

REQUEST FOR AG-3 AGRICULTURAL AND RESIDENTIAL CONDITIONAL USE
GREEN MEADOWS MUNICIPAL SOLID WASTE DISPOSAL & RECYCLING FACILITY
Amended Application for July 9, 2019 Submittal

APPENDIX IV

State Rules on Solid Waste Management

Subject 391-3-4 SOLID WASTE MANAGEMENT

Rule 391-3-4-.01 Definitions

- (1) "Active Life" means the period of operation beginning with the initial receipt of solid waste and ending at completion of closure activities.
- (2) "Active Portion" means that part of a solid waste handling facility or landfill unit that has received or is receiving wastes and that has not been closed.
- (3) "Aquifer" means a geological formation, group of formations, or portion of a formation capable of yielding significant quantities of ground water to wells or springs.
- (4) "Affected County" means, in addition to the county in which a facility is or is proposed to be located, each county contiguous to the host county and each county and municipality within a county that has a written agreement with the facility to dispose of solid waste.
- (5) "Asbestos-Containing Waste" means any solid waste containing more than 1 percent, by weight, of naturally occurring hydrated mineral silicates separable into commercially used fibers, specifically the asbestiform varieties of serpentine, chrysotile, cummingtonite-grunerite, amosite, riebeckite, crocidolite, anthophyllite, tremolite, and actinolite, using the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.
- (6) "Baling" means a volume reduction technique whereby solid waste is compressed into bales.
- (7) "Biomedical Waste" means any solid waste which contains pathological waste, biological waste, cultures, and stocks of infectious agents and associated biologicals, contaminated animal carcasses (body parts, their bedding, and other waste from such animals), chemotherapy waste, discarded medical equipment and parts, not including expendable supplies and materials, which have not been decontaminated, as further defined in Rule 391-3-4-.15.
- (8) "Boiler" means a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management.
- (9) "CCR Landfill" means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this Chapter, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR. This definition includes both active and inactive landfills.
- (10) "CCR Surface Impoundment" means a natural topographic depression, man-made excavation, or diked area owned or operated by an electric utility or independent power producer, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR. This definition includes both active and inactive surface impoundments, new and lateral expansions of surface impoundments, dewatered surface impoundments, and NPDES-CCR surface impoundments.

- (11) "CCR Unit" means any CCR landfill, CCR surface impoundment, or the lateral expansion of such landfill or impoundment, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified.
- (12) "Certificate" means a document issued by a college or university of the University System of Georgia or other organization approved by the Director, stating that the operator has met the requirements of the Board for the specified operator classification of the certification program.
- (13) "Closure" means a procedure approved by the Division which provides for the cessation of waste receipt at a solid waste disposal site and for the securing of the site in preparation for post- closure.
- (14) "Coal Combustion Residuals (CCR)" means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.
- (15) "Collector" means the person or persons as defined herein who, under agreements, verbal or written, with or without compensation does the work of collecting and/or transporting solid wastes, from industries, offices, retail outlets, businesses, institutions, and/or similar locations, or from residential dwellings, provided however, that this definition shall not include an individual collecting and/or transporting waste from his own single family dwelling unit.
- (16) "Commercial solid waste" means all types of solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities, excluding residential and industrial wastes.
- (17) "Composting" means the controlled biological decomposition of organic matter into a stable, odor free humus.
- (18) "Construction/Demolition Waste" means waste building materials and rubble resulting from construction, remodeling, repair, and demolition operations on pavements, houses, commercial buildings and other structures. Such waste include, but are not limited to asbestos containing waste, wood, bricks, metal, concrete, wall board, paper, cardboard, inert waste landfill material, and other nonputrescible wastes which have a low potential for groundwater contamination.
- (19) "Construction/Demolition Waste Landfill" means a landfill unit that accepts construction/demolition waste. A Construction/Demolition Waste unit also may receive inert waste and yard trimmings and may be publicly or privately owned.
- (20) "Contaminant which is likely to pose a danger to human health" means any constituent in Appendix I, II, III, or IV or other site specific constituents as specified by the Division in the Groundwater Monitoring or Corrective Action Plan that is found at levels statistically confirmed above a groundwater protection standard.
- (21) "Detected" means statistically significant evidence of contamination has been determined to exist by using methods specified in Rule 391-3-4-.14.
- (22) "Director" means the Director of Environmental Protection Division of the Department of Natural Resources.

- (23) "Disposal Facility" means any facility or location where the final disposition of solid waste occurs and includes, but is not limited to, landfilling and solid waste thermal treatment technology facilities.
- (24) "Division" means the Environmental Protection Division of the Department of Natural Resources.
- (25) "Generator" means any person in Georgia or in any other state who creates solid waste.
- (26) "Garbage" means food waste including waste accumulations of animal or vegetable matter used or intended for use as food, or that attends the preparation, use, cooking, dealing in or storing of meat, fish, fowl, fruit or vegetables.
- (27) "Groundwater" means water below the land surface in a zone of saturation.
- (28) "Hazardous Waste" means any solid waste which has been defined as hazardous waste in regulations promulgated by the Board of Natural Resources, Chapter 391-3-11.
- (29) "Household waste" means any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).
- (30) "Host Local Government" means the host county or other local governmental jurisdiction within whose boundaries a municipal solid waste disposal facility is located.
- (31) "Industrial Furnace" means a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management.
- (32) "Industrial Waste" means solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under the Hazardous Waste Management Act and regulations promulgated by the Board of Natural Resources, Chapter 391-3-11. Such waste includes, but is not limited to, wastes resulting from the following manufacturing processes: Electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; inorganic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil or gas waste.
- (33) "Inert Waste Landfill" means a disposal facility accepting only wastes that will not or are not likely to cause production of leachate of environmental concern. Such wastes are limited to earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trimmings, stumps, limbs, and leaves. This definition excludes industrial and demolition waste not specifically listed above.
- (34) "Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit or landfill unit.
- (35) "Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such wastes.

- (36) "Landfill Unit" means an area of land or an excavation in which solid waste is placed for permanent disposal and which is not a land application unit, surface impoundment, injection well, or compost pile. Permanent disposal requires the placement of daily, intermediate, and/or final earth, synthetic, or a combination of earth and synthetic cover over the solid waste.
- (37) "Leachate Collection System" means a system at a landfill for collection of the leachate which may percolate through the waste and into the soils surrounding the landfill.
- (38) "Liner" means a continuous layer of natural or man-made materials beneath or on the sides of a disposal site or disposal site cell which restricts the downward or lateral escape of solid waste constituents, or leachate.
- (39) "Liquid Waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for the Evaluation of Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).
- (40) "Materials Recovery Facility" means a solid waste handling facility that provides for the extraction from solid waste of recoverable materials, materials suitable for use as a fuel or soil amendment, or any combination of such materials.
- (41) "Monofill" means a method of solid waste disposal that involves the landfilling of one waste type or wastes having very similar characteristics in a segregated trench or area which is physically separated from dissimilar or incompatible waste.
- (42) "Municipal Solid Waste" means any solid waste derived from households, including garbage, trash, and sanitary waste in septic tanks and means solid waste from single-family and multifamily residences, hotels and motels, bunkhouses, campgrounds, picnic grounds, and day use recreation areas. The term includes yard trimmings and commercial solid waste, but does not include solid waste from mining, agricultural, or silvicultural operations or industrial processes or operations.
- (43) "Municipal Solid Waste Landfill (MSWLF) Unit" means a discrete area of land or an excavation that receives household waste, and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR Part 257.2. A MSWLF unit also may receive other types of solid waste, such as commercial solid waste, nonhazardous sludge, small quantity generator waste and industrial solid waste. Such a landfill may be publicly or privately owned.
- (44) "Municipal Solid Waste Disposal Facility" means any facility or location where the final deposition of any amount of municipal solid waste occurs, whether or not mixed with or including commercial or industrial solid waste, and includes, but is not limited to, municipal solid waste landfills and solid waste thermal treatment technology facilities.
- (45) "Municipal Solid Waste Disposal Facility Operator" means the operator certified in accordance with Rule [391-3-4-.18](#) and stationed on the site who is in responsible charge of and has direct supervision of the daily field operations of a municipal solid waste disposal facility to ensure that the facility operates in compliance with the permit.
- (46) "Municipal Solid Waste Landfill" means a disposal facility where any amount of municipal solid waste, whether or not mixed with or including commercial waste, industrial waste, nonhazardous sludges, or small quantity generator hazardous wastes, is disposed of by means of placing an approved cover thereon.

- (47) "Open Burning" means the combustion of solid waste without:
- (a) Control of combustion air to maintain adequate temperature for efficient combustion;
 - (b) Containment of the combustion reaction in an enclosed device to provide sufficient residence time and mixing for complete combustion; and
 - (c) Control of the emission of the combustion products.
- (48) "Open Dump" means a disposal facility at which solid waste from one or more sources is left to decompose, burn or to otherwise create a threat to human health or the environment.
- (49) "Operating Records" means written records including, but not limited to, permit applications, monitoring reports, inspection reports, and other demonstrations of compliance with this Chapter, which records are kept on file at the facility or at an alternative location as approved by the Division.
- (50) "Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.
- (51) "Owner" means the person(s) who owns a facility or part of a facility.
- (52) "Person" means the State of Georgia or any other state or any agency or institution thereof, and any municipality, county, political subdivision, public or private corporation, solid waste authority, special district empowered to engage in solid waste management activities, individual, partnership, association or other entity in Georgia or any other state. This term also includes any officer or governing or managing body of any municipality, political subdivision, solid waste authority, special district empowered to engage in solid waste activities, or public or private corporation in Georgia or any other state. This term also includes employees, departments, and agencies of the federal government.
- (53) "Post-closure" means a procedure approved by the Division to provide for long- term financial assurance, monitoring and maintenance of a solid waste disposal facility to protect human health and the environment.
- (54) "Private Industry Solid Waste Disposal Facility" means a disposal facility which is operated exclusively by and for a private solid waste generator for the purpose of accepting solid waste generated exclusively by said private solid waste generator.
- (55) "Processing Operation" means any method, system or other treatment designed to change the physical form or chemical content of solid waste and includes all aspects of its management (administration, personnel, land, equipment, buildings and other elements).
- (56) "Putrescible Wastes" means wastes that are capable of being quickly decomposed by microorganisms. Examples of putrescible wastes include but are not necessarily limited to kitchen wastes, animal manure, offal, hatchery and poultry processing plant wastes, dead animals, garbage and wastes which are contaminated by such wastes.

- (57) "Qualified Ground water Scientist" means a professional engineer or geologist registered to practice in Georgia who has received a baccalaureate or post-graduate degree in the natural sciences or engineering and has sufficient training and experience in groundwater hydrology and related fields that enable that individual to make sound professional judgments regarding groundwater monitoring, contaminant fate and transport, and corrective action.
- (58) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.
- (59) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.
- (60) "Recovered Materials" means those materials which have known use, reuse, or recycling potential; can be feasibly used, reused or recycled; and have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing.
- (61) "Recovered Materials Processing Facility" means a facility engaged solely in the storage, processing, and resale or reuse of recovered materials. Such term shall not include a solid waste handling facility; provided, however, any solid waste generated by such facility shall be subject to all applicable laws and regulations relating to such solid waste.
- (62) "Recycling" means any process by which materials which would otherwise become solid waste are collected, separated, or processed and reused or returned to use in the form of raw materials or products.
- (63) "Regional Landfill or Regional Solid Waste Disposal Facility" means a facility owned by a county, municipality, or special district empowered to engage in solid waste management activities, or any combination thereof, which serves two or more any combination of counties, municipalities, or special solid waste districts.
- (64) "Release" means the discharge, deposit, injection, dumping, spilling, emitting, releasing, leaking, or placing of any substance into or on any land or water of the state.
- (65) "Relevant Point of Compliance" is a vertical surface located at the hydraulically downgradient limit of the waste management unit boundary that extends down into the uppermost aquifer underlying the facility. This point will be specified by the Director and shall be no more than 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the landfill unit. The downgradient monitoring system must be installed at this point, and monitoring conducted to ensure that the concentration values listed in Table 1 of Rule 391-3-4-.07 will not be exceeded in the uppermost aquifer.
- (66) "Saturated Zone" means that part of the earth's crust in which all voids are filled with water.
- (67) "Scavenge" means the unpermitted removal of solids waste from a solid waste handling facility.
- (68) "Shredding" means the process by which solid waste is cut or torn into smaller pieces for final disposal or further processing.

- (69) "Significant Groundwater Recharge Areas" means any area as designated on Hydrologic Atlas 18 Most Significant Ground-Water Recharge Areas of Georgia, 1989, as published by the Georgia Geologic Survey, Environmental Protection Division, Georgia Department of Natural Resources, unless an applicant for a solid waste handling permit or other interested party can demonstrate to the satisfaction of the Director that an area designated on Hydrologic Atlas 18 is or is not, in fact, a significant groundwater recharge area.
- (70) "Site" means the entire property a permitted solid waste handling facility is located within and includes all activities within that property.
- (71) "Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility exclusive of the treated effluent from a wastewater treatment plant.
- (72) "Solid Waste" means any garbage or refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities, but does not include recovered materials; solid or dissolved materials in domestic sewage; solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permit under 33 U.S.C. Section 1342; or source, special nuclear, or by-product material as defined by the federal Atomic Energy Act of 1954, as amended (68 Stat. 923).
- (73) "Solid Waste Handling" means the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities.
- (74) "Solid Waste Handling Facility" means any facility, the primary purpose of which is the storage, collection, transportation, treatment, utilization, processing, or disposal, or any combination thereof, of solid waste.
- (75) "Solid Waste Handling Permit" means written authorization granted to a person by the Director to engage in solid waste handling.
- (76) "Solid Waste Management Act" or the "Act", wherever referred to in these Rules, means the Georgia Comprehensive Solid Waste Management Act, O.C.G.A. 12-8-20, et seq.
- (77) "Solid Waste Thermal Treatment Technology" means any solid waste handling facility, the purpose of which is to reduce the amount of solid waste to be disposed of through a process of combustion, with or without the process of waste to energy.
- (78) "Tire" means a continuous solid or pneumatic rubber covering designed for encircling the wheel of a motor vehicle and which is neither attached to the motor vehicle nor a part of the motor vehicle as original equipment.
- (79) "Transfer Station" means a facility used to transfer solid waste from one transportation vehicle to another for transportation to a disposal facility or processing operation.
- (80) "Uppermost Aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the solid waste handling facility's property boundary.

- (81) "Vertical Expansion" means the expansion of landfill beyond the approved maximum final elevations and within the approved waste management boundaries of the existing permit.
- (82) "Waste Management Unit Boundary" means a vertical surface located at the hydraulically downgradient limit of the unit. This vertical surface extends down into the uppermost aquifer.
- (83) "Waste-to Energy Facility" means a solid waste handling facility that provides for the extraction and utilization of energy from municipal solid waste through a process of combustion.
- (84) "Yard Trimmings" means leaves, brush, grass, clippings, shrub and tree prunings, discarded Christmas trees, nursery and greenhouse vegetative residuals, and vegetative matter resulting from landscaping development and maintenance other than mining, agricultural, and silvacultural operations.

Rule 391-3-4-.02 Solid Waste Handling Permits

- (1) Solid Waste Handling Permits Required. No person shall engage in solid waste handling or construct or operate a solid waste handling facility, except those individuals exempted from the provisions of the Georgia Comprehensive Solid Waste Management Act, under the provisions of O.C.G.A. 12-8-30.10 or O.C.G.A. 12-8-40 or those individuals who have a permit-by-Rule under Rule 391-3-4-.06, without first obtaining a permit from the Director authorizing such activity.
 - (a) Applicability. All new and existing solid waste handling permits.
 - (b) Application Completeness. The Director may issue permits for solid waste handling provided the application is judged complete and meets the requirements of the Georgia Comprehensive Solid Waste Management Act and these Rules. Solid Waste Handling Permits shall be required for, but are not limited to, persons engaged in the collection, transportation, treatment, utilization, storage, processing, or disposal of solid wastes, or any combination thereof, except as exempted by O.C.G.A. 12-8-30.10 or O.C.G.A. 12-8-40 and these Rules and shall be required for the construction or operation of all solid waste handling facilities, except as exempted by O.C.G.A. 12-8-30.10 or O.C.G.A. 12-8-40 and these Rules.
 - (c) Permit Review and Schedule. As of July 1, 2018, all new permits shall be reviewed every five years. All permits issued prior to July 1, 2018 will be reviewed within five years and will then be placed on a corresponding five year review schedule.
 - (d) Permit Review. Each permit for a solid waste handling facility will be reviewed by the Division every five years and shall be modified to assure that the facility continues to comply with the currently applicable requirements of these Rules. The permit review will require that the permittee submit and revise Design and Operational Plans and other supporting documents, as necessary, to include any changes to reflect the facility's current construction and operation. Permit reviews

shall be filed with the Division as either a minor modification or a major modification.

1. In order for permits to remain in effect, applications for permit review shall be filed at least six (6) months, but not more than eighteen (18) months prior to the date of scheduled permit review.
 2. Existing solid waste handling permits shall remain in effect during the review period.
 3. If a timely and complete review package has not been submitted, the solid waste handling facility's right to operate ceases until a complete application has been submitted.
- (2) Modification or Revocation of Permits for Cause: the Director may modify or revoke any permit issued pursuant to O.C.G.A. 12-8-24 if the holder of the permit found to be in violation of any of the permit conditions; or if the holder of the permit fails to perform such activity in accordance with the approved plan; or if such activity creates a threat to human health or the environment. In the event of modification or revocation of a permit, the Director shall serve written notice of such action on the permit holder and shall set forth in such notice the reason for such action.
- (3) Permit Modifications at the Request of the Permittee: all modifications of existing solid waste handling permits shall be classified as follows:
- (a) Major Modifications include those changes which substantially alter the design of the facility, management practices, the types of wastes being handled, or the method of waste handling, and due to the nature of the changes, would likely have an impact on the ability of the facility to adequately protect human health and the environment. Major modifications therefore require closer review and public input than minor modifications. Major modifications shall include, but are not limited to, the following:
 1. A modification which involves an expansion of an existing landfill's capacity.
 2. A modification which involves a lateral expansion of a CCR surface impoundment.
 3. A modification which adds a new solid waste handling process. This shall include but not be limited to the addition of an air curtain destructor, a materials recovery facility, a baling operation, a shredding operation, a processing operation, a municipal solid waste or sewage sludge composting operation, or a liquid solidification operation.
 4. A modification which involves the change of a site suitability requirement which could have impacted the original siting of the facility.

5. Any other modification which the Director, in the exercise of his discretion, determines to meet the criteria set forth in Section (4)(a) of this Rule.

(b) Minor modifications include changes that do not substantially alter the permit conditions, that do not reduce the capacity of the facility to protect human health or the environment, or that enable a permittee to respond in a timely manner to common variations in the type and quantities of wastes managed, technological advancements, or changes necessary to comply with new Rules where these changes can be implemented without substantially changing design specifications or management practices in the permit. Minor modifications shall include, but are not limited to, the following:

1. Changing the name of a facility.
2. A modification which involves a change in administrative and operational information and maintenance of operational records.
3. A modification which involves a change in the sequence of operation.
4. A modification which involves the relocation of access roads.
5. A modification which adds or deletes on-site structures.
6. A modification which involves the addition of or a change to a groundwater or surface water monitoring system.
7. A modification which involves the addition of or a change to a landfill gas monitoring system.
8. A modification which involves the addition or deletion of a permit-by-Rule facility.
9. A modification which involves the deletion of any solid waste handling facility.
10. A modification which involves the deletion of permitted capacity or acreage.
11. A modification which involves the addition of or a change to an erosion and sedimentation control system.
12. A modification which involves the addition of or a change to a closure or post- closure plan.

13. A modification which involves the addition of or a change to a method of leachate handling.
 14. A modification which involves the addition of or a change to a quality assurance plan.
 15. A modification which involves the change of any compliance schedule which is part of the permit.
 16. A modification which involves the addition of a corrective action plan.
 17. A modification which involves a change in ownership, or in the case of a corporation of over five (5) percent of the stock in a corporation holding a permit, but does not involve the transfer of the permit.
 18. A modification which involves the addition of acreage for the purpose of installing monitoring systems or installing structures for mitigating environmental impacts, where the original permitted acreage provides insufficient area to complete required improvements. This modification request must be accompanied by a hydrogeological assessment as specified in Rule 391-3-4-.05(1)(j).
 19. A modification which involves the addition of or change in a soil or synthetic liner and leachate collection system to a waste unit holding a valid solid waste handling permit, if it does not require other significant site redesign.
 20. A modification which involves the removal or recovery of CCR from a CCR unit for the purpose of beneficial use.
- (c) All modifications of solid waste handling permits which are major modifications shall be subject to the following requirements:
1. Submission of a completed application for a permit modification.
 2. Submission of supporting documents which accompany the application for a permit modification which describe the exact change to be made to the permit conditions and supporting documents referenced by the permit and which explain why the change is needed.
 3. Submission of a revised design for the requested change.
 4. Submission of written verification by the applicant, as required by subparagraph (1)(a) of Rule 391-3-4-.05, that the facility, as proposed to be modified, conforms to all local zoning/land use ordinances, if any.

5. Except for Private Industry Solid Waste Disposal Facilities, after July 1, 1992, submission of written verification by the applicant that the facility, as proposed to be modified, is consistent with the local or regional solid waste management plans and that the host jurisdiction and the jurisdictions generating solid waste destined to the facility can demonstrate that they are actively involved in and have a strategy for meeting the State-wide goal of waste reduction by July 1, 1996. The verification shall consist of letters from the host jurisdiction and generating jurisdictions verifying consistency with the approved local solid waste plan.
6. Except for Private Industry Solid Waste Disposal Facilities, submission of written verification that a public hearing was held by the governing authority of the county or municipality in which the solid waste facility requesting the modification is located, not less than two weeks prior to granting approval of the modification. Submission of written verification that notice of such hearing was posted at the site of such facility and advertised in a newspaper of general circulation serving the county or counties in which the facility is located at least thirty (30) days prior to such hearing. A typed transcript of the hearing must be provided to the Division.
7. Any application for a solid waste disposal facility vertical expansion shall meet the criteria as established in O.C.G.A. 12-8-24(e)(3). Any operation of a vertical expansion shall be in accordance with conditions set forth in the modified permit. Conditions to be included in any such modified permit shall, at a minimum, include the following:
 - (i) A minimum 200 foot buffer shall be provided between the property line and the waste disposal boundary established by the vertical expansion.
 - (ii) Site survey control shall be provided to ensure compliance with the approved permit modification.
 - (iii) Erosion and sedimentation control devices shall be installed, rehabilitated, and maintained as appropriate to control all surface runoff and sediments from disturbed areas.
 - (iv) All areas exposed for more than three (3) months shall be vegetated.
 - (v) Closure plans, post-closure plan, and appropriate financial responsibility shall be maintained and updated as provided for in the approved permit modification.

- (vi) All other conditions of the existing permit not in conflict with conditions (i) through (v) above.
8. With the exception of major modifications granted under subparagraph (c)7. of this Rule, all major modifications shall meet the siting and design standards applicable to new permit applications in effect on the date the modification is approved.
- (d) All modifications of solid waste handling permits which are minor modifications shall be subject to the following requirements:
1. Submission of a written request by the permit holder requests a minor modification.
 2. Submission of supporting documents which accompany the written modification request which describe the exact change to be made to the permit conditions and supporting documents referenced by the permit and which explain why the change is needed.
 3. If applicable, submission of a revised design for the requested change.
 4. For a modification involving a change in ownership covered in subparagraph (4)(b)17. above, documentation must be provided to insure compliance with subparagraph (7)(a) below.
- (4) Transfer of Permits: permits are not transferable from one site or facility to another. Permits are transferable from one person to another provided a new permit application is completed by the proposed permittee, and the proposed permittee agrees to abide by all the permit conditions or outstanding orders in effect at the time of the requested transfer. Prior to the transfer of the permit, the new permittee must demonstrate compliance with Rule 391-3-4-.13. Until such time as this is demonstrated, the original permittee shall be fully responsible for financial responsibility for the facility. Unless notified otherwise by the Director, within 45 days of receipt by the Division of a properly completed request for transfer of the permit, the permit transfer shall stand approved.
- (5) Applications for permits and major permit modifications under O.C.G.A. 12-8-24 shall be on forms as may be prescribed and furnished from time to time by the Division and shall be accompanied by all pertinent information as the Division may require.
- (6) Material submitted shall be complete and accurate.
- (7) Application for a permit or for the transfer of a permit shall contain, but shall not be limited, to the following:
- (a) A sworn statement that the applicant and owner or operator, if different than applicant, for a permit or, in the case of a corporation, partnership, or association,

an officer, Director, manager, or shareholder of five percent or more of stock or financial interest in said corporation, partnership, or association:

1. Has not intentionally misrepresented or concealed any material fact in the application submitted to the Director;
 2. Is not attempting to obtain the permit by misrepresentation or concealment;
 3. Has not been finally convicted in the State of Georgia or any federal court of any felony involving moral turpitude within three years immediately preceding the application for a permit;
 4. Has not been convicted of any violations of any environmental laws punishable as a felony in any state or federal court within five years preceding the application for a permit;
 5. Has not knowingly, willfully, and consistently violated the prohibitions specified in O.C.G.A. 12-8-30.7; and
 6. Has not been adjudicated in contempt of any court order enforcing any federal environmental laws or any environmental laws of the State of Georgia within five years preceding the application for a permit.
- (b) For a permit application, a statement that the applicant either owns the property on which the facility is to be located or had the permission of the owner to use the property for solid waste handling.
- (c) For a permit application, in the case of a regional landfill or a landfill serving more than one county, a list of the areas to be served.
- (d) For a permit application, written verification of zoning compliance as required by Rule 391-3-4-.05 paragraph (1)(a).
- (e) For a permit application, a site assessment as required by Rule 391-3-4-.05, except CCR units which must meet criteria in 391-3-4-.10.
- (8) Applications for permits will be reviewed together with such other information as may be necessary to ascertain the effect of such solid waste handling upon air, water, and land resources and human health. Conditions under which the handling will be permitted will be specified in the permit issued.
- (9) Except for Private Industry Solid Waste Disposal Facilities, each applicant for a permit shall provide verification that the facility is consistent with the local or regional solid waste management plans. The verification shall consist of letters from the host jurisdiction and generating jurisdictions verifying consistency with the approved local solid waste plans.

- (10) Changes to Permit Status. The Director may approve a request to modify an existing solid waste handling permit to reflect the change of a facility's operational status. Such changes can include operating, closure, and post-closure.

Rule 391-3-4-.03 Public Participation

- (1) Any city, county, group of counties, or authority beginning a process to select a site for a municipal solid waste disposal facility shall first call a public meeting as described herein.
- (a) Notice such meeting shall be published at least once per week for two weeks immediately preceding the public meeting in a newspaper of general circulation serving such municipality or county.
 - (b) Where such proposed facility will serve a regional solid waste management authority established pursuant to O.C.G.A. 12-8-53, the notice procedure outlined in subparagraph (a) above shall be followed in each jurisdiction participating in such authority.
 - (c) The purpose of the public meeting shall be to discuss the waste management needs of the local government or region and to describe the siting process to be followed.
- (2) The governing authority of any county or municipality taking action resulting in a municipal solid waste disposal facility siting decision shall notify the public as follows:
- (a) Cause to be published in a newspaper of general circulation serving such city or county at least once per week for two weeks immediately preceding the date of such meeting, notice of the meeting at which the siting decision is to be made.
 - (b) Such notices shall state the time, place, and purpose of the meeting.
 - (c) The meeting shall be conducted by the governing authority taking the action.
- (3) Upon submission of an application to the Division for any municipal solid waste disposal facility for which a permit (other than a permit-by-Rule) is required, the applicant, within fifteen (15) days of the submission of said application, shall take the following actions:
- (a) Publish public notice of the application in a newspaper of general circulation serving the host county if the proposed facility or expanded facility is to serve no more than one county;
 - (b) Publish public notice of the application in a newspaper of general circulation serving each affected if the proposed facility or expanded facility is to serve more than one county;
 - (c) Provide written notice of the permit application to the governing body of each affected county in subparagraph (a) or (b) above; to the governing body of each local government within subparagraph (a) or (b) above; and to the regional development center;

- (d) Request that the public notice outlined herein to be displayed prominently in the courthouse of each county notified in (c) above.
 - (e) Upon notification by the Division that a proposed facility is suitable for the intended purpose, the host local government shall initiate a local notification and negotiation process as required in O.C.G.A.12-8-32.
- (4) The governing authority of the county or municipality will hold a public hearing not less than two weeks prior to the issuance of any permit, except for a private industry disposal facility, and notice of such hearing shall be posted at the proposed site and advertised in a newspaper of general circulation serving the county or counties in which the proposed activity will be conducted, at least thirty (30) days prior to such hearing. A typed copy of the hearing transcript shall be submitted to the Division.
- (5) Whenever the Director issues, denies, revokes, suspends, or transfers, a permit or approves a major modification of a permit for a facility, he shall notify the legal organ and the chief elected official of the host local government in which the facility is located or is proposed to be located.

Rule 391-3-4-.04 General. Amended

- (1) No person shall engage in solid waste handling in a manner which will be conducive to insect and rodent infestation or the harboring and feeding of wild dogs or other animals; impair the air quality; impair the quality of the ground or surface waters; impair the quality of the environment; or likely create other hazards to the public health, safety, or well-being as may be determined by the Director.
- (2) Provisions of these Rules apply to all persons presently engaged in solid waste handling as well as all persons proposing to engage in solid waste handling.
- (3) Exemptions: provisions of these Rules shall not apply to any individual disposing of solid wastes originating from his own residence onto land or facilities owned by him when disposal of such wastes does not thereby adversely affect the public health. These Rules shall not apply to any individual, corporation, partnership, or cooperative disposing of livestock feeding facility waste from facilities with a total capacity of up to 1,000 cattle or 5,000 swine. Provided that if such individual, corporation, partnership, or cooperative shall provide an approved waste disposal system which is capable of properly disposing of the run-off from a "ten year storm" such individual, corporation, partnership or cooperative shall be further exempt regardless of total per head capacity. Nothing in these Rules shall limit the right of any person to use poultry or other animal manure for fertilizer.
- (4) Prohibited Acts:
- (a) Burning: no solid waste may be burned at a solid waste handling facility, except by thermal treatment technology facility approved by the Division.
 - (b) Scavenging: no person owning or operating a solid waste handling facility shall cause, suffer, allow or permit scavenging at such site.

- (c) Open Dump: no solid waste may be disposed of by any person in an open dump, nor may any person cause, suffer, allow or permit open dumping on his property.
 - (d) Asphalt Shingles: no roofing shingles which contain asphalt may be disposed of except in construction and demolition or municipal solid waste landfills.
- (5) The owner or occupant of any premises, office, business establishment, institution, industry, or similar facilities shall be responsible for the collection and transportation of all solid waste accumulated at the premises, office, business establishment, institution, or similar facility to a solid waste handling facility operating in compliance with these Rules unless arrangements have been made for such service with a collector operating in compliance with these Rules.
- (6) Prohibited Wastes Disposal:
- (a) If, because of unusual physical or chemical properties, or geological or hydrogeological conditions, or for other reasons, the Division finds that solid waste should not be accepted at a solid waste handling facility, the Division may require that such waste be prohibited, and that a proposal for disposal of such waste, with supporting data as may be deemed necessary, be submitted by the generator of such waste for consideration of approval by the Division. The prohibition of such waste shall continue in effect until an acceptable procedure for processing or disposal has been developed and approved.
 - (b) The following solid wastes are specifically prohibited from disposal at solid waste disposal facilities in Georgia:
 1. lead acid batteries;
 2. liquid waste in landfills, except as allowed in (9) below;
 3. regulated quantities of hazardous waste as defined in Rules promulgated by the Board of Natural Resources, Chapter 391-3-11;
 4. radioactive waste as defined in Rules promulgated by the Board of Natural Resources, Chapter 391-3-9, Radioactive Waste Material Disposal; and
 5. polychlorinated biphenyls (PCB) waste as defined in 40 CFR, Part 761.
 - (a) Any generator who disposes of a prohibited waste or person who accepts for disposal a prohibited waste shall be deemed to be in violation of these Rules.
- (7) Recovered Materials:
- (a) Recovered materials and recovered materials processing facilities are excluded from regulation as solid wastes and solid waste handling facilities. To be

considered exempt from regulation, the material must have a known use, reuse, or recycling potential; must be feasibly used, reused, or recycled; and must have been diverted or removed from the solid waste stream for sale, use, reuse, or recycling, whether or not requiring subsequent separation and processing.

- (b) Materials accumulated speculatively are solid waste and must comply with all applicable provisions of these regulations.
- (c) A recovered material is not accumulated speculatively if the person accumulating it can show that there is a known use, reuse, or recycling potential for the material, that the material can be feasibly sold, used, reused, or recycled and that during a Calendar year commencing January 1 and ending December 31 of the same year, seventy-five percent (75%), by weight or volume, of the recovered material stored at a facility is recycled, sold, used, or reused. Any material that is accumulated speculatively and not in accordance with these requirements must be handled as solid waste.
- (d) Proof of recycling, sale, use, or reuse shall be provided in the form of bills of sale, or other records showing adequate proof of movement of the material in question to a recognized recycling facility or for proper use or reuse from the accumulation point. In addition, proof must be provided that there is a known market or disposition for the recovered material. Persons claiming that they are owners or operators of recovered materials processing facilities must show that they have the necessary equipment to do so.
- (e) A recovered material is "sold" if the generator of the recovered material or the person who recovered the material from the solid waste stream received consideration or compensation for the material because of its inherent value.
- (f) A recovered material is "used, reused or recycled" if it is either:
 1. Employed as an ingredient (including use as an intermediate) in a process to make a product (for example, utilizing old newspaper to make new paper products) or
 2. Employed in the same or different fashion as its original intended purpose without physically changing its composition (for example, use of old automobiles for spare parts or donation of clothing or furniture to charitable organizations) or
 3. Employed in a particular function or application as an effective substitute for a commercial product (for example, utilizing shredded tires in asphalt or utilizing refuse - derived fuel as a substitute for fuel oil, natural gas, coal, or wood in a boiler or industrial furnace) as long as such substitution does not

pose a threat to human health or the environment and so long as the facility is not a solid waste thermal treatment facility.

4. A material is not "used, reused or recycled" when it is applied to or placed on or in the land in a manner that constitutes disposal which, in the opinion of the Director, may pose a threat to human health and the environment (for example, utilizing soil containing levels of hazardous constituents, as listed in Chapter 391-3-11, 40 CFR Part 261, Appendix VIII for fill material when those levels are greater than the background levels in the area to be filled, land applying sludge in excess of generally accepted agricultural practices or use of inherently waste-like materials as fill material).

(8) Asbestos Containing Waste.

(a) Collection.

1. Vehicles used for the transportation of containerized asbestos waste shall have an enclosed carrying compartment or utilize a covering sufficient to contain the transported waste, prevent damage to containers, and prevent release or spillage from the vehicle.
2. Vehicles used to reduce waste volume by compaction shall not be used.
3. Vacuum trucks used to transport waste slurry must be constructed and operated to ensure that liquids do not leak from the truck.

(b) Disposal.

1. Asbestos containing waste is to be disposed of only in a permitted landfill or other facility authorized by the Division for acceptance of asbestos containing waste.
2. Asbestos containing waste shall be sealed in leak-proof containers labeled with "Caution - Contains Asbestos Fibers - Avoid Opening or Breaking Container - Breathing Asbestos is Hazardous to Your Health."
3. Asbestos containing waste shall be disposed of in such a manner as not to destroy the integrity of the asbestos containing materials containers prior to the placement of cover material. This waste shall be completely covered immediately after deposition with a minimum of six (6) inches of non-asbestos material.

(9) Liquid Waste Restrictions at Landfills.

- (a) Bulk or noncontainerized liquid waste may not be placed in landfill units unless:

1. The waste is household waste other than septic waste; or
 2. The waste is leachate or gas condensate derived from the landfill unit, whether it is a new or existing landfill or lateral expansion, is designed with a composite liner and leachate collection system as described in paragraph (1)(d) of Rule 391-3-4-.07. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record.
- (b) Containers holding liquid waste may not be placed in a landfill unit unless:
1. The container is a small container similar in size to that normally found in household waste;
 2. The container is designed to hold liquids for use other than storage; or
 3. The waste is household waste.
- (c) For purposes of this section:
1. "Liquid waste" means any waste material that is determined to contain "free liquids" as defined by Method 9095 (Paint Filter Liquids Test), as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846).
 2. "Gas condensate" means the liquid generated as a result of gas recovery process(es) at the landfill unit.

- (10) Variances, waivers, and alternative compliance schedules which may be granted under these Rules, Chapter 391-3-4, may not allow for the waiver or modification of a requirement found in 40 CFR, Part 258, as amended, 56 Fed. Reg. 51016-51039 October 9, 1991 80 Fed. Reg. 21468 (April 17, 2015); as amended at 80 Fed. Reg. 3799 (July 2, 2015) and 81 Fed. Reg. 51807 (August 5, 2016), except as provided in 391-3-4.10(11).
- (11) Compliance with the Rules for Solid Waste Management, Chapter 391-3-4, does not relieve any person from complying with all other applicable local, state, or federal rules or statutes.

Rule 391-3-4-.05 Criteria for Siting

- (1) The following criteria must be met for a site proposed as a solid waste handling facility:
- (a) Zoning. The site must conform to all local zoning/land use ordinances. Written verification must be submitted to the Division by the applicant demonstrating that the proposed site complies with local zoning and land use ordinances, if any. This verification shall include a letter from the local governmental authority stating that

the proposed site complies with local zoning or land use ordinances, if any. This verification shall be provided at the time of submission of a permit application and reaffirmed by the governmental authority prior to permit issuance.

(b) Disposal Facility Siting Decision. Whenever any county, municipality group of counties, or authority begins a process to select a site for a municipal solid waste disposal facility, documentation shall be submitted which demonstrates compliance with O.C.G.A. 12-8-26(a), and whenever the governing authority of any county or municipality takes action resulting in a publicly- or privately-owned municipal solid waste disposal facility siting decision, documentation shall be submitted which demonstrates compliance with O.C.G.A. 12-8-26(b).

(c) Airport Safety:

1. New MSWLF units or lateral expansions of existing units shall not be located within 10,000 feet (3,048 meters) of any public-use or private-use airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public-use or private-use airport runway end used by only piston-type aircraft.
2. Owners or operators of existing MSWLF units, that are located within 10,000 feet (3,048 meters) of any public- use or private-use airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public- use or private-use airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF units do not pose a bird hazard to aircraft.
3. Owners or operators proposing to site new MSWLF units and lateral expansions within a five-mile radius of any public-use or private-use airport runway end used by turbojet or piston-type aircraft must notify the affected airport and the Federal Aviation Administration (FAA).
4. The owner or operator must place the demonstration in paragraph 2. of this section in the operating record and notify the Director that it has been placed in the operating record not later than October 1, 1993.
5. For purposes of this section:
 - a. "Public-use airport" means an airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.
 - b. "Private-use airport" means an airport that is not open to the public and which may not be used without prior permission of the airport owner and which has restrictions other than the physical capacities of

available facilities and such airport is shown on the Sectional Aeronautical Charts published by the U.S. Department of Commerce for Atlanta, Jacksonville, or New Orleans, which charts are dated at least one year prior to the submission of a MSWLF permit or major permit modification application.

- c. "Bird hazard" means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.
- (d) Floodplains. A solid waste handling facility located in the 100-year floodplain shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place a demonstration of compliance in the operating record and notify the Director that it has been placed in the operating record.
 - 1. For purposes of this section:
 - a. "Floodplains" means the low land and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, that are inundated by the 100-year flood.
 - b. "100-year flood" means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equalled or exceeded once in 100 years on the average over a significantly long period.
 - c. "Washout" means the carrying away of solid waste by waters of the base flood.
- (e) Wetlands. A solid waste handling facility shall not be located in wetlands, as defined by the U.S. Corps. of Engineers, unless evidence is provided to the Director, by the applicant, that use of such wetlands has been permitted or otherwise authorized under all other applicable state and federal laws and rules. The owner or operator must place a demonstration of compliance in the operating record and notify the Directory that it has been placed in the operating record.
- (f) Fault Areas.
 - 1. New landfill units and lateral expansions of existing landfills shall not be located within 200 feet (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Director

that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the landfill unit and will be protective of human health and the environment.

2. For the purposes of this section.
 - a. "Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.
 - b. "Displacement" means the relative movement of any two sides of a fault measured in any direction.
 - c. "Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

(g) Seismic Impact Zones.

1. New landfill units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Director that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record.
2. For the purposes of this section:
 - a. Seismic impact zone means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull will exceed 0.10g in 250 years.
 - b. Maximum horizontal acceleration in lithified earth material means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.
 - c. Lithified earth material means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-

made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

(h) Unstable areas.

1. Owners or operators of new landfill units, existing landfill units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the landfill unit's design to ensure that the integrity of the structural components of the landfill unit will not be disrupted. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:
 - a. On-site or local soil conditions that may result in significant differential settling;
 - b. On-site or local geologic or geomorphologic features; and
 - c. On-site or local human-made features or events (both surface and subsurface).
2. For the purposes of this section:
 - a. "Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.
 - b. "Structural components" means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the landfill that is necessary for protection of human health and the environment.
 - c. "Poor foundation conditions" means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a landfill unit.
 - d. "Areas susceptible to mass movement" mean those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at,

beneath, or adjacent to the landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

- e. "Karst terrains" means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.
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- (i) Significant Groundwater Recharge Areas. A new municipal solid waste landfill or lateral expansion of an existing municipal solid waste landfill shall not have any part of such site located within two miles of any area that has been designated by the Director as a significant groundwater recharge area unless such municipal solid waste landfill will have a liner and leachate collection system. In the case of a regional landfill which accepts solid waste generated outside the counties or special districts constituting the region or a municipal solid waste landfill which accepts solid waste generated outside the county in which the landfill is located, no part of such site shall be within any area that has been designated as a significant groundwater recharge area.
 - (j) Hydrogeological Assessment. A hydrogeological site investigation shall be conducted with the following factors, as a minimum, evaluated:
 1. Distance to nearest point of public or private drinking water supply: all public water supply wells or surface water intakes within two miles and private (domestic) water supply wells within one-half mile of a landfill must be identified;
 2. Depth to the upper most aquifer: for landfills, the thickness and nature of the unsaturated zone and its ability for natural contamination control must be evaluated;
 3. Uppermost aquifer gradient: for landfills, the direction and rate of flow of groundwater shall be determined in order to properly evaluate the potential for contamination at a specific site. Measurements of water levels in site exploratory borings and the preparation of water table maps are required. Borings to water are required to estimate the configuration and gradient of the uppermost aquifer;

4. Topographic setting: features which shall be provided include, but are not limited to, all upstream and downstream drainage areas affecting or affected by the proposed site, floodplains, gullies, karst conditions, wetlands, unstable soils and percent slope;
 5. Geologic setting: for landfills, the depth to bedrock, the type of bedrock and the amount of fracturing and jointing in the bedrock shall be determined. In limestone or dolostone regions, karst terrain shall not be used for waste disposal. This consideration does not preclude the siting of landfills in limestone terrains, but rather is intended to prevent landfills from being sited in or adjacent to sink-holes, provided, however, that the demonstration required by subparagraph (h) has been made.
 6. Hydraulic conductivity: evaluation of landfill sites shall take into consideration the hydraulic conductivity of the surface material in which the wastes are to be buried, as well as the hydraulic conductivity of the subsurface materials underlying the fill;
 7. Sorption and attenuation capacity: for landfills, the sorptive characteristics of an earth material and its ability to absorb contaminants shall be determined; and
 8. Distance to surface water: municipal solid waste landfills shall not be situated within two miles upgradient of any surface water intake for a public drinking water source unless engineering modifications such as liners and leachate collection systems and ground-water monitoring systems are provided.
- (k) New MSWLF units shall not be located within two miles of a federally restricted military air space which is used for a bombing range.
- (2) Construction/Demolition waste landfills must comply with the siting criteria specified in "Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia", Circular 14, Appendix B.
 - (3) Industrial waste landfills permitted to receive only a single type industrial waste (monofill) or receive only a single industry's waste, must comply with the siting criteria specified in "Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia ", Circular 14, Appendix A. Commercial industrial waste landfills must meet the same siting criteria as municipal solid waste landfills.
 - (4) A site assessment report addressing the criteria listed above shall be prepared by a geologist registered in Georgia or a geotechnical engineer registered in Georgia and submitted to the Division for review at the time of submitting a permit application. The site assessment report shall be prepared in accordance with Circular 14, 1991, (amended 1997) as published by the Georgia Geologic Survey, Georgia Environmental Protection Division.

- (5) Monitoring wells and borings shall be constructed by a driller having a valid and current bond with the Water Well Standards Advisory Council.
- (6) CCR units must meet the siting criteria in 391-3-4-.10.

Rule 391-3-4-.06 Permit by Rule for Collection, Transportation, Processing, and Disposal

- (1) Permit-by-Rule. Notwithstanding any other provision of these Rules, collection operations, transfer station operations, inert waste landfill operations, waste processing and thermal treatment operations, wastewater treatment and pretreatment plant sludge disposal operations, and yard trimmings waste landfill operations shall be deemed to have a solid waste handling permit if the conditions in paragraph (2) are met and the conditions in paragraph (3), for that particular category of operation are met.
- (2) Notification. Within 30 days of commencing solid waste handling activities which are covered under a permit-by-Rule, notification must be made to the Director of such activity. Notification shall be made on such forms as are provided by the Director. Persons failing to notify the Director of such activities shall be deemed to be operating without a permit.
- (3) Categories of Operations:
 - (a) Collection Operations:
 1. Vehicle construction: vehicles or containers used for the collection and transportation of garbage and similar putrescible wastes, or mixtures containing such wastes, shall be covered, substantially leakproof, durable, and of easily cleanable construction.
 2. Vehicle maintenance: solid waste collection and transportation vehicles shall be cleaned frequently and shall be maintained in good repair.
 3. Littering and spillage: vehicles or containers used for the collection and transportation of solid waste shall be loaded and moved in such manner that the contents will not fall, leak or spill therefrom and shall be covered when necessary to prevent blowing of material from the vehicle.
 4. No regulated quantities of hazardous wastes may be collected and transported except in accordance with the provisions of the Georgia Hazardous Waste Management Act, O.C.G.A. 12-8-60 et seq.
 5. Local ordinances: it is the responsibility of the collector to comply with all local rules, regulations, and ordinances pertaining to operation of solid waste collection systems.
 6. All wastewater from cleaning of vehicles must be handled in a manner which meets all applicable environmental laws and regulations.

7. All collected solid waste must be deposited only in a permitted solid waste handling facility authorized to receive the applicable waste types.
8. After July 1, 1992, municipal solid waste may not be transported from a jurisdiction to a municipal solid waste disposal facility located in another county unless the jurisdiction generating the waste is actively involved in and has a strategy for meeting the state-wide goal of waste reduction by July 1, 1996.

(b) Transfer Station operations:

1. Solid Waste shall be confined to the interior of transfer station buildings, and not allowed to scatter to the outside. Waste shall not be allowed to accumulate, and floors shall be kept clean and well drained.
2. Sewage solids shall be excluded from transfer stations.
3. Dust, odors and similar conditions resulting from transfer operations shall be controlled at all times.
4. Rodents, insects and other such pests shall be controlled.
5. Any contaminated runoff from washwater shall be discharged to a wastewater treatment system and, before final release, shall be treated in a manner approved by the Division.
6. Hazardous Waste: no person owning or operating a transfer station shall cause, suffer, allow, or permit the handling of regulated quantities of hazardous waste.
7. Liquid wastes restricted from landfill disposal by Rule 391-3-4-.04(9) shall be excluded from transfer stations. Transfer stations in existence on August 1, 2004 and in compliance with all other regulations applicable to permit by rule transfer stations may continue to handle such liquid wastes until a solid waste processing facility permit is issued or August 1, 2006, whichever occurs first.

- (c) Inert Waste Landfill Operations: Inert Waste Landfills in existence on the effective date of this Rule and in compliance with all other regulations applicable to permit by rule for inert waste landfill operations may continue to operate under the conditions below until a solid waste handling permit is issued or December 1, 2014, whichever occurs first. Provided a complete permit application is submitted by June 1, 2014, the Director may extend the deadline for permitting until a final decision on permit issuance or denial is made. If the requirements for a permit

cannot be met by December 1, 2014, or other deadline established by the Director, the operator must cease receipt of waste on that date and complete closure by June 1, 2015, or six months from the Director's denial of the requested permit application. Any inert waste landfill which, as of January 1, 2014, has been certified by a professional engineer registered in accordance with Chapter 15 of Title 43 as being in full compliance with all permit by rule requirements established in the rules and regulations of the division as they existed on January 1, 2012, may continue to operate under such permit by rule requirements. Except as provided in sub-paragraph (f), no person may begin operating a new inert waste landfill after the effective date of this rule without first obtaining a site specific solid waste handling permit for an inert waste landfill.

1. Only waste that will not or is not likely to produce leachate of environmental concern may be disposed of in an inert waste landfill. Only earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trimmings, and land clearing debris such as stumps, limbs and leaves, are acceptable for disposal in an inert waste landfill.
2. No portion of waste disposal area shall be located within one hundred (100) linear feet of any property line or enclosed structure.
3. Materials placed in inert waste landfills shall be spread in layers and compacted to the least practical volume; and, a uniform compacted layer of clean earth cover no less than one (1) foot in depth shall be placed over all exposed inert waste material at least monthly.
4. The inert waste landfill site shall be graded and drained to minimize runoff onto the landfill surface, to prevent erosion and to drain water from the surface of the landfill.
5. Access to inert waste landfills shall be limited to authorized entrances which shall be closed when the site is not in operation.
6. Suitable means shall be provided to prevent and control fires. Stockpiled soil is considered to be the most satisfactory fire fighting material.
7. A uniform compacted layer of final cover not less than two (2) feet in depth and a vegetative cover shall be placed over the final lift not later than one month following final placement of inert waste within that lift.
8. Notice of final closure must be provided to the Director within 30 days of receiving the final load of waste. Any site not receiving waste for in excess of 180 days shall be deemed abandoned and in violation of these Rules unless properly closed. Notice of closure must include the date of final

waste receipt and an accurate legal description of the boundaries of the landfill.

9. All deeds for real property which have been used for landfilling shall include notice of the landfill operations, the date the landfill operation commenced and terminated, an accurate legal description of the actual location of the landfill, and a description of the type of solid wastes which have been deposited in the landfill. Concurrent with the submission of notice of final closure to the Director, the owner or operator must submit to the Director confirmation that the information required in this section has been noticed on the property deed.
10. All wastes received at the landfill must be measured and reported as required by Rule 391-3-4-17.
11. All other applicable federal, state, and local laws, rules, and ordinances, including erosion and sediment control, and any applicable federal wetlands permits, must be fully complied with prior to commencement of landfilling operations.

(d) On-site Waste Processing and Thermal Treatment Operations:

1. For purposes of this Rule, "On-site Processing or Thermal Treatment Facility" shall mean a facility that processes or thermally treats, no less than 75 percent, by weight, solid waste generated at the permit-by-Rule facility location or facilities owned by the same person who owns the property containing the permit-by-Rule facility. On-site facilities may include fixed or mobile facilities either owned or under contract with the solid waste generator of 75 percent of the solid waste so long as the solid waste generator maintains legal control of the solid waste while at the permit-by-Rule facility.
2. Capacity: the on-site waste processing and thermal treatment technology facility shall be adequate in size and capacity to manage the projected volume of solid waste and residue generated.
3. Residue: on-site thermal treatment technology facilities shall be designed in such a manner to expedite the routine sampling of bottom and fly ash. Temperature and combustion time shall be sufficient to produce a satisfactory residue, essentially free of odors and unstable organic matter, and such residue shall be promptly deposited in a municipal solid waste landfill having a liner and leachate collection system and operated and maintained as provided herein, handled in such other manner as may be approved by the Division, or if shown by testing to be hazardous, handled in

accordance with the provisions of the Georgia Hazardous Waste Management Act, O.C.G.A. 12-8-60, et seq. Residue from thermal treatment technology facilities that burn only biomedical wastes may be deposited in any permitted municipal solid waste landfill. Residue from the burning of any wastes, other than biomedical wastes, must, if landfilled, be placed in landfills having liners and leachate collection systems unless the Division grants an exemption.

4. Storage: the areas for storing wastes prior to processing must be clearly defined and the maximum capacity specified. No waste may be stored in excess of the designated capacity.
5. Disposal of waste: treated waste from on-site processing facilities and any material not sold or used, reused, or recycled must be disposed in a permitted disposal facility.
6. Air quality: on-site processing and thermal treatment technology facilities shall be designed and operated in such manner as to meet any air quality standards of the Division.
7. Wastewater: on-site processing and thermal treatment technology facilities shall be designed so that any wastewater generated will be discharged to a wastewater treatment system and, before final release, will be treated in a manner approved by the Division.
8. Fire protection: on-site processing and thermal treatment technology facility designs shall provide for fire control equipment placed near the storage and charging area, and elsewhere as needed.
9. Supervision: operation and management of on-site thermal treatment technology facilities shall be under the direct supervision and control of an operator who is present at all times of operation and is qualified in thermal treatment technology management by training, education or experience. Operation and management of on-site processing facilities shall be under the supervision and control of a responsible individual properly trained in the operation of such facilities at all times during operation.
10. Prohibited waste: no lead acid batteries, radioactive waste, or regulated quantities of hazardous waste or polychlorinated biphenyls may be accepted. The operator must have a plan for excluding these wastes.
11. Cleanliness and sanitation: on-site processing and thermal treatment technology facilities shall be maintained in a clean and sanitary condition. Solid waste shall be confined to the designated storage area.

12. Record keeping: accurate written, daily records by actual weight or by the methods approved in accordance with O.C.G.A. 12-8-31.1(g) shall be kept of all waste processed or disposed at the on-site processing and thermal treatment technology facility. Such records shall include the source of the waste, by facility name and location. Copies of such records shall be maintained for a period of at least three (3) years and shall be submitted to the Division quarterly on such forms as prescribed by the Division.
13. Local ordinances: it is the responsibility of the operator of on-site processing and thermal treatment technology facilities to comply with all local rules, regulations, and ordinances pertaining to operation of these facilities and all other applicable federal and state laws and rules.
14. All facilities handling biomedical waste must, in addition to this Rule, meet any requirements of Rule 391-3-4-.15.

(e) Wastewater Treatment or Pretreatment Plant Sludge Disposal:

1. All wastewater treatment or pretreatment plant sludges that are not beneficially used, reused, or recycled in accordance with Rule 391-3-4-.04 or that are not disposed of by landfilling in accordance with Rule 391-3-4-.07, must be handled in accordance with an approval or a permit issued by the Division under authority of the Georgia Water Quality Control Act, O.C.G.A. 12-5-20, et seq. or the Georgia Air Quality Act, O.C.G.A. 12-9-1 et seq.

(f) Yard Trimmings Waste Landfill Operations: Landfill Operations with 5 acres or less of waste disposal area and located in counties with a population less than 65,000 people and accepting exclusively yard trimmings as defined by these Rules can be permitted under the following conditions:

1. Only yard trimmings are acceptable for disposal in a yard trimmings waste landfill. Vegetative matter from land clearing operations shall not be disposed in a yard trimmings waste landfill.
2. No portion of the waste disposal area shall be located within two hundred (200) linear feet of any property line or enclosed structure.
3. Materials placed in yard trimmings waste landfills shall be spread in layers and compacted to the least practical volume; and, a uniform compacted layer of clean earth cover no less than one (1) foot in depth shall be placed over all exposed yard trimmings waste material at least monthly.

4. The yard trimmings waste landfill site shall be graded and drained to minimize runoff onto the landfill surface, to prevent erosion and to drain water from the surface of the landfill.
5. Access to yard trimmings waste landfills shall be limited to authorized entrances which shall be closed when the site is not in operation.
6. Suitable means shall be provided to prevent and control fires. Stockpiled soil is considered to be the most satisfactory firefighting material.
7. A uniform compacted layer of final cover not less than two (2) feet in depth and a vegetative cover shall be placed over the final lift not later than one month following final placement of yard trimmings waste within that lift.
8. Notice of final closure must be provided to the Director within 30 days of receiving the final load of waste. Any site not receiving waste for in excess of 180 days shall be deemed abandoned and in violation of these Rules unless properly closed. Notice of closure must include the date of final waste receipt and an accurate legal description of the boundaries of the landfill.
9. All deeds for real property which have been used for landfilling shall include notice of the landfill operations, the date the landfill operation commenced and terminated, an accurate legal description of the actual location of the landfill, and a description of the type of solid wastes which have been deposited in the landfill. Concurrent with the submission of notice of final closure to the Director, the owner or operator must submit to the Director confirmation that the information required in this section has been noticed on the property deed.
10. All wastes received at the landfill must be measured and reported as required by Rule 391-3-4-.17.
11. All other applicable federal, state, and local laws, rules, and ordinances, including erosion and sediment control, and any applicable federal wetlands permits, must be fully complied with prior to commencement of landfilling operations.

Rule 391-3-4-.07 Landfill Design and Operations

- (1) All landfills must be designed by a professional engineer registered to practice in Georgia and designed in accordance with the following criteria:
 - (a) Site limitations: the landfill must be designed in such a manner as to comply with the specific site limitations issued by the Division as a part of a site approval.

- (b) **Buffers:** Facilities must provide a minimum 200 foot buffer between the waste disposal boundary and the property line and a minimum 500 foot buffer between the waste disposal boundary and any occupied dwelling and the dwelling's operational private, domestic water supply well in existence of the date of permit application. The 500-foot buffer may be reduced if the current owner of the dwelling provides a written waiver consenting to the waste disposal boundary being closer than 500 feet. The waste disposal boundary is defined as the limit of all waste disposal areas, appurtenances, and ancillary activities (including but not limited to internal access roads and drainage control devices). No land disturbing activities are to take place in these buffers, except for construction of groundwater monitoring wells and access roads for direct ingress or egress, unless otherwise specified in a facility design and operation plan or corrective action plan approved by the Division.

- (c) **Site survey control** shall be provided to ensure the operation will be on permitted lands. Survey control will be accomplished through use of permanent, accessible benchmarks, survey control stakes, and/or boundary markers which designate and/or delineate all permitted areas. Survey control shall be as indicated on the design and operational plan. Where necessary for construction or operational purposes, vertical as well as horizontal survey control will be established and maintained to delineate fill boundaries, buffers, and property boundaries.

- (d) **Liners and Leachate Collection Systems:** new MSWLF units and lateral expansions shall be constructed with liners and leachate collection systems. The liner and leachate collection system must ensure that the concentration values listed in Table 1 will not be exceeded in the uppermost aquifer at the relevant point of compliance. The liner and leachate collection system must be designed and installed under the supervision of a professional engineer registered to practice in Georgia who shall certify the installation.

TABLE 1

Chemical	MCL (mg/l)
Arsenic	0.05
Barium	1.0
Benzene	0.005
Cadmium	.01
Carbon tetrachloride	0.005
Carbon tetrachloride	0.005

Chromium (hexavalent)	0.05
2, 4 Dichlorophenoxy acetic acid	- 0.1
1, 4 Dichlorobenzene	- 0.075
1, 2 Dichloroethane	- 0.005
1, 1 Dichloroethylene	- 0.007
Endrin	0.0002
Fluoride	4
Lindane	0.004
Lead	0.05
Mercury	0.002
Methoxychlor	0.1
Nitrate	10
Selenium	0.01
Silver	0.05
Toxaphene	0.005
1, 1, 1- Trichloromethane	0.2
Trichloroethylene	0.005
2, 4, 5- Trichlorophenoxy acetic acid	0.01
Vinyl Chloride	0.002

1. If the MSWLF is located in an area of higher pollution susceptibility, as defined by Hydrologic Atlas #20, A Pollution Susceptibility Map of Georgia, or in a significant ground water recharge area as designated by Hydrologic Atlas #18, the liner and leachate collection system must, at a minimum, be designed with:

- a. a composite liner, as defined in paragraph c. of this section and a leachate collection system that is designed and constructed to maintain less than a 30-cm depth of leachate over the liner.
 - b. at least a five foot separation between the liner system and the seasonal high ground water elevation.
 - c. For purposes of this section, "composite liner" means a system consisting of two components; the upper component must consist of a minimum 30-mil flexible membrane liner (FML), and the lower component must consist of at least a two-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. FML components consisting of High Density Polyethylene (HDPE) shall be at least 60- mil thick. The FML component must be installed in direct and uniform contact with the compacted soil component.
2. The relevant point of compliance shall be no more than 150 meters from the waste management unit boundary and shall be located on land owned by the owner of the MSWLF unit. In determining the relevant point of compliance, the Division shall consider at least the following factors:
- a. The hydrogeologic characteristics of the facility and surrounding land:
 - b. The volume and physical and chemical characteristics of the leachate:
 - c. The quantity, quality, and direction, of flow of ground water;
 - d. The proximity and withdrawal rate of the ground-water users;
 - e. The availability of alternative drinking water supplies;
 - f. The existing quality of the ground water, including other sources of contamination and their cumulative impacts on the ground water and whether groundwater is currently used or reasonably expected to be used for drinking water;
 - g. Public health, safety, and welfare effects; and
 - h. Practicable capability of the owner or operator.
3. For MSWLF units not located in significant ground water recharge areas or areas of higher pollution susceptibility, liners and leachate collection systems may meet a design standard other than that specified in

subparagraph (1)(d) 1. of this Rule, so long as such design ensures that the concentration values listed in Table 1 of this Rule will not be exceeded in the uppermost aquifer at the relevant point of compliance. The factors listed in subparagraph 2. above for determining the relevant point of compliance, shall also be used in determining the suitability of the liner and leachate collection system design.

- (e) Erosion and Sedimentation Control: all surface runoff from disturbed areas must be controlled by the use of appropriate erosion and sedimentation control measures or devices. Sediment basins must be designed to handle both the hydraulic loading for the 25 year, 24-hour storm and the sediment loading from the drainage basin for the life of the site. Runoff from the facility must be designed for flow through permanent sediment control impoundments which are designed to assure discharges meeting the requirements of O.C.G.A. 12-7-6.
- (f) Vegetation: the plan must call for the vegetation of any disturbed area that will remain exposed for more than three (3) months. Vegetation of final cover must take place within two (2) weeks after final cover placement.
- (g) Sequence of Filling: the plan must define a sequence of filling showing a detailed progression of filling the entire site that minimizes any problems with drainage and all weather access roads to the working face.
- (h) Limited Access: a gate or other barrier shall be maintained at potential vehicular access points to block unauthorized access to the site when an operator is not on duty. A fence or other suitable barrier must be provided around the site, including impoundments, leachate collection and treatment systems and gas venting and processing facilities, sufficient to prevent unauthorized access.
- (i) Final Grading: the grade of final slopes shall be designed to:
 - 1. insure permanent slope stability;
 - 2. control erosion due to rapid water velocity and other factors;
 - 3. allow compaction, seeding, and vegetation of cover material placed on the slopes;
 - 4. minimize percolation of precipitation into final cover and provide diversion of surface runoff from disposal area; and
 - 5. meet the final closure requirements of Rule 391-3-4-.11.
 - 6. the grade of the final surface of the facility may not be less than 3 percent nor greater than 33 percent.

- (j) Access Roads: access roads shall be designed to provide for the orderly egress and ingress of vehicular traffic when the facility is in operation, including during inclement weather.
 - (k) Fire Protection: the disposal site must be designed to prevent and minimize the potential for fire or explosion. A minimum supply of one day of cover material must be maintained within 200 feet of the working face for fire fighting purpose, unless other acceptable means have been provided and approved by the Director.
 - (l) Ground water and Surface water Monitoring Plan: the design must provide for a groundwater monitoring plan in accordance with the requirements for Groundwater Monitoring and Corrective Action as provided in Rule 391-3-4-.14. A surface water monitoring plan which will determine the impact of the facility on all adjacent surface waters must also be included.
 - (m) Closure Criteria: the design must provide for proper closure in accordance with Rule 391-3-4-.11.
 - (n) Post-Closure Care: the design must provide for Post-closure care in accordance with Rule 391-3-4-.12.
 - (o) Financial Responsibility: the design must provide for financial responsibility in accordance with Rule 391-3-4-.13.
- (2) Construction Certification: upon receipt of a final and effective solid waste handling permit, construction may commence in accordance with the approved design and operational plan and permit conditions. Prior to receipt of solid waste, the Division must be provided with written certification by a professional engineer licensed to practice in Georgia, that the facility has been constructed in accordance with the approved permit. Unless notified otherwise by the Division, within 15 days of receipt by the Division of the written certification, the facility owner or operator may commence disposal of solid waste. This process shall be repeated for each subsequent major construction phase, including but not limited to, new cells, additional monitoring wells, sediment ponds, leachate treatment systems, modifications adding a new solid waste handling process, and application of final cover.
- (3) Any person engaged in the operation of landfills shall comply with the following performance requirements:
- (a) Air Criteria.
 - 1. Owners or operators of all landfills must ensure that the units not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the U.S. Environmental Protection Agency pursuant to Section 110 of the Clean Air Act, as amended.

2. Open burning of solid waste, except for the infrequent burning of agricultural wastes, silvicultural wastes, land clearing debris, diseased trees, or debris from emergency cleanup operations, is prohibited at all landfills.
- (b) Unloading: solid waste unloading shall be restricted to the working face of the operation in such manner that waste may be easily incorporated into the landfill with available equipment.
- (c) Procedures for excluding receipt of prohibited wastes:
1. Not later than October 1, 1993, owners or operators of all landfills must implement a program at the facility for detecting and preventing the disposal of regulated quantities of hazardous wastes as defined in the Rules for Hazardous Waste Management, Chapter 391-3-4-11, polychlorinated biphenyls (PCB) wastes as defined in 40 CFR, Part 761, and other wastes prohibited by Rule 391-3-4-.04, or the facility's permit. This program must include, at a minimum:
 - a. random inspections of incoming loads unless the owner or operator takes other steps to ensure that incoming loads do not contain prohibited wastes:
 - b. records of any inspections:
 - c. training of facility personnel to recognize prohibited wastes; and d. notification of the Director if a prohibited waste is discovered at the facility.
 2. The procedures must be made a part of the operating record.
- (d) Spreading and Compaction: solid waste shall be spread in uniform layers and compacted to its smallest practical volume before covering with earth.
- (e) Daily Cover:
1. Except as provided in paragraph 2. of this section, the owner or operator of all MSWLF units must cover disposed solid waste with six inches of earthen material at the end of each operating day, or at more frequent intervals if necessary, to control disease vectors, fires, odors, blowing litter, and scavenging.
 2. Alternative materials (such as foams or tarps) of an alternative thickness (other than at least six inches of earthen material) may be approved by the Director if the owner or operator demonstrates that the alternative material and thickness control disease vectors, fires, odors, blowing litter, and

scavenging without presenting a threat to human health and the environment.

(f) Disease Vector Control.

1. Owners or operators of all landfills must prevent or control on-site populations of disease vectors using techniques appropriate for the protection of human health and environment.
2. For purposes of this Rule, "disease vectors" means any rodents, flies, mosquitoes, or other animals, including insects, capable of transmitting disease to humans.

(g) Intermediate Cover: a uniform compacted layer of clean earth cover not less than one (1) foot in depth shall be placed over each portion of any intermediate lift following completion of that lift.

(h) Explosive Gases Control.

1. Owners or operators of all landfills that are required to do methane monitoring under their permits must ensure that:
 - a. The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components); and
 - b. The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.
2. Owners or operators of all landfills that are required to do methane monitoring must implement a routine methane monitoring program to ensure that the standards of this section are met. Copies of the monitoring results must be provided to the Division within 14 days of completion of the event. Results must be submitted on forms provided by the Division.
 - a. The type and frequency of monitoring must be determined based on the following factors:
 - (i) Soil conditions;
 - (ii) The hydrogeologic conditions surrounding the facility;
 - (iii) The hydraulic conditions surrounding the facility;

- (iv) The location of facility structures and property boundaries.
 - b. The minimum frequency of monitoring must be quarterly.
 - 3. If methane gas levels exceeding the limits specified in this section are detected, the owner or operator must:
 - a. Immediately take all necessary steps to ensure protection of human health and notify the Director;
 - b. Within seven days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health; and c. Within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the Director that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy.
 - 4. For purposes of this section, lower explosive limit means the lowest percent by volume of a mixture of explosive gases in air that will propagate a flame at 25°C and atmospheric pressure.
- (i) Run-on/Run-off Control.
 - 1. Owners or operators of all landfills must design, construct, and maintain:
 - a. A run-on control system to prevent flow onto the active portion of the landfill during the peak discharge from a 25-year storm;
 - b. A run-off control system from the active portion of the landfill to collect and control at least the water volume resulting from a 24-hour, 25-year storm.
 - 2. Run-off from the active portion of the landfill unit must be handled in accordance with section (g) of this Rule.
- (j) Surface water requirements; All landfill units shall not:
 - 1. Cause a discharge of pollutants into waters of the state or the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination system (NPDES) requirements pursuant to section 402:

2. Cause the discharge of a nonpoint source of pollution to waters of the state or the United States, including wetlands, that violates any requirement of an area-wide or State-wide water quality management plan that has been approved under section 208 or 319 of the Clean Water Act, as amended.
- (k) Continuity of Operation: all-weather access roads shall be provided to the working face of the disposal operation and provisions shall be made for prompt equipment repair or replacement when needed.
 - (l) Environmental Protection: the landfill shall be operated in such manner as to prevent air, land, or water pollution, and public health hazards.
 - (m) Prohibited Waste: no liquids, except as allowed in subparagraph (9) of Rule 391-3-4-.04 lead acid batteries, radioactive waste, or regulated quantities of hazardous waste may be accepted. The operator must have a plan for excluding these wastes.
 - (n) Supervision: the disposal facility shall be under the supervision of an operator who is properly trained in the operation of landfills and the implementation of Design and Operational Plans and who, if the facility is a municipal solid waste disposal facility, is certified in accordance with O.C.G.A. 12-8-24.1 and these Rules.
 - (o) Limited Access: access to landfills shall be limited to authorized entrances which shall be closed when the site is not in operation. Owners and operators of all landfills must control public access and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, as appropriate to protect human health and the environment.
 - (p) Litter Control: scattering of wastes by wind shall be controlled by fencing or other barriers and the entire site shall be inspected daily and all litter removed.
 - (q) Fire Protection: suitable measures to control fires that may start shall be provided. Stockpiled soil is considered to be the most satisfactory fire fighting material.
 - (r) Erosion and Sedimentation Control: all erosion and sedimentation control measures or facilities, whether temporary or permanent, shall be continuously maintained by the operator so as to be effective. Runoff from the facility must be directed to permanent sediment control impoundments which are designed to assure discharges meeting the requirements of O.C.G.A. 12-7-6. Erosion and sedimentation control measures and facilities will be employed prior to and concurrent with clearing, grading, overburden removal, access or other land disturbing activities for preparation of the site for landfilling. Immediate measures must be implemented to establish vegetation on disturbed exposed soil which will

not be a part of the waste disposal area or which will remain exposed for more than three (3) months.

- (s) Information Posted: signs shall be posted at the entrance to landfills indicating the days and hours of operation.
- (t) Prohibited Acts: the landfill shall be operated and maintained to prevent open burning, scavenging, and the open dumping of wastes.
- (u) Recordkeeping Requirements.
 1. Not later than October 1, 1993, the owner or operator of a MSWLF unit must record and retain near the facility in an operating record or in an alternative location approved by the Director the following information as it becomes available:
 - a. Any location restriction demonstration required under Rule 391-3-4-.05;
 - b. Inspection records, training procedures, and notification procedures required in subparagraph (c) of this Rule;
 - c. Gas monitoring results from monitoring and any remediation plans required by paragraph (h) of this section;
 - d. Any MSWLF unit design documentation for placement of leachate or gas condensate in a MSWLF unit as required under paragraph (9) of Rule 391-3-4-.04;
 - e. Any demonstration, certification, finding, monitoring, testing, or analytical data required by Rule 391-3-4-.14;
 - f. Closure and post-closure care plans and any monitoring, testing, or analytical data as required by Rule 391-3-4-.11 and Rule 391-3-4-.12; and
 - g. Any cost estimates and financial assurance documentation required by Rule 391-3-4-.13.
 2. The owner/operator must notify the Director when the documents from paragraph 1. of this section have been placed or added to the operating record, and all information contained in the operating record must be furnished on request to the Director or be made available at all reasonable times for inspection by the Director.

3. The Director can set alternative schedules for recordkeeping and notification requirements as specified in paragraphs 1. and 2. of this section, except for the notification requirements in Rule 391-3-4-.05(1)(c), Airport Safety, and Rule 391-3-4-.14(30)(c), Assessment Monitoring.
 - (v) Groundwater, Underdrain Discharge, and Surface Water Monitoring: all water monitoring points shall be sampled in accordance with the approved plans or with any directive issues by the Division. Analytical results must be submitted to the Division in accordance with the approved time schedules. It shall be the responsibility of the facility owner or operator to promptly report any exceedance of established standards. All monitoring reports must be accompanied by a certified statement by a qualified groundwater scientist, for those constituents which have established standards, that established standards have been complied with or certifying noncompliance. Underdrain discharge shall comply with surface water monitoring standards.
 - (w) Survey Control: survey control shall be provided by the owner and/or operator as indicated on the approved design and operational plan. Site survey control shall be provided to ensure the operation will be on permitted lands. Survey control will be accomplished through use of permanent, accessible benchmarks, survey control stakes, and/or boundary markers which designate and/or delineate all permitted areas. Where necessary for construction or operational purposes, vertical as well as horizontal survey control will be established and maintained to delineate fill boundaries, buffers, structural designs, and property boundaries.
 - (x) Buffers: Buffers are evaluated and approved based on the design criteria in effect at the time of the permit issuance. Any future expansion of a landfill unit will be evaluated in accordance with applicable design criteria at the time of landfill unit expansion submittal. Buffers reflected in an approved permit must be maintained as stated in the facility's approved Design and Operational Plan.
 - (y) Additional Stipulations: notwithstanding the above, additional stipulations for owning or operating a landfill may be imposed by the Director as deemed necessary to carry out the purposes of O.C.G.A. 12-8-20, et seq.
- (4) Other Disposal Operations.
 - (a) Industrial Waste Disposal Facilities: industrial waste disposal facilities permitted to receive only a single type industrial waste (monofill) or receive only a single industry's waste may be given a variance by the Director from installing liners and leachate collection systems, applying daily cover, installing ground water and surface water monitoring systems and monitoring for methane gas if the applicant can demonstrate to the satisfaction of the Director that the waste to be disposed of would not cause odors or be attractive to disease vectors or birds or generate

methane gas. Unless a variance is granted, the applicant must demonstrate compliance with all applicable provisions of this Rule. Disposal facilities accepting wastes from more than one industrial source, unless the facility is a monofill, must meet all standards applicable to municipal solid waste landfills in Chapter 391-3-4. CCR Units are exempt from the requirements of this Rule and must meet requirements in Rule 391-3-4-10.

- (b) Construction/Demolition Facilities: disposal facilities permitted to receive only construction and demolition wastes, unless such waste includes household waste, may be given a variance by the Director from installing liners and leachate collection systems and applying daily cover if the applicant can demonstrate to the satisfaction of the Director that the waste to be disposed of would not cause odors or be attractive to disease vectors or birds. Unless a variance is granted, the applicant must demonstrate compliance with all applicable provisions of this Rule. All other provisions of Chapter 391-3-4 applicable to municipal solid waste landfills must be met.
- (c) Inert Waste Landfill Facilities: disposal facilities are permitted to receive only waste that will not or is not likely to produce leachate of environmental concern. Only earth and earth-like products, concrete, cured asphalt, rock, bricks, yard trimmings, and land clearing debris such as stumps, limbs and leaves, are acceptable for disposal in an inert waste landfill. Inert waste landfill facilities must be designed by a professional engineer registered to practice in Georgia to comply with the following standards:
 1. Buffers: No portion of waste disposal area shall be located within one hundred (100) linear feet of any property line or enclosed structure.
 2. Survey Control: site survey control shall be provided to ensure the operation will be on permitted lands. Survey control will be accomplished through use of permanent, accessible benchmarks, survey control stakes, and/or boundary markers which designate and/or delineate all permitted areas. Survey control shall be as indicated on the design and operational plan. Where necessary for construction or operational purposes, vertical as well as horizontal survey control will be established and maintained to delineate fill boundaries, buffers, and property boundaries.
 3. Siting: waste shall not be located in wetlands or floodplains, and waste shall not be placed within five feet of the permanent water table. A demonstration must be included in the design and operational plan on how these requirements will be met.
 4. Explosive Gases Control: the plan must implement a routine methane monitoring program to ensure that the concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive

limit for methane for on-site enclosed structures and does not exceed the lower explosive limit for methane at the facility property boundary. The type of monitoring must be determined based on the following factors: soil conditions; the hydrogeologic conditions surrounding the facility; the hydraulic conditions surrounding the facility; and the location of facility structures and property boundaries. The minimum frequency of monitoring must be quarterly. If methane gas levels exceeding the limits specified in this section are detected, the owner or operator must: immediately take all necessary steps to ensure protection of human health and notify the Director; within seven days of detection, place in the operating record the methane gas levels detected and a description of the steps taken to protect human health; and within 60 days of detection, implement a remediation plan for the methane gas releases, place a copy of the plan in the operating record, and notify the Director that the plan has been implemented. The plan shall describe the nature and extent of the problem and the proposed remedy. If a facility can demonstrate that no organic component of the inert waste stream has been accepted or will be accepted in the future, a variance from the explosive gases control requirements may be requested for review with the application for inert waste landfill permit request.

5. Sequence of Filling: the plan must define a sequence of filling showing a detailed progression of filling the entire site that minimizes any problems with drainage and all weather access roads to the working face.
6. Spreading/Compaction/Monthly Cover: materials placed in inert waste landfills shall be spread in layers and compacted to the least practical volume; and, a uniform compacted layer of clean earth cover no less than one (1) foot in depth shall be placed over all exposed inert waste material at least monthly.
7. Erosion and Sedimentation Control: all surface runoff from disturbed areas must be controlled by use of appropriate erosion and sedimentation control measures or devices. Best management practices (BMPs) from the Manual for Erosion and Sediment Control in Georgia should be utilized.
8. Vegetation: the plan must call for the vegetation of any disturbed area that will remain exposed for more than three (3) months. Vegetation of final cover must take place within two (2) weeks after final cover placement.
9. Fire Protection: suitable means shall be provided to prevent and control fires. Stockpiled soil is considered to be the most satisfactory fire fighting material. A minimum of one month of cover material must be maintained within 200 feet of the working face for fire fighting purpose, unless other acceptable means have been provided and approved by the Director.

10. Limited Access: access to inert waste landfills shall be limited to authorized entrances which shall be closed when the site is not in operation.
11. Final Grading: the inert waste landfill site shall be graded and drained to minimize runoff onto the landfill surface, to prevent erosion and to drain water from the surface of the landfill. The grade of the final surface of the facility may not be less than 3 percent nor greater than 33 percent.
12. Final Cover: a uniform compacted layer of final cover not less than two (2) feet in depth and a vegetative cover shall be placed over the final lift not later than one month following final placement of inert waste within that lift.
13. Final Closure: notice of final closure must be provided to the Director within 30 days of receiving the final load of waste. Any site not receiving waste for in excess of 180 days shall be deemed abandoned and in violation of these Rules unless properly closed. Notice of closure must include the date of final waste receipt and an accurate legal description of the boundaries of the landfill.
14. Deed Notice: all deeds for real property which have been used for landfilling shall include notice of the landfill operations, the date the landfill operation commenced and terminated, an accurate legal description of the actual location of the landfill, and a description of the type of solid wastes which have been deposited in the landfill. Concurrent with the submission of notice of final closure to the Director, the owner or operator must submit to the Director confirmation that the information required in this section has been noticed on the property deed.
15. Reporting: all wastes received at the landfill must be measured and reported as required by Rule 391-3-4-.17.
16. Post-Closure Care: the design must provide for post-closure care for a minimum of thirty (30) years. If a demonstration can be made that the site is no longer producing methane, the post closure care period may be reduced, but in no circumstance shall it be reduced to less than 5 years.
17. Financial Responsibility: the design must provide for financial responsibility in accordance with Rule 391-3-4-.13.
18. Other Laws: compliance with all other applicable federal, state, and local laws, rules, and ordinances, including local zoning, land use ordinances,

and any applicable federal wetlands permits, must be demonstrated in the application for solid waste handling.

- (d) Construction and operation of a solid waste handling facility for which specific rules have not been developed is prohibited unless same are consistent with the policies and intent of O.C.G.A. 12-8-20, et. seq., and are permitted by the Director.
- (5) CCR Management Plan. Owners or operators of MSWLS and Commercial Industrial Landfills must incorporate a CCR management plan into the facility's Design and Operational Plan before the initial receipt of CCR. MSWLS and Commercial Industrial Landfills that accepted CCR before the effective date of the Rule and will continue to accept CCR after the effective date must incorporate a CCR management plan into the facility's Design and Operational Plan by minor modification 180 days from the effective date of the Rule. The owner or operator shall notify the local governing authorities of any city and county in which the landfill is located upon the submittal of the CCR Management Plan by EPD.

Rule 391-3-4-.08 Solid Waste Thermal Treatment Operations

- (1) Except as otherwise noted in (2) below, any person engaged in thermal treatment technology of solid waste, in addition to the requirements of O.C.G.A. 12-8-24(i) relating to Federal New Source Performance Standards, shall comply with the following requirements:
 - (a) Design Criteria: a design and operational plan prepared as a part of the permit application must be prepared by a professional engineer registered in Georgia and must include, but is not limited to, the following criteria:
 1. Capacity: the thermal treatment technology facility shall be adequate in size and capacity to manage the projected incoming solid waste and residue volumes.
 1. Storage Time: the facility shall provide for a minimum storage capacity of not less than three (3) times the daily capacity of the thermal treatment technology equipment. No waste shall be stored in excess of the permitted capacity.
 2. Types of Waste: the application must include the sources, types and weight or volumes of solid waste to be processed, including data on the moisture content of the waste, and information concerning special environmental pollution or handling problems that may be created by the solid waste.
 3. Residue Analysis: the facility shall be designed in such a manner as to provide for such devices to expedite the routine sampling of bottom and fly ash.

4. Air Quality: the facility shall be designed in such manner as to meet any air quality standards of the Division.
 5. Wastewater: the facility shall be designed so that any wastewater generated will be discharged to a wastewater system and, before final release, will be treated in a manner approved by the Division.
 6. Fire Protection: facility design shall provide for fire control equipment placed near the storage and charging area, and elsewhere as needed, and additional fire fighting equipment shall be made available for emergencies.
 7. Residue Acceptability: the facility shall provide for sufficient temperature and combustion times to produce a residue essentially free of odors and unstable organic matter.
- (b) Construction Certification: upon receipt of a final and effective solid waste handling permit, construction may commence in accordance with the approved design and operational plan and permit conditions. Prior to the receipt of solid waste, the Division must be provided with written certification, by a professional engineer licensed to practice in Georgia, that the facility has been constructed in accordance with the approved permit. Unless notified otherwise by the Division within 15 days of receipt by the Division of the written certification, the facility owner or operator may commence disposal of solid waste.
- (c) All persons owning or operating thermal treatment technology facilities shall comply with the following performance requirements:
1. Supervision: operation and management of thermal treatment technology facilities shall be under the direct supervision and control of an operator who is present at all times of operation and is qualified in thermal treatment technology management by training, education or experience and who, after July 1, 1992, is certified in accordance with O.C.G.A. 12-8-24.1 and these Rules.
 2. Residue: temperature and combustion time shall be sufficient to produce a satisfactory residue, essentially free of odors and unstable organic matter, and such residue shall be promptly deposited in a municipal solid waste landfill having a liner and leachate collection system and operated and maintained as provided herein, handled in such other manner as may be approved by the Division, or if shown by testing to be hazardous, handled in accordance with the provisions of the Georgia Hazardous Waste Management Act, O.C.G.A. 12-8-60, et seq.

3. Waste Water: waste water shall be discharged into a waste water treatment system and, before final release, shall be treated in a manner approved by the Division.
4. Information Posted: signs shall be posted at the entrance to the plant indicating the days and hours of operation. Access to the plant shall be limited to those times when authorized personnel are on duty.
5. Cleanliness and Sanitation: plants shall be maintained in a clean and sanitary condition. Solid waste shall be confined to the unloading area, which shall be maintained free of dust and nuisances. Accumulations of putrescible materials and rubbish shall be controlled in a manner so as to minimize odors and prevent infestation by insects or rodents, and insect and rodent control measures shall be applied as needed. Sanitary facilities shall be provide for employees and shall be kept clean and good repair.
6. Fire Control: fire control equipment shall be available near the storage area and charging area, and elsewhere as needed, and additional fire fighting equipment shall be made available for emergencies.
7. Sampling requirements: sampling of ash residues must be conducted at frequencies and in such a manner as prescribed below:
 - (i) Prior to the initial disposal of ash or residue from a facility.
 - (ii) At a minimum, monthly for the first six (6) months of operations at the facility, and annually during the remaining life of the facility.
 - (iii) A sampling and analysis plan shall be submitted to, and approved by, the Director.
 - (iv) Fly ash and bottom ash shall be sampled and analyzed separately.
8. Prohibited Waste: no lead acid batteries, radioactive waste, or regulated quantities of hazardous waste may be accepted. The operator must have a plan for excluding these wastes.
9. Record Keeping: accurate written, daily records by actual weight or by the methods approved in accordance with O.C.G.A. 12-8-31.1(g) shall be kept of all waste received at the thermal treatment facility. Copies of such records shall be maintained for a period of at least three (3) years and shall be made available to the Division upon request.
10. Additional Stipulations: notwithstanding the above, additional stipulations for owning or operating a thermal treatment facility may be imposed by the

Director as deemed necessary to carry out the purposes of O.C.G.A. 12-8-20, et seq.

- (2) Any person engaged in the operation of an Air Curtain Destructor (ACD) shall comply with the following requirements: for purposes of these Rules, an "Air Curtain Destructor" means a forced air pit thermal treatment technology for the burning of wood wastes.
- (a) Design Criteria: a design and operational plan prepared as a part of the permit application must be prepared by a professional engineer registered in Georgia and must include, but is not limited to, the following criteria:
1. Location: the ACD must be at least 500 feet from any occupied dwelling. The distance may increased or decreased on a site-specific basis at the discretion of the Division.
 2. Storage: areas for storing wastes prior to treatment must be clearly defined and maximum capacity specified.
 3. Types of Wastes: only wood wastes consisting of trees, logs, brush, stumps relatively free of soil, and natural wood products free of wood preserving chemicals, paints, and other contaminants may be burned. Fallen leaves, sawdust, other densely packed wood wastes, and paper (any type) may not be burned.
 4. Air Quality: the facility shall be designed in such a manner as to meet applicable air quality standards of the Division. No smoke emissions exceeding 20 percent opacity may be produced during operation except for a specified ignition period.
 5. Disposal of Ash and Residue: ash and residue shall be removed from the facility, handled as a recovered material or and disposed in a permitted facility.
 6. Fire Protection: facility design shall provide for fire control equipment placed near the storage and ACD area. Additional fire fighting equipment shall be made available for emergencies.
- (b) Construction Certification: upon receipt of a final and effective solid waste handling permit, construction may commence in accordance with the approved design and operational plan and permit conditions. Prior to the receipt of solid waste, the Division must be provided with written certification, by a professional engineer licensed to practice in Georgia, that the facility has been constructed in accordance with the approved permit. Unless notified otherwise by the Division within 15 days of receipt by the Division of the written certification, the facility owner or operator may commence disposal of solid waste.

- (c) All persons owning or operating an air curtain destructor shall comply with the following performance requirements:
1. Supervision: operation and management of air curtain destructors shall be under the direct supervision and control of an operator who is present at all times of operation and is qualified in air curtain distracter management by training, education or experience and who, after July 1, 1992, is certified in accordance with O.C.G.A. 12-8-24.1 and these Rules.
 2. Residue: temperature and combustion time shall be sufficient to produce a satisfactory residue, and such residue shall be promptly deposited in a landfill operated and maintained as provided herein or handled in such other manner as may be allowed by these Rules. Ashes may not be allowed to build up on the combustion pit to higher than one-third the pit depth to the point where combustion is impeded, whichever comes first.
 3. Access: facility access shall be restricted to prohibit unauthorized storage or disposal of wastes and to prevent injury during ACD operation.
 4. Inspection and Maintenance: the ACD and all operating appurtenances must be routinely inspected and adequately maintained to ensure proper working order. Storage areas must be inspected and maintained to exclude unauthorized wastes and minimize any fire hazard.
- (d) No ACD may burn any household waste or yard trimmings.

Rule 391-3-4-.09 Shredding, Baling, Materials Recovery Facilities and Other Processing Operations

- (1) Any person engaged in shredding, baling, or the recovery of materials from solid waste, shall comply with the following requirements:
- (a) Design Standards: a design and operational plan prepared by a professional engineer registered to practice in Georgia and proposed as a part of the permit application must include, but is not limited to, the following standards:
 1. Capacity. The facility shall be adequate in size and capacity to manage the projected incoming solid waste and residue volumes.
 2. Baling Equipment. The equipment must be capable of producing a relatively uniform bale size and shape which can be easily handled by equipment at the baling facility. The bales must have sufficient stability to withstand transportation to the disposal site and handling necessary to position them for final disposal.

3. **Storage Time.** The facility shall provide for a minimum storage capacity of not less than three (3) times the daily capacity of the shredding, baling, or materials recovery equipment. No waste shall be stored in excess of the permitted capacity.
 4. **Types of Waste.** The application must include the sources, types, and weight of solid waste to be processed, and information concerning special environmental pollution or handling problems that may be created by the solid waste.
 5. **Air Quality.** The facility shall be designed in such a manner as to meet any air quality standards of the Division.
 6. **Wastewater.** Any wastewater generated by the facility shall be contained fully on the facility and discharged or delivered to a wastewater treatment system and, before final release, shall be treated in a manner approved by the Division.
 7. **Fire Protection.** Facility design shall provide for fire control equipment placed near the storage area and elsewhere as needed, and additional fire fighting equipment shall be made available for emergencies.
 8. **Disposal of Waste.** Shredded and baled waste, and any material not sold or used, reused, or recycled as recovered material must be disposed in a permitted facility.
- (b) **Construction Certification:** upon receipt of a final and effective solid waste handling permit, construction may commence in accordance with the approved design and operational plan and permit conditions. Prior to receipt of solid waste, the Division must be provided with written certification, by a professional engineer licensed to practice in Georgia, that the facility has been constructed in accordance with the approved permit. Unless notified otherwise by the Division within 15 days of receipt by the Division of the written certification, the facility owner or operator may commence processing of solid waste.
- (c) **Performance Standards.** All persons owning or operating shredding, baling, or materials recovery facilities shall comply with the following requirements:
1. **Supervision.** Operation and management of the facility shall be under the supervision and control of a responsible individual properly trained in the operation of such facilities at all times during operation.

2. Shredding Plant Residue: The shredded material shall be deposited in a municipal solid waste landfill or handled in such a manner as may be approved by the Division.
3. Bales. The baling operation shall be controlled to produce a uniform bale size and shape which can be easily handled by equipment at the baling facility and at the disposal facility. The bales must have sufficient stability to withstand transportation to the disposal facility and handling necessary to position them for final disposal. Baled solid waste shall be deposited in a municipal solid waste landfill or handled in such other manner as may be approved by the Division.
4. Wastewater. Wastewater shall be contained fully on the facility and discharged or delivered to a wastewater treatment system and, before final release, shall be treated in a manner approved by the Division.
5. Air Quality. Atmospheric emissions shall be controlled so as not to exceed air quality standards of the Division.
6. Information Posted. Signs shall be posted at the entrance to the plant indicating the days and hours of operation. Access to the plant shall be limited to those times when authorized personnel are on duty.
7. Cleanliness and Sanitation. Facilities shall be maintained in a clean and sanitary condition. Solid waste shall be confined to the unloading area, which shall be maintained free of liquids, dust and nuisances. Accumulations of liquids, putrescible materials and rubbish shall be controlled in a manner so as to minimize odors and prevent infestation by insects or rodents, and insect and rodent control measures shall be applied as needed. Sanitary facilities shall be provided for employees and shall be kept clean and in good repair.

- (2) Construction and operation of solid waste processing facilities for which specific rule have not been developed are prohibited unless same are consistent with the policies and intent of O.C.G.A. 12-8-20, et seq., and are permitted by the Director.

Rule 391-3-4-.10 Coal Combustion Residuals

- (1) Applicability.

- (a) This Rule applies to the following:

1. Owners and operators of new and existing landfills and surface impoundments, including any lateral expansions of such units that dispose or otherwise engage in solid waste management of CCR generated from the

combustion of coal at electric utilities and independent power producers. Unless otherwise provided in this Rule, these requirements also apply to disposal units located off-site of the electric utility or independent power producer.

2. All CCR units.
3. Any practice that does not meet the definition of a beneficial use of CCR.

(b) This Rule does not apply to the following:

1. Wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals.
2. Fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels (including other fossil fuels) other than coal, for the purpose of generating electricity unless the fuel burned consists of more than fifty percent (50%) coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.
3. CCR placement at active or abandoned underground or surface coal mines.
4. Municipal Solid Waste Landfills and Commercial Industrial Landfills that receive CCR.

(c) Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments 40 CFR 257.60 through 257.107, (80 Fed. Reg. 21468 (April 17, 2015); as amended at 80 Fed. Reg. 37988 (July 2, 2015) and 81 Fed. Reg. 51807 (August 5, 2016) are hereby incorporated.

(d) Any reference to 40 C.F.R. Parts in any provisions adopted by reference shall be construed to refer to the provisions contained in the following sections of these Rules:

<u>Federal</u>	<u>Georgia</u>
<u>Regulation</u>	<u>Rule</u>
<u>Reference</u>	<u>Reference</u>

40 C.F.R. <u>391-3-4-</u>	
Part 257.53	<u>.10</u> (2)

40 C.F.R. <u>391-3-4-</u>	
Parts	<u>.10</u> (3)

257.60 -
257.64
40 C.F.R. 391-3-4-
Parts .10 (4)
257.70 -
257.74
40 C.F.R. 391-3-4-
Parts .10 (5)
257.80 -
257.84
40 C.F.R. 391-3-4-
Parts .10 (6)
257.90 -
257.98
40 C.F.R. 391-3-4-
Parts .10 (7)
257.100 -
257.104
40 C.F.R. 391-3-4-
Parts .10 (8)
257.105 -
107

(2) Definitions.

- (a) Definitions in 40 CFR 257.53 are incorporated by reference into this section and are applicable to CCR units with the following additions and revision:
1. "Dewatered Surface Impoundment" means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 and does not contain liquids on or after October 19, 2015.
 2. "NPDES -CCR Surface Impoundment" means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 which still contains both CCR and liquids and is located at an electric utility or independent power producer that has ceased producing electricity prior to October 19, 2015.
 3. "Inactive CCR Landfill" means a CCR landfill that no longer receives CCR and other wastes on or after October 19, 2015.
 4. The following text shall be substituted for the fourth condition in the definition of Beneficial use of CCR "(4) For unencapsulated use of CCR,

the user must demonstrate to the Division and provide documentation to the Division that environmental releases to groundwater, surface water, soil, and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil, and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use."

(3) Location Restrictions.

- (a) New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must meet the location restrictions in 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, and 40 CFR 257.63.
- (b) Existing or new CCR landfills, existing or new CCR surface impoundments, or lateral expansions of a CCR unit must meet the location restrictions in 40 CFR 257.64.
- (c) For new and lateral expansions of CCR units, the hydrogeological evaluation for a specific site must be performed by a qualified groundwater scientist.
- (d) For new and lateral expansions of CCR units, when the geological and hydrogeological data so indicate, the Division may specify greater separation distances to protect groundwater.
- (e) Buffers: New CCR units and lateral expansions of CCR units must provide a 200-foot undisturbed buffer between the waste disposal boundary and the boundary of the permitted facility and a minimum 500-foot buffer between the waste disposal boundary and any occupied dwelling and the dwelling's operational private, domestic water supply well in existence on the date of the permit application. The 500-foot buffer may be reduced if the current owner of the dwelling provides a written waiver consenting to the waste disposal boundary being closer than 500 feet. No disposal or storage practices for waste shall take place in the buffer zones.

(4) Design Criteria.

- (a) New CCR landfills and lateral expansions of CCR landfills shall be designed in accordance with 40 CFR 257.70.
- (b) Existing CCR surface impoundments shall comply with liner design criteria in 40 CFR 257.71 and the structural integrity criteria in 40 CFR 247.73.
- (c) New CCR surface impoundments and lateral expansions of CCR surface impoundments shall be designed and comply with requirements in 40 CFR 257.72 and 40 CFR 257.74.

(5) Operating Criteria.

- (a) CCR landfills shall be operated in accordance with the criteria in 40 CFR 257.80, 40 CFR 257.81, and 40 CFR 257.84.
- (b) CCR surface impoundments shall be operated in accordance with the criteria in 40 CFR 257.80, 40 CFR 257.82, and 40 CFR 257.83.
- (c) The operation and use of the CCR unit shall be as stipulated in the solid waste handling permit.

(6) Groundwater Monitoring and Corrective Action.

- (a) CCR units are subject to the groundwater monitoring and corrective action requirements in 40 CFR 257.90, 40 CFR 257.91, 40 CFR 257.93, 40 CFR 257.94, 40 CFR 257.95, 40 CFR 257.96, 40 CFR 257.97, and 40 CFR 257.98.
- (b) When referenced in this Rule, Appendix III and Appendix IV constituents shall refer to those constituents as listed in Appendix III and IV of 40 CFR Part 257, Subpart D, 80 FR 21468, (Apr. 17, 2015), which are hereby incorporated by reference.
- (c) The owner or operator of a CCR unit must submit a semi-annual report to the Division to coincide with the semi-annual sampling event. A qualified groundwater scientist must certify the report.
- (d) The Division must provide concurrence with the following actions in order for them to be complete:
 - 1. Groundwater monitoring system design
 - 2. Groundwater sampling and analysis plan
 - 3. Groundwater monitoring well installation
 - 4. Alternate source demonstration
 - 5. Selection of remedy
 - 6. Completion of remedy
- (e) The Director may require the analysis of additional parameters based on waste descriptions.
- (f) An owner or operator of a CCR unit shall continue to monitor for Appendix I or II constituents if these constituents have previously been detected at statistically significant levels above background concentrations.

- (g) Monitoring wells require replacement after two dry sampling events, unless an alternate schedule has been approved by the Division. A minor modification shall be submitted in accordance with subparagraph (4)(b)7 of Rule 391-3-4-.02 prior to the installation or decommissioning of monitoring wells. Well installation must be directed by a qualified groundwater scientist.

(7) Closure and Post-Closure Care.

- (a) Inactive surface impoundments are subject to the requirements in 40 CFR 257.100.
 - 1. The following additional requirements apply to inactive surface impoundments:
 - (i) Permitting requirements in Rule 391-3-4-.10(9)
 - (ii) Groundwater monitoring and corrective action requirements in Rule 391-3-4-.10(6)
 - 1. CCR surface impoundments that complete closure through removal of CCR are subject only to the requirements in subparagraph (9)(c)6(v)(I) of Rule 391-3-4-.10.
- (b) Closure or retrofit of existing, new, and lateral expansions of CCR units shall be conducted in accordance with 40 CFR 257.101, 40 CFR 257.102, and 40 CFR 257.103.
- (c) The owner or operator must close the CCR unit in accordance with the written closure plan.
- (d) A notice of intent to close must be provided to the Director after receipt of the final load of waste.
- (e) Upon completion of closure activities, a professional engineer registered in Georgia shall prepare and submit a closure report to the Director. The closure report must be completed on forms provided by the Division. If the Director concurs with the closure report, closure will be deemed complete and the facility may begin the post-closure care period.
- (f) Concurrent with the submission of this closure report to the Director, the owner or operator must submit confirmation to the Director that a notation on the property deed has been recorded. This recording must in perpetuity notify any potential purchaser of the property that the land has been used as a CCR unit and that its use is restricted under the post closure care requirements of this Rule.

(g) Post-Closure care for existing, new, and lateral expansions of CCR units shall be conducted in accordance with 40 CFR 257.104 with the following exception and additions:

1. An owner or operator of an inactive surface impoundment that elects to close a CCR unit pursuant to the requirements under 40 CFR 257.100(b) is subject to the post-closure care criteria in 40 CFR 257.104.
2. CCR units must comply with the conditions of the solid waste handling permit.
3. The release of CCR units from post-closure care must be approved by the Division.

(8) Recordkeeping, Notification, and Posting of Information to the Internet.

(a) The requirements of 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107 are incorporated by reference with the following addition:

1. Electronic mail sent to a designated EPD recipient is an authorized form of notification when approved by EPD.

(9) Permits.

(a) CCR Permit Applications: After the effective date of this Rule, owners and operators of all CCR units are required to submit to the director a permit application that meets the requirements of this Rule. Separate permits are required for each CCR unit.

1. Owners and operators of new CCR units are required to submit to the director a complete permit application prior to the initial receipt of CCR.
2. Owners and operators of all CCR units shall submit a complete permit application no later than two years from the effective date of the Rule.

(b) All CCR unit permit applications must include the following:

1. A completed form designated by EPD.
2. Written verification that the site conforms to all local zoning or land use ordinances.
3. Property boundary survey and legal description.
4. Financial assurance mechanism meeting the criteria in Rule 391-3-4-.13.

5. A qualified professional engineer's certification that all application requirements have been met.

(c) Additional permit application requirements for CCR Units by Facility Type:

1. New CCR landfills or lateral expansion of CCR landfills

- (i) Technical data and report to comply with location restrictions in 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, 40 CFR 257.63, and 40 CFR 257.64.
- (ii) Siting report that meets the criteria specified in "Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia", Circular 14, Appendix A. The report shall be prepared by a qualified groundwater scientist.
- (iii) Plan and profile sheets of the disposal area. The plan and profile sheets shall include topographical maps at contour intervals of not more than five feet for the existing ground surface elevations, initial disposal area elevations, final disposal area elevations, and buffers.
- (iv) Design of a liner and leachate collection system as required by 40 CFR 257.70.
- (v) Quality assurance/quality control (QA/QC) plan for the construction of the liner system, leachate collection system, and the final cover system.
- (vi) An operation plan that includes at a minimum:
 - (I) A fugitive dust plan in compliance with 40 CFR 257.80.
 - (II) A run-on and run-off control plan in compliance with 40 CFR 257.81.
 - (III) Inspection requirements in compliance with 40 CFR 257.84.
 - (IV) Identification of any uniquely associated wastes as listed in 40 CFR 261.4(b)(4), the estimated quantities generated by the facility, and a description of how these wastes will be managed.

- (V) Procedures for compliance with recordkeeping, notification, and posting of information to the internet as required by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.
 - (VI) Procedures for updating all plans and assessments periodically as required by 40 CFR Part 257.
 - (vii) A groundwater monitoring plan in accordance with Rule 391-3-4-.10(6).
 - (viii) A closure and post-closure plan in accordance with Rule 391-3-4.10(7).
 - (ix) Any additional information that may be required by the Division.
2. New Surface Impoundments or lateral expansions of surface impoundments
- (i) Technical data and report to comply with location restrictions in 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, 40 CFR 257.63, and 40 CFR 257.64.
 - (ii) Siting report that meets the criteria specified in "Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia", Circular 14, Appendix A. The report shall be prepared by a qualified groundwater scientist.
 - (iii) Technical report for the hazardous potential classifications as outlined in 40 CFR 257.74 and the emergency action plan if required by 40 CFR 257.74.
 - (iv) For a new CCR surface impoundment that has a height of five feet or more and a storage volume of 20 acre-feet or more, or a surface impoundment with a height of 20 feet or more, the application shall include the following:
 - (I) Design and construction plan requirements in 40 CFR 257.74.
 - (II) Structural stability assessment as required by 40 CFR 257.74.
 - (III) Safety factor assessment as required by 40 CFR 257.74.

- (v) Design of a liner system as required by 40 CFR 257.72.
- (vi) Quality assurance/quality control (QA/QC) plan for the construction of the liner system, leachate collection system, and the final cover system.
- (vii) An operation plan that includes at a minimum:
 - (I) A fugitive dust plan in compliance with 40 CFR 257.80.
 - (II) An inflow design flood control system in compliance with 40 CFR 257.82.
 - (III) Inspection requirements in compliance with 40 CFR 257.83.
 - (IV) Identification of any uniquely associated wastes as listed in 40 CFR 261.4(b)(4), the estimated quantities generated by the facility, and a description of how these wastes will be managed.
 - (V) Procedures for compliance with recordkeeping, notification, and posting of information to the internet as required by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.
 - (VI) Procedures for updating all plans and assessments periodically as required by 40 CFR Part 257.
- (viii) A groundwater monitoring plan in accordance with Rule 391-3-4-.10(6).
- (ix) A closure and post-closure plan in accordance with Rule 391-3-4-.10(7).
- (x) Any additional information that may be required by the Division.

3. Existing CCR landfills

- (i) Location restriction demonstration requirements in 40 CFR 257.64.
- (ii) Description of how the CCR landfill's operating criteria requirements in 40 CFR 257.80, 40 CFR 257.81, and 40 CFR 257.84 are met.

- (iii) Groundwater monitoring plan in accordance with 391-3-4-.10 (6). Explanation of how groundwater monitoring and corrective action criteria requirements in 40 CFR 257.90, 40 CFR 257.91, 40 CFR 257.93, 40 CFR 257.94, 40 CFR 257.95, 40 CFR 257.96, 40 CFR 257.97, and 40 CFR 257.98 are met.
 - (iv) Explanation of how closure and post-closure care requirements in 40 CFR 257.101, 40 CFR 257.102, 40 CFR 257.103, and 40 CFR 257.104 will be met.
 - (v) Website address for information required to be posted by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.
4. Inactive CCR landfills must meet requirements subparagraphs (9)(c)3.(i)-(iv) of this Rule for an existing CCR landfill.
5. Existing Surface Impoundments
- (i) Location restriction demonstrations required by 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, 40 CFR 257.63, and 40 CFR 257.64.
 - (ii) Description of the CCR surface impoundment's design criteria required by 40 CFR 257.71 and 40 CFR 257.73.
 - (iii) Description of how the CCR surface impoundment's operating criteria required by 40 CFR 257.80, 40 CFR 257.82, and 40 CFR 257.83 are met.
 - (iv) Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6). Explanation of how groundwater monitoring and corrective action criteria required by 40 CFR 257.90, 40 CFR 257.91, 40 CFR 257.93, 40 CFR 257.94, 40 CFR 257.95, 40 CFR 257.96, 40 CFR 257.97, and 40 CFR 257.98 are met.
 - (v) Explanation of how closure and post-closure care requirements found in 40 CFR 257.101, 40 CFR.257.102, 40 CFR 257.103, and 40 CFR 257.104 will be met.
 - (vi) Website address for information required to be posted by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.
6. Inactive Surface Impoundments. An owner or operator of an inactive surface impoundment shall complete closure of the CCR unit as specified

in 40 CFR 257.100 no later than April 17, 2018 or submit a permit application for an existing CCR surface impoundment, including:

- (i) Technical data and report showing compliance with 40 CFR 257.100.
- (ii) Technical report of geological and hydrogeological units within the disposal site.
- (iii) Potentiometric surface map of the water table.
- (iv) Siting report which includes identification of wetlands, floodplains, and seismic impact zones.
- (v) Written closure plan that includes at a minimum:
 - (I) Narrative describing how the CCR unit will be closed including the elimination of free liquids and stabilization of remaining waste or by closure through removal of CCR.
 - (II) Identification of any pipes, utilities, or other penetrations through or beneath the impoundment. The inspection frequency and method of evaluation should be provided.
 - (III) Final cover analysis.
- (vi) Stability analysis that, at a minimum, includes the following:
 - (I) On-site or local soil conditions that may result in significant differential settling.
 - (II) On-site or local geologic or geomorphologic features.
 - (III) On-site or local human-made features or events, both surface and subsurface.
- (vii) Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6).
- (viii) Closure through removal of CCR is subject only to (v)(I) above and is not subject to the financial assurance requirements of Rule 391-3-4-.13.

7. NPDES - CCR Surface Impoundments