should be section 363.11.5.

Response: Comment noted. This typographical error was corrected in the final regulations.

Part 364

Comment: Really appreciate the continued exemption of municipal non-hazardous transportation from being put under that waste transporter, regulated waste regulations for removing non-hazardous waste. We will really appreciate that reduction, the burden on municipalities.

Response: Comment noted.

General Comments

Comment: A cradle to grave reporting system for oil and gas production waste and for C&D debris was recommended but none of the documents are provided to DEC except upon request, which limits the availability of the records under the Freedom of Information Law.

Response: The final regulation requires waste tracking documents for non-exempt drilling and production waste and for restricted-use, limited use and contaminated fill material statewide. Additionally, C&D debris, including general fill material, generated within New York City will require waste tracking documents. Signed copies of waste tracking documents for non-exempt drilling and production waste and for restricted-use, limited-use, and contaminated fill material, must be provided to the Department within 15 days of the waste delivery to the receiving location or facility. Those waste tracking documents will be available pursuant to the Freedom of Information Law.

Comment: It seems quite excessive to require every small amount of soil, whether contaminated or not, within the NYC area and potentially the remainder of the state to be tracked on a reporting form. It seems even more "something" to think that reporting this information to the DEC within 15 days will solve or eliminate any environmental harm happening in the down-state area. There is no way the NYS DEC regions are prepared for the amount of reporting information that will be received. The supporting documents do not even attempt to discuss or address this issue. Additionally, what cost is this to the State, the local communities, the small businesses, the economy and ultimately the tax-payers of NYS? It is not possible from paperwork alone, to find and track all of the soil around the State of NY and the into the surrounding states.

Response: The final regulations respond to the concerns of both the Department and the public for a higher level of scrutiny on the disposition of fill material that may contain varying levels of contamination. The waste tracking documents and notification requirements in the final regulation provide the Department with tools to better address the growing concerns on how fill material is managed. The Department recognizes the volume of reporting information the regulations will generate and is actively working to develop a system that satisfies the intent of the regulations while not unnecessarily burdening the Department and the regulated community.

Comment: The permit period for waste transporter permits should be increased to at a minimum 3 years. Most transportation vehicles have a life cycle far in excess of this time period. The increase in permit term will help small businesses in absorbing the additional costs of doing business. The supporting document make no valid attempt to address the number of additional waste transporter permits that will be required or the impacts of loss of truck drivers from the industry. Additionally, why couldn't a waste transporter permit be all encompassing of
the registration, why does it seem both are necessary.

Response: The one-year term for Part 364 Waste Transporter permits is set in statute at ECL 27-0305(8) and the fees are established by ECL 72-0502 and are therefore unable to be changed by a Department rulemaking. With respect to the concern regarding the increased number of permits, the final regulations are not expected to have any substantial increase on the number of permits although the registration component is expected to be a new workload for the Department and the means of addressing that workload is under development. Also the final regulations are not expected to have a substantial negative impact on the trucking industry with respect to the number of drivers as the volumes of materials to be transported is not changing, only the management and oversight of that transportation. It is necessary to keep permitting and registration separate, as regulatory fees apply to each vehicle that requires a permit while there are no regulatory fees for registration. The final regulation does make an allowance to combine to the extent possible a registration and a permit for those entities that require both.

364
Comment: NYSDEC' s new requirement to register all refuse hauling vehicles is an unnecessary expense our customers will absorb in their cost for our services. We propose, as an alternative, that the revised NYSDEC Part 364 regulations should only require that registrants list the number and types of vehicles with current State Motor Vehicle license plates they have doing business in New York State registered with licensing authorities.

Response: The final regulations only require registration for the transportation of certain waste types and there are no fees associated with registration. Unlike the requirement for a Part 364 permit, registrants will not be required to list each vehicle used, allowing for much greater flexibility in operation and without the need to apply for a modification to the registration to add or remove vehicles, as is required with a permit.

364
Comment: Commenter objects to the exemption of general fill from the tracking requirements, stating that unless these materials are tracked from point of generation, some will continue to dispose of the material in areas that are unsuitable.

Response: The final regulations require waste tracking documents for general fill material generated in NYC. The Department does not currently have reason to extend the waste tracking requirements for general fill material beyond that geographic area of the State.

364-1.2(e)(10)
Comment: Are millings subject to these requirements if they come from a commercial or industrial site? The majority of my concerns with these specifications are dependent on whether millings and asphalt are considered a solid waste under C&D. If it is a solid waste and this applies, then again all the previous arguments apply here - a company moving millings from a construction project has to either find registered trucks (which will most likely increase the cost to hire those trucks, plus it's unlikely you'll find them because it can be difficult to even find enough un-registered trucks during busy times of the construction season), or under-load each truck to stay under the 10 cy limit (which will increase fuel emissions because you need to make more truck trips to move the same amount of material).

Response: Asphalt millings that meet the criteria of subparagraph 360.12(a)(3)(ix) are not considered a solid waste and are therefore not subject to Part 364. Contaminated asphalt and asphalt millings from a commercial or industrial site would require transportation in accordance with Part 364.

364-1.2(e)(11)
Comment: This has been changed so ANY fill material generated by a commercial or industrial site is subject to the transport regulations. Does this mean fill material generated from a new shopping or housing development being placed in a field would now be subject to the Part 364 regulations? I understand that contaminated soil might be subject to this, but why would normal, uncontaminated soils be subjected to this?

Response: The final regulations do not require that all fill material transported in shipments greater than ten cubic yards be transported by a Part 364 registered waste transporter. However, the Department expects that transportation contractors will just as likely have occasion to transport restricted-use, limited-use and/or contaminated fill material and accordingly will acquire the no cost registration for those materials.

364-1.2(e)(11) & 364-4.1
Comment: Fill material, particularly general fill, should not be a "Regulated Waste" in the same category and regulatory requirements as hazardous waste.

Response: The final regulations does not indiscriminately place fill material in the same category as hazardous waste and only those fill materials that are determined to meet hazardous waste criteria need be managed as hazardous waste. The transportation of materials that are classified as hazardous waste requires insurances and specialized driver certification and training beyond those required for the transportation of other wastes. The requirements for the transportation of fill material that is not classified as a

hazardous waste are generally equivalent to those of transporters for materials not subject to Part 364.

364-2.1 & 364-5
Comment: There have been instances when the commenting municipality was required to transport C&D debris due to a natural disaster or an emergency. Additionally, the municipality must also conduct clean-up operations from vacant or abandoned lots and from illegal dumping; in both instances the waste generator is unknown. These circumstances should be covered by the exemptions. We therefore renew our request that the exemptions contained in Section 364-2 of these provisions be expanded to provide for the occasional transport of C&D debris by a municipality as follows:

"C&D debris transported by a municipal agency to an authorized facility where such transport is necessitated by a natural disaster or other emergency or where conducted in accordance with a clean-up operation as part of the agency's official duties."

Response: The final regulations include provisions for emergency permits in section 364-4.5. With respect to C&D debris, the transportation of that material will be subject to the registration requirements. Municipalities need only obtain a (no fee) registration to be able to transport any of the waste mentioned by the commenter. In cases where a municipality is charged with the clean-up and transportation of C&D debris resultant to an emergency, natural disaster, or illegal dumping, the municipality can sign-off on the waste tracking documents as the generator.

364-2.1
Comment: The proposed regulation for waste transporters provides an exemption (Subpart 364-2.1(b)(23)) for regulated waste transported by a public utility or railroad service vehicle owned or operated by that utility or service. This request was approved by the Department in response to comments. It is our understanding that if the public utility transporter exemption is used to transport waste, then a transporter tracking document would not be required as such transport is exempt from all transporter requirements. An exemption is also provided for < 10 yd3 C&D under 364-2.1(b)(6) and would also allow transport without requiring a permit or subject to transporter rules. We request clarification that the exemption applies for a utility or its contractor regardless of load size. Clarification of the meaning "incidental to the primary function of the transport vehicle" that appears in the exemption provided under 364-2.1(b)(23) is also requested. The process of sending tracking documents, returned signed, and discrepancies within 15 days to Department for all C&D shipments throughout the state, and to notify the Department 15 days in advance of every transfer of BUD fill materials throughout the state will place additional burdens on the Department (See e.g., proposed 364-5(b)(8)). We believe this is impractical, and certainly for emergency work it may not be feasible. This creates another parallel system for administration, similar to hazardous waste manifest system. If notifications and tracking documents are received at regional offices, regions would have the burden of the increased records management and tracking.

Response: The final regulations consider contractors that are performing work in accordance with contract documents in the same category as the public utility, public railroad service or public transportation agency they are working for, therefore, the transportation of waste by the public entity or its contractor is exempt from Part 364, without restriction to quantity per shipment, as long as the transportation of the waste is incidental to the primary function of the transport vehicle. An example of when transportation of the waste is incidental to the primary function of the transport vehicle would be the transportation of damaged power poles or transformers by a utility line service truck (e.g., a bucket truck). The transportation of regulated waste in a vehicle that is intended by design for the movement of material, such as a dump truck, is not exempt from the requirements of Part 364. With respect to the additional workload to be placed on the Department associated with waste tracking, the Department acknowledges that comment.

364-2.1(b)(l)
Comment: This regulation as currently written will be confusing and difficult for the solid waste management facilities to manage. Most facilities are required to review a transporter's Part 364 permit prior to accepting the waste. According to 364-1.2 (e)(10), construction and demolition debris will require a Part 364 permit, however Part 364-2.l(b)(l) excludes institutional generators. This will make it very difficult and confusing for both transporters and solid waste management facilities to manage. We acknowledge DEC's desire to track construction and demolition debris, however exclusions and exemptions can make it more complicated and onerous. Further, C&D debris should only be tracked to the initial point of disposal. It is not possible for either the transporter or the disposal facility to track C&D debris through multiple facilities.

Response: The final regulations exempt self-transported institutional C&D debris as those wastes have not been demonstrated to be problematic. As identifying institutional transporters is relatively straight forward, the Department does see where receiving facilities will have difficulty discerning self-transported institutional C&D debris. With respect to waste tracking, transporters are only responsible for tracking waste to the point of delivery. If waste is moved from the original destination facility, the waste tracking cycle starts anew.

364-2.1(b)(14)
Comment: We object to the exemption of “Oil, gas, solution mining”… and, “brine disposal” well cuttings shipments of any size from the Part 364 regulations, as the Department has proposed. These materials carry known risks to public health and the environment and must be treated in the same regard as at least C&D debris.

Response: The final regulations exempt only well drill cuttings that are rock chips, fragments and/or fines that are generated during drilling and are uncontaminated by drilling and cutting fluids including any additives.

364-2.1(b)(15)

Comment: We object to the revision made which exempts the transport of bottom and fly ash from combustion facilities from the Part 364 regulations. This material contains particulate matter, which is a public health risk especially if it is not handled or disposed of properly. Subjecting this material to the Waste Transporter regulations set forth in Part 364 will ensure it is handled as safely as possible and that it is being disposed of at its designated destination.

Response: Combustion facilities in New York State are required to report to the Department the amount of bottom and fly ash generated and where those wastes were disposed. Further, the disposal facilities in New York State that accept bottom and fly ash also are required to report to the Department the amount received and the sources of those wastes. With those regulatory requirements already in place, the Department believes there is insufficient reason to suspect those wastes will be disposed of in other than an environmentally sound manner and, therefore, has elected not to subject the transportation of those wastes to regulation under Part 364.

364-2.1(b)(23)
Comment: This exemption should include any "regulated waste - fill material" as would be defined in these regulations transported by/from any public works project.

Response: Fill material is by definition a regulated waste and therefore the suggested wording would be redundant.

Part 364-3
Comment: We understand the DECs new requirement to register our companies and to follow the procedures of this section. We believe that the registration oversight is designed such that our companies will only have to register annually and that this registration requirement will be considered simply a ministerial action not triggering the payment of any fee. However, we believe the administrative costs associated with the new requirement to register and label all vehicles, which industry-wide total in the thousands, if not tens of thousands, is an unnecessary burden and an expense our customers will have to absorb in the cost of our services. We encourage the DEC, when developing and implementing this registration process, to keep it as simple as possible with maximum flexibility for registrants. The number of vehicles used in our work is often seasonal and may otherwise vary throughout the year due to economic activity or other conditions, which could create a significant administrative burden if this information needs to constantly be revised and resubmitted to the Department. Lastly, please clarify whether vehicles used to collect fee based subscription service residential waste or recyclables from households and our commercial accounts will be covered by this section.

Response: The final regulations exempt the transportation of residential waste and recyclables. The transportation of commercial wastes and recyclables, not specifically exempt under the regulations are required to obtain a registration or permit, depending on the material. The Department acknowledge the remainder of the comment.

364-5.1(b)(5)
Comment: "*All transporters of restricted-use, limited-use, and contaminated fill material, and nonexempt drilling and production waste and those transporters subject to subdivision 364-5.1(a)(2) of this Part must provide copies of waste tracking documents signed by the receiving location or facility to both the generator and the department within 15 days of waste delivery to the receiving location or facility"*. While we understand the obligation of the transporter to provide this documentation, there is no provision for the generator to document attempts to secure a tracking document not provided by the transporter. We recommend specific provisions be added for exception reporting by the waste generator.

Response: The enabling legislation for the regulations limits the Department's regulatory authority to transporters of waste, not to generators of waste.

364-5.2(a)
Comment: We recommend that drilling and production waste tracking forms indicate, in addition to the specific type of drilling and production waste as defined in Part 360.2 (89), whether or not that waste has had more than de minimus contact with flowback water or production brine, and whether or not that waste has been mixed with other wastes in preparation for transport and disposal.

Response: The types of waste that would be transported by a registered or permitted Part 364 transporter from oil and gas production sites would include, in some cases, flowback water and production brine so reporting contact with these wastes would be self-evident. Otherwise, the comment is noted.

364-1.2(e)(10)
Comment: Please clarify: Is recycled asphalt pavement (RAP) considered C&D debris for purposes of Part 364 registration or permitting, or is it exempt because of the predetermined BUD for RAP in 360.12? Not exempting vehicles transporting RAP – both private and municipal - will hinder the recycling of asphalt pavement.

Response: Asphalt milling that meet the criteria of subparagraph 360.12(a)(3)(ix) are not considered a solid waste and are therefore not subject to Part 364.

364-3.1(a)

Comment: This section states that any transporter of less than 50 pounds of RMW per month must register with the state. However, (1) states so long as the generator self-transports the waste. This section is confusing. The language was changed, however, now makes it less clear. Is the Department intending for this section to apply to a generator self-transporting their own waste?

Response: The language in the final regulations has been amended to clarify the Department's intent.

364.4.9(a)

Comment: This section references OSHA 29 CFR 1910.120 and 1910.1200 as additional required training. Since RMW does not fall under RCRA and a spill would not constitute a hazardous waste site cleanup, the requirement for OSHA HAZWOPER training is not necessary. Instead, the Department should incorporate by reference 29 CFR 1910.1030, the OSHA Bloodborne Pathogen Standard which is more applicable to this waste stream.

Response: The Department included reference to OSHA 29 CFR 1910.120 and 1910.1200 because often, hazardous waste may be mixed with RMW or infectous waste that may constitute a hazardous waste spill response. The Department also agrees that reference to 29 CFR 1910.1030 should also be included. This section is amended to include this reference.

364-4.9(b)

Comment: Why is reporting required if a leak occurs within the transport vehicle during transport? The federal transport regulations exempt reporting of RMW leakage if the environment (air, soil, water) is not impacted?

Response: The Department registers and permits RMW waste transporters and requires that leaks or spills be reported within 48 hours because a spill of RMW poses a potential threat to public health and the environment, as well as to risk to transporters.

364-5.1(b)(7)
Comment: This section states that a copy of each tracking document be returned to the generator within 15 days of receipt of the document from the receiving facility. It is requested that these documents be allowed to be transmitted electronically. Alternatively, this section should be deleted.

Response: The final regulations do not specify the method of document delivery, however, electronic document transmission is encouraged.

365 Regulated Medical Waste and Other Infectious Wastes

365-1
Comment: Clarification is requested on whom or how these regulations will be applied to generators so that compliance can be achieved by all parties.

Response: Section 365-1.1 identifies the applicability of Part 365 and section 365-1.2 identifies the requirements applicable to generators. If a generator also operates treatment or other RMW management facilities, Subpart 365-2 may also apply as outlined in the final regulations.

365-1.1
Comment: It is recommended that the following language be changed as follows to clarify the scope of the exemptions and their limits: This Subpart does not apply to hospitals, residential health care facilities, diagnostic and treatment centers (defined in section 2801 of the Public Health Law) and clinical laboratories (defined in section 571 of the Public Health Law) except to the extent hospitals use bulk packaging or accept RMW from off-site.

Response: The Department agrees this revision provides clarity to the applicability. This section has been modified as requested.

365-1.2(a)(1)(i)
Comment: It is suggested that the following be added to this section: “a description of the types, and method(s) for treatment or disposal of RMW generated on-site. Generators are responsible for properly identifying and segregating wastes that are restricted from autoclave use under Section 365-2.6(b) and marking them for appropriate treatment (e.g., incineration waste, incinerate only, etc.);”

Response: The Department agrees that the suggestions adds clarity. Paragraph 365-1.2(a)(1) was revised accordingly.

365-1.2(b)(4)
Comment: This section points to 365-1.2(b)(11). This should be corrected to read 365-1.2(b)(13).

Response: Agreed. Paragraph 365-1.2(b)(4) was revised.

365-1.2(b)(13)(ii)
Comment: The language should be modified to read: The primary container for discarded sharps must be rigid, leak-proof on the sides and bottom, puncture-resistant and closable, and may serve as a secondary container for purposes of transport, provided it meets the definition of a secondary container and conforms to the USDOT 49 CFR.

Response: The regulations are sufficient for the purposes intended.

365-1.2(b)(13)(v)
Comment: It is recommended that the language read: except containers that are in conformance with US DOT regulations as incorporated by reference or have been approved for reuse by United States Food and Drug Administration (FDA), may not be reused.

Response: In response to this comment, the Department modified the final regulation to state that only primary containers that have been approved for reuse by the United States Food and Drug Administration (FDA) may be reused.

365-1.2(b)(14)(i)
Comment: It is requested that the following be added: (i) secondary containers must comply with the standards prescribed by the USDOT found under 49 CFR 173.134 and 197, as incorporated by reference in section 360.3 of this Title. Reusable secondary containers can include wheeled carts or roll-off bulk containers.

Response: The Department agrees and this subparagraph was revised to include a reference to the appropriate standard.

365-1.2 (b)(14)(vi)
Comment: Storage time for bulk packages that are roll-offs. No roll off should be allowed to be stored for more than 7 days at any time regardless of temperature. Variability even in winter temperatures can lead waste to be exposed to 45 F for several days and then below 45 for several more days, followed again by warm temperatures. Where is the temperature measured? In the waste or is this ambient temperature. No facilities using roll-offs actually separate adult diapers or other grossly soiled items that will immediately begin to decompose due to feces as well as exposure to purulent material. As such this will begin to generate an odor immediately. Urine and suction canisters with fluids (urine and respiratory secretions) will also be added to the bins haphazardly. While the state cannot stop the use of these containers it should limit their storage time. This is not 20 gallons of waste, rather up to 40 cubic feet. Consider the outdoor storage of these containers that could become a vermin haven. More frequent removal is warranted.

Response: The Department does not agree. A number of small healthcare facilities using bulk packages do not generate sufficient waste to fill a container in less than 21 days and certainly may not be able to fill it in 14 days. The facility can employ measures to control odors, and other nuisance issues to minimize their potential for occurring. At this time, the Department's position is that the imposition of a 7 day maximum storage limit regardless of temperature would be a significant economic burden for these small generators.

365-1.2(b)(14)(vi)

Comment: This section reads as follows: **"**Bulk packages that are roll-off containers (except those used for pathological waste, blood or blood products, or animal waste) that will be sent off-site may only be stored at the site of generation until the container is filled, or for 21 days if ambient temperatures are below 45 degrees Fahrenheit (7 degrees Centigrade) or for 14 days if above 45 degrees, whichever comes first, except that bulk packages that are putrescent must be immediately sent to the receiving facility." **S**torage of bulk packages at for up to 21 days when the temperature is below 45 degrees may be fine, but may be a financial concern for small providers that do not generate sufficient waste to fill a container every 14 days if above 45 degrees. It is requested that generators be allowed to store the bulk containers for 21 days without regard to the temperature.

Response: Temperature has a dramatic impact on odor, and other environmental concerns and therefore should be a consideration in determining the appropriate length of storage time.

365-1.2 (b)(14)(vii)
Comment: Pathological waste should not be stored in a bulk container for any reason. These are tissues that may have been in formalin thereby requiring disposal via incineration. While some roll-offs have compartments, this will still require manual handling which poses occupational hazards and raises concerns regarding proper segregation.

Response: Pathological waste may be stored in primary containers labeled for incineration and that conform to USDOT requirements in a separate compartment within the bulk container. The primary container is designed to contain the waste in the bulk container.

365-1.2(b)(14)(ix)
Comment: It is requested that the Department consider the following wording to include an exception for sharps containers because sharps containers should not be lined. (ix) All internal surfaces of a reusable secondary container, except for reusable sharps containers as per this section, must be completely protected by a disposable liner.

Response: The Department agrees. This subparagraph was amended.

365-1.2(c)(3)
Comment: It is requested that the tracking form be modified to conform to USDOT and a public comment opportunity of the tracking forms.

Response: The form will be evaluated for any required modifications to conform to the USDOT requirements, as suggested. The Department will consider public comments on the form.

365-1.2(c)(5)
Comment: It is requested that the pharmaceutical waste section requirements be clarified to ensure consistency throughout the regulations. It is also recommended that the generator section be more clear about the obligation to segregate and ensure these waste are sent for processing at an incineration facility or other authorized facility for treatment.

Response: Paragraph 365-1.2(a)(1), which requires the development of a waste management plan has been modified to identify that generators are responsible for properly identifying and segregating their waste and for its appropriate marking.

365-2.2
Comment: It is requested that the Department exempt pharmaceutical waste collection kiosks and collection systems as these are becoming increasingly common.

Response: The proposed regulations have been amended to exempt pharmaceutical waste collection kiosks provided for collection from homeowners consistent with sharps collection.

365-2.2(c)
Comment: It is recommended that this section be changed as follows: Facilities that accept used medical devices which will be sent to the manufacturer, re-processor or remanufacturer for reuse or any manufacturer, remanufacturer or reprocessing facility. Facilities shall accept used medical devices that are either source separated at the healthcare facility or are contained within regulated medical waste containers identified for segregation. For facilities managing used healthcare products in regulated medical waste containers identified for segregation shall comply with section 365-2.5(f) of this subpart.

Response: The regulations have been clarified to identify that generator facilities that source separate used medical devices proposed to be reused and that are sent directly to manufactures, remanufacturers, or reprocessors are exempt.

365-2.4
Comment: It is noted that Regulated Medical Waste is not defined under Part 360.2(a)(229) as "including select agents or toxins of biological origin". Please align the definition and this subpart.

Response: The definition in Part 360 provides the general categories that are included in the definition of RMW from the ECL. Section 365-2.4 clarifies that RMW does include select agents and toxins of biological origin.

365-2.4
Comment: Please clarify the meaning of the first sentence - specifically, how are "biocontainment facilities at a Biosafety Level 3 or 4 laboratory" related to (or

different from?) "a facility that treats, stores or transfers RMW".

Response: Not all biocontainment facilities working with infectious agents at biosafety level 3 or 4 generate waste that would be classified as RMW. The proposed regulation requires all facilities either managing RMW or waste potentially contaminated with infectious agents from biocontainment facilities to obtain a permit.

365-2.4(a)
Comment: It is recommended that the waste control plan be modified to identify RMW that will be accepted, the service area, acceptance and management of reusable secondary containers and reusable medical devices; pharmaceutical and the on-site treatment of BSL 3 or 4 agents; how the facility will identify and manage all waste received identified for treatment by incinerator by the generator that would be transferred, such as pharmaceutical, chemotherapy, pathological waste, low level radioactive or hazardous waste; how inspection of incoming waste will be performed, methods used to manage odor, litter and vectors, compliance with storage requirements and the handling of spills, breached containers, contaminated equipment and methods for maintaining tracking forms.

Response: The Department believes that this provision as written provides the appropriate information required for waste pre-acceptance and acceptance, handling, storage, dispatch, maintenance, incidents and non-conformances, and overall general management of RMW at a permitted facility.

365-2.4(a)(1)-(a)(3)(iv)
Comment: It is recommended that the Department modify this section to keep record or quantity of what wastes were treated at the facility versus the amount of waste bypassed for some other treatment technology such as incineration. It is also requested that it be clarified that the Department does not expect wastes to be “inspected” and “categories” be identified through any type of inspection process. Commercial facilities will only be able to identify if a waste is to be bypassed for alternative treatment (such as incineration) as identified by the generator.

Response: The primary purpose of this requirement is to identify the types of waste likely to be sent to a treatment facility. It is not the Department’s intent to require commercial facilities to open containers for inspection. The provision has been modified for clarity.

365-2.4 (a)(3)(iv)
Comment: Is has been recommended that waste from Biosafety Level 3 labs be treated on site. It has been a long standing requirement from CDC and other federal agencies that Biosafety Level 4 labs treat waste on site. This section may not be consistent with current standards in place at labs.

Response: The CDC BMBL is an advisory document recommending best practices for the safe conduct of work in laboratories but is not a regulatory document. Although academic and research institutions may require waste treatment on-site in accordance with the BMBL, this does not always occur. The Department believes it is a necessary safeguard to require facilities to document whether they plan to accept waste from biosafety level 3 or 4 laboratories.

365-2.4(b)(1)(iii)
Comment: It is recommended that the Department require that equipment with current 510K approvals follow manufacturer's recommendation for cleaning and disinfection. For containers that do not have current 510K approvals, it is recommended that either hot water or chemical disinfection be used, but not both.

Response: The Department agrees and this requirement has been clarified to allow either exposure to hot water or exposure to a chemical disinfectant. This change does not negate the need for appropriate cleaning of the containers.

365-2.4 (b)(1)(iii)(*b*)
Comment: NSF/ANSI 3 2012 provides standards for Commercial Ware washing Equipment which is what most washing systems for reusable sharps containers are based upon. There are two methods of sanitizing - one with chemical and one with hot water. This should be reviewed and applied accordingly to this regulation. See http://standards.nsf.org/apps/group_public/download.php/34766/NSF_3-2012.pdf Note this is for automated washing equipment. Similar parameters could be applied to manual washing of containers.

Response: The Department agrees. However, the Department does not authorize manual washing of contaminated containers.

365-2.4(b)(1)(iii)(*b*)
Comment: Please change "approved for use by the Department to "registered for use by the USEPA".

Response: The Department also registers pesticides so the language is appropriate.

365-2.4(b)(1)(iii)(*b*)
Comment: It is recommended that the following requirement be deleted: (b) "… and exposure to a chemical disinfectant approved for use by the Department and used according to the manufacturer's label directions."

Response: The Department does not agree with deletion since it would reduce the criteria specified for proper cleaning. The proposed clause however, has been amended as follows: (*b*) for disinfection, exposure to hot water at a temperature of at least 180 degrees Fahrenheit (82 degrees Celsius) for a minimum of 15 seconds, or exposure to

a chemical disinfectant registered for use by the USEPA and used according to the manufacturer's label directions.

365-2.4(d)
Comment: It is unclear how or what type of contingency planning is necessary for excessive noise. It is recommended this be "excessive noise" be eliminated from the requirement. It is believed this was a carry-over from the solid waste regulations. Most medical waste facilities do not even meet the OSHA hearing conservation threshold of 85dB.

Response: The contingency plan is meant to address many potential problems, even those with a low probability of occurring. If excess noise is a low probability it could be addressed succinctly in the plan.

365-2.5
Comment: It is recommended that the language be modified to separate return of 1) used medical devices source separated by hospitals; 2) recovery of used medical devices from RMW; and 3) recycling of treated RMW.

Response: Subdivision 365-2.5(f) has been revised to clarify the intent.

365-2.5(a)
Comment: It is believed that current tracking forms are outdated, expensive and onerous beyond what is required by the USDOT regulations. As evidenced by the USDOT Preemptive authority determination against NJDEP, shipping document or tracking form requirements should match what is required in the federal regulations and not beyond (as was submitted in the first comment period, September 2016). It is respectfully requested that the tracking form be modified to conform to USDOT and a public comment opportunity of the tracking forms.

Response: The form will be evaluated for any required modifications to conform to the USDOT requirements and the need for public comment will be determined accordingly once the regulations are promulgated.

365-2.5(b)
Comment: It is requested that the language for this item be amended to include "other methods acceptable to the Department and specified in the facility's Part 360/365 permit" in addition to the "fixed radiation detection unit...." described in the proposed regulations.

Response: The Department believes this provision is appropriate as written. Fixed radiation detection units have been used historically to prevent the acceptance of radioactive materials at permitted RMW facilities.

365-2.5(b)(3)

Comment: There is no reason to record background levels at an RMW facility. It is requested that this requirement be removed. Section 365-2.5 (b)(4) should require weekly checks.

Response: The Department believes this provision is appropriate as written. It is standard operating procedure to conduct daily background checks for radiation at facilities which have installed radiation detection equipment.

365-2.5(b)(4)
Comment: It is recommended that the language be revised to read ". . . reported to the Department on the next business day from the event."

Response: The Department agrees and has modified this requirement.

365-2.5(d)(2)
Comment: The language in this section is not reasonable. The following language is recommended: 2) RMW must be inspected as it is being unloaded and or processed to ensure the RMW has been packaged appropriately. If any packages are broken, leaking or otherwise compromised, the RMW must be handled as outlined in the contingency plan.

Response: The final regulations include clarifications concerning inspection of packaging.

365-2.5(d)(4)
Comment: Most transfer stations for medical waste do not have scales. It will require additional equipment, man power and will add cost. It is recommended to include the following language: (4) The facility must record the date of arrival of each waste load at the facility, the original generator identification, package type and weight or volume, and the intended disposition of the waste. These documents may be maintained electronically.

Response: The regulations have been amended to address this comment allowing either weight or volume to be recorded.

365-2.5(e)(3)
Comment: The wording should be revised to read (3) RMW must be completely contained and secured during storage and with appropriate blocking and bracing when in the vehicle during transport.

Response: The regulations have been amended to clarify that appropriate blocking and bracing must be used when RMW is moved by a vehicle during transport.

365-2.5(e)(5)

Comment: Today the containers are already stacked at eight (8) ft. high within the trucks during transport and then brought into the facility by use of a hand truck or dolly by the employee, they are not unstacked until such time as they are ready to be scanned at a treatment facility. Often, at facilities where waste is transferred from truck to truck they will not be unstacked at all. This is standard practice safely conducted across the industry and across the country. If the containers cannot be maintained in their original order they will need to be unstacked before they can be moved within the facility. It is requested that the Department change this condition to read "The top of the stacked containers when full cannot be more than eight (8) feet above floor level."

Response: The regulations have been clarified to recognize that eight feet is an appropriate restriction.

365-2.6(b)(1)
Comment: Is it the Department's intent that only toxic drug waste is prohibited from autoclaving? It is recommended that the Department clarify the pharmaceutical waste requirements by ensuring consistency throughout the regulation. Also, see 365-1.2(a)(1)(i) comment and response.

Response: The Department agrees that the requirements for handling of pharmaceutical waste must be consistent and have been amended the regulations accordingly.

365-2.6(b)(2)
Comment: Currently facilities are permitted to allow waste to decay to alarm level. If they are required to wait for decay until background levels they would be going beyond what they have to do for incoming waste that is at their alarm level. This could also potentially create a problem and potential violation of holding/storage times for waste. It is recommended that the language be amended to read: (2) An autoclave cannot be used for treatment of radiological RMW unless decayed to set facility alarm radiation levels prior to treatment.

Response: The regulations have been amended to make this clarification.

365-2.6(b)(3)
Comment: It is unclear why the Department specified mouse carcasses. It is agreed that small quantities of tissue can be autoclaved but it is recommended that full animal carcasses not be differentiated and should be sent for incineration. This needs to be clear under the generator section as well so that waste is properly segregated and labeled by the generator for proper off- site treatment.

Response: The regulations have been amended to clarify.

365-2.6(c)
Comment: It is recommended that this section pertaining to cultures and stocks be

moved under the generator requirements under section 365-1.2(a) Waste Management Plan.

Response: Entities that treat their waste on-site must conduct the treatment in accordance with this Subpart as identified in 365-1.2(d).

365-2.6(c)(l)
Comment: Federal guidance for the inactivation of select agents and toxins include methods other than autoclaving or incineration found in 365 2.6(c)(l). In the Federal Select Agent Program document "Guidance on the Inactivation or Removal of Select Agents and Toxins for Future Use", released June 2017, it is stated that inactivation can fall into several categories: physical (e.g. heat or irradiation), enzymatic (e.g. lysozyme), or chemical. Please align section 365-2.6(c)(1) to the guidance for inactivation of select agents and toxins by reference to the Federal Select Agent Program 7 CFR Part 331, 9 CFR Part 121.3, 42 CFR Part 73.3.

Response: The regulations have been amended to include a reference to inactivation in accordance with the Federal Select Agent Program.

365-2.6 (i)(2)
Comment: No biological indicator is mentioned for microwave systems.

Response: Microwave systems work by exposing the waste to electromagnetic radiation which heats the ingredients (dry materials and fluids) of the waste stream to produce thermal energy. Due to the fluids in the waste stream, microwaving would operate in a manner similar to steaming, and would consequently be considered a moist heat system. The regulations have been clarified to indicate that the requirement for the use of biological indicators for moist heat systems.

365-2.6(i)(2)(i)
Comment: It is agreed that during validation 6log10 spores could be used. However, the Department is silent with regard to bio-challenge testing. It is recommended the Department adopt the DOH regulations which specify 4log10 spores in the referenced section and under 70-3.2(f)(2)" in the absence of parametric controls, routine operational performance of an autoclave shall be monitored by(i) challenge testing conducted every forty (40) hours of autoclave operation or once a week, whichever occurs first (though it is recommended once a week) and . .. (ii). . No autoclave that fails to attain 4log10 reduction in viable spore concentration upon challenge testing. . . " which shows that it requires 4log10 bio-challenge testing. Since the Department is silent, it is currently unclear.

Response: This section as written is appropriate. To assess treatment performance, whether for validation or bio-challenge testing, the system must employ commercially-prepared and verified biological indicators from the same lot or batch, each containing

spores with a minimum 6 $\log_{10}$ concentration. Treatment must demonstrate no growth or a 6 log reduction in viable spore concentration in the biological indicators.

365-2.6 (i)(2)(ii)
Comment: Shouldn't D-values be provided for all technologies and associated biological indicators?

Response: Commercially prepared biological indicators include certificates of performance that include the D-values**.**

365-2.6 (i)(2)(vi)(*f*)
Comment: One control should be sufficient. Also, the BIs have already been certified by the originating lab and retested by a third party lab to ensure they meet the requirements of the State of NY. A second BI for a control seems excessive. It is suggested that this requirement should be changed back to one positive control to meet the industry standards of testing. The section should read: (f) a minimum of one control from the same lot or batch.t unless one BI is a negative control - not incubated and one is a positive control (incubated).

Response: The Department agrees and the regulations have been amended to address the comment.

365-2.6(i)(2)(vii)-viii)
Comment: It is understood that the Department is attempting to eliminate heat conduction from metal biological indicator holders, but this section seems very prescriptive and unreasonable. This is not how testing is conducted today. There is concern that this type of testing would make it more difficult to retrieve BIs. Testing methods are different for all treatment units. Each treatment unit will need to have a testing procedure sent to the State of NY and approved prior to testing. It is recommended to eliminate the prescriptive portion of the language of (vii) and (viii) and begin with (vii) "The carrier system should be designed to mimic the thermal resistance of RMW before testing..." (viii) "be placed in the carrier to prevent direct conduction of heat from the metal if metal containers are used to contain the indicators".

Response: The Department believes that this provision, as written, provides the appropriate procedures for containing, protecting and ease of retrieval of biological indicators used for assessing treatment performance.

365-2.6 (i)(3)
Comment: Quantitative testing serves no additional purpose other than to increase cost of testing. Where quantitative testing is the only way to confirm efficacy, it should be the requirement.

Response: This requirement has been clarified.

365-2.6(i)(6)
Comment: The responsibility of the treatment facility should be to follow the manufacturer's instructions on proper handling of these during storage and testing, and be aware of the expiration date. It is strongly recommended that this requirement be eliminated and instead the following language replace it: (6) Treatment facilities are required to follow commercially purchased biological indicator manufacturer specifications for the type of treatment technology, storage times, holding temperatures and expiration date. Any use of biological indicators outside of the manufacturer's requirements and parameters may invalidate test results and requiring retesting.

Response: The facility is obligated to follow all required manufacturer specifications, for equipment, indicators, etc. This information is reviewed by the Department as part of the permit application review.

365-2.6 (i)(8)
Comment: Self -Contained Biological Indicators with vent caps should also not be used where liquid volumes may accumulate and contaminate the indicators.

Response: The Department agrees and the final regulations have been revised.

365-2.6 (j)
Comment: Failures are not defined. If 60 biological indicators are processed and there is one failure, that suggest a >98 success rate. It is recommended that when a substantial number of BIs are tested that a pass /fail rate be established. For validation testing it could be 90 to 95 % based upon the number of samples process. For very small sample size 100% success rate would be required. Cut off could be 10 or 20 samples. A "failed" test should first be repeated as well as assessment of operational parameters. If the test fails again, the equipment should come off line, operational components assessed and then retested with testing schedule continuing and not having to return to daily testing. This is similar to the testing of autoclaves for processing medical devices.

Response: The Department agrees and the final regulations have been revised.

365-2.6(j)(4)
Comments: Validation testing should not be required for large commercial units every five years. This is overly burdensome and does not provide any value for large commercial operations that run continuously, run operational maintenance checks and bio-challenge testing regularly. Additionally, full validation would require a facility to have to shut down and divert waste while testing was being conducted and results received. This is unreasonable and creates an added risk of waste having to be transported longer distances. Revalidation as a routine requirement is not conducted in any other state. It is recommended to remove 365-2.6 (j)(4) a treatment device has

been operational without a repeat validation for at least 5 years; or…

Response: The Department is aware of a number of failures at commercial facilities and believes it is necessary to periodically repeat validations to ensure that treatment systems continue to function properly.

365-2.6(k)(3)
Comment: The requirement to bio-challenge each load of waste treated from BSL-3 facilities is overly burdensome and will cause: a waste of energy; increased generation of solid waste; increased costs; increased time required to comply with regulations; and decreased productivity with no appreciable benefit in public health or environmental risk. The biological agents used at BSL-3 do not pose the same community risk as those worked with at BSL-4 - in fact, many agents manipulated at BSL-3 are commonly also worked with at BSL-2 in clinical settings (e.g., *Mycobacterium tuberculosis).* Furthermore, the quantities of active infectious agents disposed of in RMW from BSL-3 facilities is dwarfed by the quantity of noninfectious Personal Protective Equipment and other solid waste generated in BSL-3 facilities. Common BSL-3 protocols require inactivation of concentrated cultures of infectious agents by chemical disinfection prior to disposal.

Response: The Department is aware of a number of pass through autoclave treatment failures where strict reliance on parametric monitors was used to determine treatment. Work with infectious agents in both the public and private sector, various laboratories, and in animal care have expanded. Threats from new infectious agents and diseases have emerged and represent potential risks to laboratory workers who work with these agents and diseases, communities and the environment. Essential for an effective autoclave operation is a reliable method for determining whether treatment or kill was achieved. The Department believes that bio-challenge testing with each load of waste is imperative, key to the process and the most reliable method for determining kill of infectious agents in the waste stream.

365-2.6(k)(3)
Comment: If the requirement to bio-challenge each load of waste treated fromBSL-3 facilities does not include performing the bio-challenge with bags (or sharps containers) of uncontaminated waste and instead place biological indicators inside bags of contaminated waste generated in the BSL-3, then this will increase the risk of exposure for the workers performing the test.

Response: Facilities do not need to open sealed containers of waste to conduct bio-challenge testing with each load. Waste can be simulated with clean materials, include biological indicators and be placed separately in the autoclave for easy retrieval.

365-2.6(k)(3)
Comment: If the requirement to bio-cha1lenge each load of waste treated from BSL-3

facilities does not include performing the bio-challenge with bags (or sharps containers) of uncontaminated waste and instead place biological indicators outside bags of being autoclaved then this will result in the meaningless waste of resources and generation of excess waste, since indicators placed outside of waste containers do not undergo the same conditions as those inside the containers.

Response: The Department does not agree. The Department has collaborated and participated in numerous validation and bio-challenge testing methods and the results have indicated that simulation is a reliable and safe method to determine treatment effectiveness.

365-2.6(k)(3)
Comment: It is requested that the requirement to bio-challenge each load of waste treated from BSL-3 facilities be changed to a) verification of parametric monitoring to match the treatment parameters verified by validation testing, and b) Periodic bio-challenges using uncontaminated waste every 40 hours of operation.

Response: The Department does not agree. Parametric monitors are used to provide an indication that a load has been subjected to a sterilization cycle. These monitorsare very different from biological indicators because they reflect the cumulative input of physical parameters that can be determined over time by temperature or pressure, but do not simulate microbial inactivation like biological indicators.

365-2.6(k)(6)
Comment: It is requested that the qualifications for inspectors be refined by: a) requiring certification, such as Licensed Professional Engineer, Certified Industrial Hygienist, or Certified Biosafety Professional and b) adding as statement such as "with experience in the applicable safety, technical, and regulatory aspects of the facility" to the requirements.

Response: The final regulations have been revised accordingly.

365-2.6(k)(7)
Comment: Please clarify what "facility equipment" must be washed and disinfected, and when that must happen.

Response: The final regulations have revised to identify, in general, the equipment that must be washed and disinfected.

365-2.6(k)(8)
Comment: Please clarify what is meant by "acceptable operating parameters." If a treatment system fails to reach a parameter such as time, temperature, or pressure due to a mechanical failure, then simply repeating the treatment cycle for the waste load once the problem is corrected is sufficient.

Response: The final regulations have been modified to clarify.

365-2.6(k)(8)
Comment: Please clarify what is meant by "acceptable operating parameters." If this is in reference to a biological indicator (BI) growth result, does this mean a single BI failure can trigger revalidation? It is requested that an acceptable BI failure rate be included in this requirement.

Response: The final regulations have been clarified.

365-2.6(k)(8)(i)
Comment: There are not circumstances that should not require full scale validation. This section should be modified to read: 365- 2.6(k)(8)(i) discontinue use of the system, using emergency shutdown procedures if appropriate, until corrective action has been taken. ADD SECTION: 365- 2.6(k)(8)(vi) Repeat bio-challenge testing protocols as per permit condition and number of BI as required for the next three consecutive runs on the failed unit. Record results as part of operating log. If bio-challenge achieves appropriate kill, operations may resume as normal. Should any of these re-test results fail stop the operation and notify the Department as soon as practicable to set up additional testing protocols up to and including potential re-validation.

Response: The final regulations provide additional clarity that bio-challenge testing could be used instead of repeated validation.

365-2.6(l)
Comment: It is not understood why the operator name or the type of waste being treated is recorded. That should already be identified as part of the operating plan. The log should be capable of being maintained electronically as many units now have electronic logging capability. It is recommended that the language be amended to read: (l) An operation log must be maintained for each treatment device. The log must record the date, time, and amount of RMW treated, operating parameters, and the dates and results of calibration and testing. These records may be maintained electronically.

Response: The Department believes it is necessary to require that the name of the treatment system operator and type of waste treated must be recorded so that the treatment and disposition of the waste is verified and traceable. The Department has also modified this requirement to indicate that records may be maintained electronically.

365-2.6(m)(5)
Comment: Please clarify that this sentence refers to reusable primary containers.

Response: The final regulations have been amended to make this requirement clearer.

365-2.6 (m)(5)
Comment: Bio-challenge testing such as protein swabs or ATP should be conducted at

a minimum monthly. These are easy tests to conduct and low cost and provide confirmation of the washing processing is operating correctly as reusable sharps containers are in patient care areas and more accessible to patients as well as staff.

Response: The Department agrees that bio-challenge testing of reusable containers should be done more frequently and have revised the regulations to include quarterly testing. The Department believes the proposal for monthly testing is not necessary.

365-2.6(m)(5)
Comment: It is strongly recommended that this requirement be deleted.

Response: The Department does not agree. See the previous comment and response.

365-2.7(d)(3)
Comment: Does this mean a single biological indicator (BI) failure can trigger revalidation? It is requested that an acceptable BI failure rate be included in this requirement. Also, It is unreasonable, and potentially a further risk, to require a commercial operation to stop operation for several days or weeks until a full scale re-validation is completed due to one test anomaly. It is recognized that these are requirements under 10 NY CRR 70 and may be protocols that are more specific to small scale lab operations, however these conditions are not feasible for large scale commercial operations that support the safe waste treatment of thousands of healthcare facilities. It is recommended the following Section 365-2.7(d)(3) should be modified to read the same as above. If an autoclave fails to attain no growth in viable spores concentration upon bio-challenge testing it cannot be used to treat RMW until it conducts repeat bio-challenge testing. Repeat bio-challenge testing protocols as per permit condition and number of BI as required for the next three consecutive runs on the failed unit. Record results as part of operating log. If bio-challenge achieves appropriate kill, operations may resume as normal. Should any of these re-test results fail, stop the operation and notify the Department as soon as practicable to set up additional testing protocols up to and including potential re-validation.

Response: The regulations have been modified to provide addition clarity.

365-2.7(h)(1)-(3)
Comment: It is noted that the requirements in this item represent a significant operational burden and appear to conflict with the purpose of validation testing (i.e., to demonstrate the effectiveness of specific treatment cycle parameters) - this requirement would require very much more samples, transportation to a laboratory, and associated waste generation than validation testing alone. It is requested that it be replaced with the current practice of parametric monitoring and periodic challenge testing after successful validation.

Response: The Department believes this is a necessary requirement to ensure that

microbial inactivation is occurring during each treatment cycle. Parametric monitors are used to provide an indication that a load has been subjected to a sterilization cycle but are very different from biological indicators. They reflect the cumulative input of physical parameters that can be determined over the time by temperature or pressure, but do not simulate microbial inactivation like biological indicators.

365-2.7(h)(1)-(3)
Comment: Do the requirements to "include biological indicators" mean that the indicators are placed in the autoclave but not inside the waste containers? If so, this will result in the meaningless waste of resources and generation of excess waste, since indicators placed outside of waste containers do not undergo the same conditions as those inside the containers. Please clarify.

Response: Biological indicators must be placed in the waste or by placing them in bags or containers that have clean waste and treating them in the same treatment cycle.

365-2.7(h)(3)
Comment: The regulations should be modified under 365-2.7(h)(4). After six months of successful operation with no failures in daily testing, bio-challenge testing may be conducted every 40 hours of operation or once a week whichever is greater. Repeat bio-challenge testing protocols as per permit condition and number of BI's as required for the next three consecutive runs on the failed unit.

Response: The Department agrees and have revised the regulations to include the language proposed.

365-2.7(h)(4)
Comment: It is recommended this section be revised to read: (4) Bio-challenge testing must include at least one-third of the number of biological indicators that are required for validation or two indicators whichever is greater. Additionally, the Department has discretion to increase or decrease the number of indicators required based on test performance and facility, and may modify the facility permit to reflect the operating conditions.

Response: The final regulations are adequate to address the need for performance assurance.

365-2.7(h)(5)
Comment: This requirement places an additional burden on commercial entities that is not necessary. It is recommended that it either be removed or at a minimum modified to 200 hours of operation or once every six months, whichever is greater.

Response: The Department believes this is a necessary requirement to have an independent verification of testing results. Permitted facilities have been conducting

bio-challenge testing and having the results verified every 200 hours since the inception of the Department's RMW program.

365-2.8(a)(1)
Comment: It is recommended that the Department modify this section to keep record or quantity of what wastes were treated at the facility versus the amount of waste bypassed for some other treatment technology such as incineration.

Response: The final regulations have been amended accordingly

365-2.8(a)(3)
Comment: Please clarify the meaning and differences between of "routine system's monitoring" in item (i) "relevant process monitoring" in item (ii) and "the residence time, pressure and temperature of each load" in item (v).

Response: This requirement has been revised to indicate in part, that records of test results and parametric monitoring must be retained. Subparagraph 365-2.8(a)(3)(v) has been deleted.

365-2.8(b)(l)
Comment: Waste in the "cultures and stocks" category and sharps are often treated in the same autoclave load, making quantification of each difficult. It is requested that reporting these two categories together be allowed if separate quantification is not feasible.

Response: The final regulations have been amended to allow a summary by quantity and, if feasible, by category as specified by the generator on the containers.

365-2.8(b)(l)
Comment: Not sure it is possible to quantify the category of waste unless the generator sorts and identifies. Only after a container is emptied for treatment might one know what is in the waste stream. Weight may be the only info that could be obtained with the exception of items to be incinerated - path and chemo waste. It is unclear what this data is used for or what the benefit would be otherwise. Commercial facilities would have no direct way to capture this information. It is recommended that the Department modify this section remove the category, but rather require facilities to keep record or quantity of what wastes were treated at the facility versus the amount of waste bypassed for some other treatment technology (such as incineration).

Response: The final regulations have been revised to allow a summary by quantity and, if feasible, by category as specified by the generator on the containers.

365-3
Comment: This section is a nice addition as it covers waste streams that are not generated in the treatment of humans or animals. This is not medical waste. This

would have been appropriate to call "Biohazardous Waste".

Response: The Department believes that the title “Other Infectious Waste” is consistent with generally recognizable terminology for waste that is not considered as RMW but potentially poses the ability to infect people.

365-3
Comment: It is recommended that Department delete this section and develop a stakeholders meeting to better identify and address the issues related to other infectious wastes.

Response: The Department does not agree. In recent years, awareness and concern about infectious waste issues have increased. Not all infectious wastes meet the specific definition of RMW, this section allows the Department to require the management of specific infectious wastes that are not RMW in a manner that is protective of human health and the environment.

366 Local Solid Waste Management Planning

366-1.1
Comment: How can a SWMF know that waste its receiving from a MSW-TS, serving a market that overlaps two or more local solid waste management districts, is derived from a municipality with an approved LSWMP? What protocols will the planning unit be required to follow to advise the SWMF that the waste derived from the given planning unit is in accordance with a Department approved LSWMP? These questions are raised as MSW-TS often commingle waste collected by various private and public collection companies in their staging floors prior to loading in larger trucks or rail for transport to a disposal facility. Once the waste is in the long-haul truck or rail car, it's not possible to distinguish where the waste originated. In some cases the waste within a given long-haul truck may be from multiple states as well as multiple planning districts.

Response: The Department maintains information on its website related to the status of LSWMPs and can be used to determine whether or not a municipality is covered by an approved LSWMP. Planning units are not specifically required to notify SWMFs of LSWMP approval, it is the SWMFs responsibility to verify the waste they receive is from a municipality covered by an approved LSWMP. In the case described, the transfer facility is also prohibited from accepting waste from a municipality that is not included in a Department-approved LSWMP and therefore the transfer facility will know which municipalities/planning units the waste originated. The disposal facility will obtain that information from the transfer facility. In instances as described where material received at a transfer facility is sourced from various locations and is transported to different disposal facilities, it is understood that the allocation of waste generation will be based on the aggregate received and sent out from that transfer facility on any given day.

Comment: A LSWMP should be limited to 25 pages, and be required to be prepared by the Planning Unit itself, not a consultant. The Department is harkening back to its Beyond Waste SWMP, which hasn't been updated since its adoption. We recommends the planning process be placed in abeyance until the State SWMP is either updated or redone, and then structure the LSWMPs accordingly.

Response: The regulations set no specific length for a LSWMP, and the Department has streamlined and modified LSWMP requirements to make it easier for planning units to draft their own LSWMPs.

Comment: The Department missed the larger point intended by many commenters who criticized the Department for not making the necessary changes in the regulation to affect changes in the relationship the DEC and the planning units. Local plans needs to be greatly reduced, with greater reliance on prepared resource material, and presentation of programs and figures in a common format with a less descriptive nuance. We consider the failure to reconsider the nature of the state-local partnership in the adoption of the new Part 366 regulations to be a missed opportunity. While the changes adopted in the Revised Part 366 are appreciated, we do not believe that the

revised regulation will affect needed changes in the relationship between DEC and planning units. Even with the revisions made, the planning process will remain a largely academic exercise, in which sixty-odd planning units submit what amounts to a doctoral thesis on solid waste management methods to a DEC serving in the role of academic advisor. Plans will remain lengthy and duplicative, review will remain tedious and time-consuming (despite completeness and substantive review time frames), and approval will do no more than relieve a burden from both the Planning Unit and the Department.

Response: The Department made adjustments to the revised proposal that were intended to increase the flexibility and usefulness of the LSWMP and has enhanced supporting information and tools as part of the broader Local Solid Waste Management Planning program while maintaining consistency with the obligations for local solid waste planning included in the Solid Waste Management Act.

Comment: What is needed is a planning relationship that eliminates duplicative and wasteful effort, identifies both problems and solutions, enhances State and local cooperation and prompts decision-making. To that end, in its textual revision of the initial draft of Part 366, we called upon the DEC to take on a greater partnership role, with specific practical responsibilities in planning, and to retreat from its stance as a reviewer of plans against an academic and aspirational standard. We called for the size of local plans to be greatly reduced, with greater reliance on prepared resource materials, and presentation of programs and figures in a common format, with much less descriptive nuance. Essential quantitative information, applicable to commonly understood programs, would be submitted on forms, without extensive discussion. Planning units would gather the necessary information and be responsible for operation of their systems, but would not be required to conduct original research or prepare detailed planning scenarios for programs and facilities unlikely to be undertaken. The DEC would relieve individual planning units of the task of analyzing waste streams, and prepare urban, suburban and rural waste composition figures for use by all. The State would also, using the annual reports submitted by disposal facilities across the State, relieve planning units of the burden of tracking the destinations of waste disposed elsewhere, and establish a central data base of disposal information, accessible to all. We proposed that the State should act as a central depository for accurate information on the status of developing technologies, and suggest potential uses to communities with needs. We urged the DEC to establish a section to monitor recyclables markets across the State, and provide reliable information to local government on trends in pricing and market developments. Changes such as these would allow DEC to review plans more quickly, foster ready comparison of programs of one planning unit with another, educate both planners and the public in the economics of waste management and recycling, provide increased objectivity in evaluation of developing technology, distinguish successes from failures in application of policy and technology, and increase collaboration between the DEC and planning units.

Response: The Department incorporated those concepts in the proposed revisions by identifying that those components of the LSWMPs could be developed with information

prepared by the Department. Much of the identified information is already available on the Department's website to assist planning units in the development of their LSWMPs. We believe the changes incorporated in the proposed revisions do in fact allow for all of the noted benefits identified in the comment.

Comment: The establishment of time frames for review are like permit application provisions in the Uniform Rules which establish deadlines for completeness review and substantive reviews. However, these changes will not necessarily expedite the approval of plans, and may simply deflect responsibility for delays from DEC to planning units. The responsibilities assumed by DEC with these time frames require review and notice of deficiencies. Review under deadlines may he cursory, and deficiencies may be overstated. No time frames are established for planning unit resubmissions. The net effect may be controversies regarding the nature and scope of the deficiencies identified by DEC, and negotiated time frames for responses and resubmissions by planning units. Because each local plan will remain essentially unique. Each plan will undergo individual review, as is currently contemplated.

Response: The establishment of review time frames for the Department were in response to several comments received on the draft regulations. The comments did not ask for specific time frames to be placed on planning units for response to Department comments but instead were focused on timely Department review and issuance of comments. The established time frames directly addressed those concerns.

Comment: These changes will not substantially reduce the costs associated with plan preparation and updates. We estimate that each planning unit will need to prepare one new LSWMP, 6 LSWMP biennial reports, and one LSWMP Update at the end of a 10-year planning period. A preliminary estimate of the incremental costs of compliance, over and above current compliance costs, would require planning units to spend $320,000 to $560,000 more than what they would need to spend under the current regulations. The extra hours involved with these same additional compliance requirements range from 2,100 to 3,830 more hours. These extra costs and hours would be expended over a roughly 12-year period, to allow time for preparation of a new LSWMP and then an LSWMP Update just prior to the end of that 10-year planning period. The estimated costs are subject to the length of the review. The DEC, in the Regulatory Impact Statement, states that these changes to the LSWMP regulations will not present a burden or additional costs in professional services to any planning unit. We disagree.

Response: The LSWMP development and reporting requirements have either remained the same or have been reduced from the current regulatory requirements. Accordingly, the associated cost for compliance will not result in increased costs over a currently compliant LSWMP development and reporting requirements.

Part 369
Comment: We were thrilled that DEC has agreed to allow the continuation of replacement of equipment, as all of these pieces of equipment have reached the end of their useful life.

Response: Comment noted.

Appendix A

Part 360

360.2(b)(2)
360.2(b)(33)
360.2(b)(77)
360.2(b)(89)
360.2 (b) (90)
360.2 (b) (99)
360.2 (b) (199)
360.2 (b) (121)
360.2 (b) (161)
360.2 (b) (171)
360.2 (b) (232)
360.2 (b) (236)
360.2 (b) (278)
360.2 (b) (289)
360.2 (b) (290)

360.3(a)(4)(i)
360.3(a)(4)(viii)
360.3(d)(4)

360.4(b)(2)
360.4(f)
360.4(k)
360.4(p)

360.12(c)(1)(ii)
360.12(c)(1)(iv)
360.12(c)(2)(vii)
360.12(c)(3)(viii)
360.12(c)(3)(ix)
360.12(c)(3)(x)
360.12(e)(1)
360.12(f)(3)(ii)
360.12(f)(3)(ix)
360.12(f)(3)(x)

360.13(a)(g)

360.14(b)(1)(vi)

360.15(a)(3)(i)
360.15(a)(3)(ii)

360.19(c)(1)(v)
360.19(j)

360.22(b)(3)(v)

Part 361

361-1.5(c)(4)
361-3.2(e)(8)
361-3.2(e)(15)
361-3.2(e)(16)
361-3.3(d)(4)(ii)
361-5.1
361-5.2(a)(1)
361-5.2(a)(6)
361-5.2(a)(7)
361-5.2(a)(9)
361-5.4(a)
361-5.4(e)
361-5.4(f)(1)(i)
361-5.4(f)(1(iv)
361-5.4(f)(3)
361-5.4(f)(4)
361-7.3(a)(3)

Part 362

362-3.1
362-3.5(b)
362-3.5(d)
362-3.5(e)
362-3.5(f)

Part 363

363-2.1(i)
363.4.3(c)
363-4.3(c)(3)(ii)
363-4.3(d)(1)(i)

363-4.3(e)(1)(ii)
363-4.3(e)(1)(iii)
363-4.3(e)(3)
363-4.3(f)
363-4.6(e)(9)(ii)
363-4.6(h)
363-4.6(j)(4)
363-5.1(a)(2)(i)
363.6.1(d)
363-6.3
363-6.4
363-6.5(b)
363-6.7(a)(1)
363-6.7(b)(1)(iv)
363-6.12(a)(i)
363-6.12(a)(1)(i)
363-6.12(a)(2)
363-7.1(f)(7)(i)
363-9.6(a)(1)
363-9.6(b)(1)

Part 364

364-1.2(h)
364-2.1(b)(5)
364-2.1(b)(6)
364-3.1(a)(1)
363-3.1(c)
363-3.3(f)

Part 365

365-1.2(a)(1)
365-1.2(b)(7)
365-1.2(b)(13)(ii)
365-1.2(b)(13)(v)
365-1.2(b)(14)(i)
365-1.2(b)(14)(ix)
365-1.2(c)(7)
365-2.2(a)
365-2.2(c)
365-2.4(a)(1)
365-2.5(b)(4)(ii)
365-2.5(d)(2)
365-2.5(d)(4)
365-2.5(e)(3)
365-2.5(e)(5)
365-2.5(f)(1)
365-2.5(f)(2)
365-2.5(f)(3)
365-2.5(f)(4)
365-2.5(f)(5)
365-2.6(b)(1)
365-2.6(b)(2)
365-2.6(b)(5)
365-2.6(c)(1)
365-2.6(c)(3)
365-2.6(c)(4)
365-2.6(c)(8)
365-2.6(j)(2)
365-2.6(k)(6)
365-2.6(k)(7)
365-2.6(k)(8)
365-2.6(l)
365-2.7(d)(3)
365-2.7(h)(1)
365-2.7(h)(2)
365-2.7(h)(3)
365-2.8(a)(1)
365-2.8(a)(3)
365-2.8(b)(1)