

PROPOSED AMENDMENTS TO THE RULES
OF GEORGIA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION RELATING TO
SOLID WASTE MANAGEMENT, CHAPTER 391-3-4

The Rules of the Department of Natural Resources, Chapter 391-3-4, Rules for Solid Waste Management, are hereby amended and revised for specific Rules, or such subdivisions thereof as may be indicated.

[Note: Underlined text is proposed to be added. Lined-through text is proposed for deletion.]

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) "Bulking Agent" means the non-reactive, solid material that is used to reduce the moisture content of waste via a physical process such that the waste no longer meets the definition of Liquid Waste as defined in these rules.

(910) "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~~11) "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~~12) "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~~13) "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~~14) "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~~15) "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~~16) "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~~17) "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~~18) "Composting" means the controlled biological decomposition of organic matter into a stable, odor free humus.

~~(1819)~~ "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 non-putrescible wastes which have a low potential for groundwater contamination.

~~(1920)~~ "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.

~~(2021)~~ "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.

~~(2122)~~ "Detected" means statistically significant evidence of contamination has been determined to exist by using methods specified in Rule 391-3-4-.14.

~~(2223)~~ "Director" means the Director of Environmental Protection Division of the Department of Natural Resources.

~~(2324)~~ "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.

~~(2425)~~ "Division" means the Environmental Protection Division of the Department of Natural Resources.

~~(2526)~~ "Generator" means any person in Georgia or in any other state who creates solid waste.

~~(2627)~~ "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.

~~(2728)~~ "Groundwater" means water below the land surface in a zone of saturation.

~~(2829)~~ "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.

(30) "High Moisture Content Waste" means sludge, non-hazardous solidified liquids and bulking agents and/or solidification/stabilization agents with moisture content greater than 40%. The moisture content of non-hazardous household waste is excluded from this definition.

~~(2931)~~ "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).

~~(3032)~~ "Host Local Government" means the host county or other local governmental jurisdiction within whose boundaries a municipal solid waste disposal facility is located.

~~(3133)~~ "Industrial Furnace" means a device as defined in Chapter 391-3-11, the Rules for Hazardous Waste Management.

~~(3234)~~ "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.

~~(3335)~~ "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.

~~(3436)~~ "Lateral expansion" means a horizontal expansion of the waste boundaries of an existing MSWLF unit or landfill unit.

~~(3537)~~ "Leachate" means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such wastes.

~~(3638)~~ "Landfill Unit" means an area of land of which 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.

~~(3739)~~ "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.

~~(3840)~~ "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.

~~(3941)~~ "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).

(4042) "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.

(4143) "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.

(44) "Mulch" means a product produced by grinding, shredding or chipping of yard trimmings, land-clearing debris, untreated and unpainted wood, or any combination thereof, that has not undergone controlled aerobic decomposition to produce a stabilized organic product.

(45) "Mulching" means the grinding, shredding or chipping of yard trimmings, land-clearing debris, untreated and unpainted wood, or any combination thereof, that has not undergone controlled aerobic decomposition to produce a stabilized organic product.

(4246) "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.

(4347) "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.

(4448) "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.

(4549) "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.

(4650) "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.

(4751) "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.

(4852) "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.

(4953) "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.

(5054) "Operator" means the person(s) responsible for the overall operation of a facility or part of a facility.

(5155) "Owner" means the person(s) who owns a facility or part of a facility.

(5256) "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.

(5357) "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.

(5458) "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.

(5559) "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).

(5660) "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.

(5761) "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.

(5862) "Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

(5963) "Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

(6064) "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.

(6165) "Recovered Materials Processing Facility" means a facility engaged solely in the storage, processing, recycling, and resale or reuse of recovered materials. Such ~~term~~ facility shall not ~~include~~ be considered 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.

(6266) "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, intermediates, or products which can be used as a substitute for products not derived by such processes.

(6367) "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.

(6468) "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.

(6569) "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.

(6670) "Saturated Zone" means that part of the earth's crust in which all voids are filled with water.

(6771) "Scavenge" means the unpermitted removal of solids waste from a solid waste handling facility.

(6872) "Shredding" means the process by which solid waste is cut or torn into smaller pieces for final disposal or further processing.

(6973) "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.

(7074) "Site" means the entire property a permitted solid waste handling facility is located within and includes all activities within that property.

(7175) "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.

(7276) "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; post-use plastics and nonrecycled feedstock that are subsequently processed using a pyrolysis or gasification to fuels and chemicals process; 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).

(7377) "Solid Waste Handling" means the storage, collection, transportation, treatment, utilization, processing, or disposal of solid waste, or any combination of such activities; but does not include recovered materials processing or pyrolysis or gasification to fuels and chemicals processes, or the holding of post-use plastics or nonrecycled feedstock at a pyrolysis facility or gasification to fuels and chemicals facility prior to processing at the facility where those materials are being held to ensure production is not interrupted.

(7478) "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; but does not include recovered materials processing facilities or pyrolysis or gasification to fuels and chemicals facilities.

(7579) "Solid Waste Handling Permit" means written authorization granted to a person by the Director to engage in solid waste handling.

(7680) "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.

(7781) "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.

(82) "Solidification" means the process of:

(a) mixing non-hazardous liquid wastes with bulking agents in order to produce a bulked waste with a low moisture content, or

(b) adding a solidification/stabilization (S/S) agent to bind the liquid waste into a solid form.

(83) "Solidification/stabilization (S/S) agents" means binders and/or supplemental additives that chemically react with the liquid waste, resulting in a solid material with structural integrity where the liquid waste is bound and cannot be separated from the solid material.

(7884) "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.

(7985) "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.

(8086) "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.

(8187) "Vertical Expansion" means the expansion of landfill beyond the approved maximum final elevations and within the approved waste management boundaries of the existing permit.

(8288) "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.

(8389) "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.

(8490) "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.

Authority: O.C.G.A. §. 12-8-20 et seq., as amended.

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 (43)(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.

Authority: O.C.G.A. §. 12-8-20 et seq., as amended.

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.

Authority: O.C.G.A. §. 12-8-20 et seq., as amended.

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.

(d) 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. Stockpiles of unprocessed yard trimmings, land-clearing debris, untreated and unpainted wood, or any combination thereof and mulch are considered recovered materials if the requirements for facilities with mulching operations as set forth in 391-3-4-.04(7)(g) are met.

(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 rolling 12 month period ~~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).

(g) Mulching is considered a recovered material operation at facilities demonstrating compliance with the following criteria:

1. A stockpile must have no greater than the following maximum dimensions:

(I) Area: 25,000 square feet

(II) Height: 25 feet

2. Unprocessed yard trimmings, land-clearing debris, untreated and unpainted wood or any combination thereof, must be processed no later than 90 days after receipt, unless otherwise stated in the Solid Waste Handling Permit.

3. Mulch 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 rolling 12 month period seventy-five percent (75%) by weight or volume of the products stored at a facility are recycled, sold, used, or reused. Any material that is accumulated speculatively and not in accordance with these requirements must be handled as solid waste.

4. The facility shall have on site a fire plan detailing steps to prevent, contain and extinguish a fire. The fire plan shall include documentation that the local fire authority or a Georgia State Certified Fire Inspector conducted a fire safety survey.

5. Activities involving open flames and other flammable materials (oil, gas, fuel) shall not be allowed within 25 feet of a stockpile, with the exception of maintenance activities involving torches and welding equipment, as long as a fireproof barrier is used.

6. The facility must provide a buffer between unprocessed yard trimmings, land-clearing debris, untreated and unpainted wood, mulch, and any combination thereof and the property line. The buffer shall be set by the local fire authority or a Georgia State Certified Fire Inspector and documented in the fire plan. If the local fire authority or a Georgia State Certified Fire Inspector does not establish a buffer, the minimum buffer shall be 50 feet. The buffer may include the fire lane.

7. The facility shall utilize best management practices from the most recent edition of the Georgia Stormwater Management Manual to minimize the exposure of material storage areas to rain, snow, snowmelt, and runoff.

8. The facility shall have erosion and sediment control measures adequate to prevent the escape of sediment from the facility property into Waters of the State. Construction and operating areas must utilize best management practices from the most recent edition of the Manual for Erosion and Sedimentation Control in Georgia.

h. Existing facilities producing mulch that have stockpiles of unprocessed yard trimmings, land clearing debris, untreated and unpainted wood, mulch, or any combination thereof on the effective date of this rule shall comply with the above sections (g) 1.- 8. within 6 months of the effective date of the rule.

(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. 37991 (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.

Authority O.C.G.A. § 12-8-20 et seq., as amended.

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 a long 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.

(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- unless the MSWLF was permitted and operational on July 1, 1997.

(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.

Authority: O.C.G.A §.12-8-20 et seq., as amended.

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.

Authority O.C.G.A. § 12-8-20 et seq., as amended.

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
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)~~ 391-3-4-.07(1)(e), Erosion and Sedimentation Control, 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)(ac)3, 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.

(6) High Moisture Content Waste Management Plan. Owners or operators of MSWLs and Commercial Industrial Landfills must incorporate a High Moisture Content Waste (HMCW) management plan into the facility's Design and Operational Plan by major modification before the initial receipt of HMCW if planning to accept greater than 5% HMCW by weight. MSWLs and Commercial Industrial Landfills that accepted High Moisture Content Waste before the effective date of the Rule and will continue to accept HMCW greater than 5% by weight after the effective date must incorporate a HMCW management plan into the facility's Design and Operational Plan by minor modification as part of the facility's permit review required by 391-3-4-.02.

Authority: O.C.G.A. § Section 12-8-20 et seq.,

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 rules 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.

Authority: Ga. L. 1972, p. 1002, as amended; O.C.G.A. Secs. 12-8-20, et seq., 12-8-23.

Rule 391-3-4-.12 Post-Closure Care

(1) 40 CFR Part 258, Subpart F, Section 258.61, as amended, 56 Fed. Reg. 51016 (October 9, 1991); 57 Fed. Reg. 28628 (June 26, 1992) is hereby incorporated by reference:

(2) The owner and/or operator of all landfills must conduct post-closure care for at least thirty (30) years after the Director has authorized the Post-Closure Permit. The Director may extend the post-closure care period where necessary to adequately protect human health and the environment.

(3) The owner and/or operator shall be responsible for conducting all monitoring and corrective actions as needed to protect human health and the environment, including, but not limited to:

(a) Methane monitoring, reporting and development of remediation plans in accordance with the requirements specified in paragraphs (h) and (v) of Rule 391-3-4-.07(3), and the approved plans developed for the facility.

(b) Groundwater monitoring, reporting and development of corrective action plans in accordance with paragraph (v) of Rule 391-3-4-.07(3), 391-3-4-.14 and the approved plans developed for the facility.

(4) Post-closure use of property must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the monitoring systems, unless the Division determines that the activities are necessary to meet the requirements of this Chapter.

(5) If the owner and/or operator or any subsequent owner or operator of the land upon which a landfill is located wishes to remove wastes and waste residues, the liner, if any, or contaminated soils, the owner or operator must request and receive written approval from the Division.

(6) A copy of the post-closure care plan required under paragraph (1) of this Rule must be submitted as part of the permit application, or in the case of existing sites, within 180 days of being directed to do so by the Director.

(7) Owners and operators of CCR units are exempt from this Rule and must meet the post-closure requirements in Rule 391-3-4-.10.

(8) Reduction of Post-Closure Care. Unless the facility is in active remediation, the ~~The~~ Director may reduce the post-closure care period at certain sites when the following is demonstrated:

(a) No releases of contaminants above the groundwater protection standard or surface water instream standards are occurring, or ~~(including where a statistically significant increase above background but statistically below the groundwater protection standard exists), unless the facility is in active remediation;~~

(b) Methane from the site is not migrating above the Lower Explosive Limit at the property boundary, ~~unless the facility is in active remediation;~~ and

(c) The landfill is stable and will not pose a threat to human health or the environment and is currently in the closure or post-closure period.

(d) The post-closure care period at MSWLs must, at a minimum, be 30 years.

~~(ae)~~ The Director may reduce the post-closure care period at Industrial Waste Disposal Facilities and Construction/Demolition Facilities where 391-3-4-.12(8)(a), (b), and (c) can be demonstrated to the satisfaction of the Director.

~~(bf)~~ The Director may reduce the post-closure care period at sites permitted as Inert Waste Landfill Facilities where 391-3-4-.12(8)(b) and (c) can be demonstrated to the satisfaction of the Director.

(g) The post-closure care period in (e) and (f) must, at a minimum, be 10 years.

(9) Denial of reduction in Post-Closure Care. If an application for a reduction in post-closure care is denied by the Director, the applicant may request a subsequent review.

Authority O.C.G.A. § 12-8-20 et seq., as amended.

Rule 391-3-4.16 Composting, ~~Mulching~~ and Anaerobic Digestion Facilities

(1) Composting is a desirable means of reducing the amount of solid waste destined for disposal. All composting facilities not exempted in 391-3-4-.16(3) shall either be regulated under Permit-by-Rule in 391-3-4-.16(5)(b) or shall obtain a Solid Waste Handling Permit in accordance with either 391-3-4-.16(5)(c), 391-3-4-.16(5)(d), 391-3-4-.16(5)(e), or 391-3-4-.16(5)(f) depending on the technology employed and feedstocks processed.

(a) Composting facilities in existence on the effective date of this Rule may continue to operate until March 31, 2015 under their existing permit, or Permit-by-Rule, before demonstrating compliance under conditions (i) - (vii) of this section. Existing facilities requesting major modifications after the effective date of this Rule must fully comply with this Rule. Facilities that cannot demonstrate compliance with conditions (i) - (vii) of this section by March 31, 2015 shall

initiate closure.

- (i) Existing Permit-by-Rule composting facilities that meet the criteria of 391-3-4-.16(5)(b) 1. must comply with the operating standards of Class 2 Composting Facilities, but are exempted from the design standards of Class 2 Composting Facilities.
 - (ii) Existing permitted composting facilities that classify as Class 3 Composting Facilities in 391-3-4-.16(5)(c) 1. and 2. must comply with the operating standards of Class 3 facilities, but are exempted from the design standards of Class 3 facilities.
 - (iii) Existing permitted composting facilities that classify as Class 4 Composting Facilities in 391-3-4-.16(5)(d) 1. and 2. must comply with the operating standards of Class 3 and Class 4 facilities, but are exempted from the design standards of Class 3 and Class 4 facilities.
 - (iv) Existing permitted composting facilities that classify as Class 5 Composting Facilities in 391-3-4-.16(5)(e) 1. must comply with the operating standards of Class 3, Class 4, and Class 5 facilities, but are exempted from the design standards of Class 3, Class 4, and Class 5 facilities.
 - (v) Existing permitted composting facilities that classify as Class 6 In-vessel Composting and Anaerobic Digestion Facilities in 391-3-4-.16(5)(f) 1. must comply with the operating standards of Class 6 facilities, but are exempted from the design standards of Class 6 facilities.
 - (vi) All existing composting and anaerobic digestion facilities are exempt from the siting criteria of 391-3-4-.16(6), unless applying for a major modification as in 391-3-4-.16(7)(a) 1. or 2.
 - (vii) All existing composting and anaerobic digestion facilities, other than those operating as Permit-by-Rule facilities, must comply with the testing requirements of 391-3-4-.16(8).
- (2) Definitions. For the purposes of this Rule:
- (a) "Aerated Static Pile Composting" means a process in which decomposing organic material is placed in piles over an air distribution system to supply oxygen for the purpose of producing compost.
 - (b) "Agricultural Residuals" means the residuals from customary and generally accepted activities, practices, and procedures that farmers adopt, use, or engage in during the production and preparation for market of poultry, livestock, and associated farm products; and in the production and harvesting of agricultural crops, which include agronomic, horticultural, and silvicultural crops, and residuals resulting from aquacultural activities. It also includes residuals from harvesting and production of row crops and manures. The term does not include dead animals, wastewater or special wastes, such as waste oils or other lubricants, unused fertilizers, pesticides, or pesticide containers.
 - (c) "Anaerobic Digester" means an enclosed vessel that processes organic material under anaerobic conditions to produce biogas and digestate.

- (d) "Anaerobic Digestion" means the controlled decomposition of organic material under anaerobic conditions in an anaerobic digester to produce biogas and digestate.
- (e) "Backyard Composting" means composting of yard trimmings and food residuals, managed so as not to attract vectors, at residential, commercial, or industrial property by the owner or tenant for use on site. All feedstocks must be generated and composted on site.
- (f) "Biogas" means gas generated by anaerobic digestion.
- (g) "Compost" means a stabilized organic product produced by a controlled aerobic decomposition process that can be used as a soil additive, fertilizer, growth media or other beneficial use.
- (h) "Composting Facility" means buildings, grounds and equipment dedicated to the manufacture of compost.
- (i) "Contact Water" means a liquid that has passed through or emerged from raw feedstocks and materials that are being processed; liquid that has come into contact with equipment that is dedicated to the composting or anaerobic digestion process; and which contains extracted, dissolved or suspended materials. Contact water also includes condensate from gases resulting from the composting and the anaerobic digestion processes.
- (j) "Curing" means, for the purposes of composting and anaerobic digestion, a continuation of the composting process after the high heat stage during which stability and maturity continue to increase. For the purposes of these regulations, compost enters the curing stage after completing the process to further reduce pathogens.
- (k) "Digestate" means the residual solids or liquids remaining after organic material has been processed in an anaerobic digester.
- (l) "Feedstock" means any organic material used in the production of ~~mud~~ or compost or processed in an anaerobic digester. Feedstocks shall not include additives or amendments that are not part of the composting process.
- (m) "Food Processing Residuals" means organic material generated as a by-product of the food-processing sector that is non-hazardous and contains no domestic wastewater. For the purposes of these regulations, the term applies to use as a feedstock in the composting or anaerobic digestion process and does not include dissolved air flotation (DAF) skimmings or fats, oil, and greases.
- (n) "Food Residuals" means pre- and post-consumer food used as a feedstock in a composting or anaerobic digestion facility.
- (o) "Industrial By-product" means organic materials generated by manufacturing or industrial processes that are non-hazardous, contain no domestic wastewater, and pass the paint filter test.

(p) "In-vessel Composting" means the aerobic decomposition of organic material in an enclosed container for the purpose of producing compost.

(q) "Maturity" means a measure of the degree of completion of the composting process.

~~(r) "Mulching" means the grinding, shredding or chipping of woody materials consisting of stumps, trees, limbs, branches, bark, leaves and other clean wood that has not undergone controlled aerobic decomposition to produce a stabilized organic product.~~

(s) "Source-separated Organics" means organic material including, but not limited to, food residuals, food processing residuals, and compostable paper that has been separated from non-compostable material.

(t) "Stability" means the inverse measure of the potential for a material to rapidly decompose that is measured by indicators of microbial activity, such as carbon dioxide production, oxygen uptake, or self-heating.

(3) Exemptions.

(a) The following ~~mulching and~~ composting operations are exempt from a Solid Waste Handling Permit:

1. Backyard composting.

2. A facility composting ~~or mulching~~ only Category A feedstock.

3. A facility processing less than 40 tons per year of food residuals generated on site and composted in leak-proof containers that prohibit vector attraction and prevent nuisance odor generation.

~~4.5:~~ 4. Composting of food residuals and yard trimmings generated on site at a K-12 institution for educational purposes.

~~6.5:~~ 5. Composting of biosolids at a treatment works regulated by a National Pollutant Discharge Elimination System (NPDES) permit, Land Application System (LAS) permit, or other permit from EPD, and in which case that permit has been modified in accordance with the Georgia Rules for Water Quality Control 391-3-6-.17(3)(c) 1. to incorporate any necessary requirements for regulating the composting operation.

~~7.6:~~ 6. Composting of dead animals, provided such composting is in accordance with the requirements of the Georgia Dead Animal Disposal Act (O.C.G.A. § 4-5) and Georgia Department of Agriculture Rules (Chapter 40-13-5).

~~8.7:~~ 7. Anaerobic digestion facilities that are permitted in accordance with the Georgia Rules for Water Quality Control. These include facilities located at a wastewater treatment plant and on-farm anaerobic digesters or lagoons.

9. 8. Manures managed in accordance with the Georgia Rules for Water Quality Control.

(4) Feedstock Categories.

(a) The categories described below are not intended to be all-inclusive. Case-by-case determinations by the Division may be necessary concerning selection of the appropriate category for a particular feedstock, including industrial by-products not elsewhere classified. Accordingly, the Division may require that analytical and/or process information be supplied by the owner or operator to assist in making such determinations. At a minimum, the Division will require applicants to provide an analysis of metals and proof of compostability of the potential feedstock, including C:N ratio and soluble salts.

1. Feedstock Category A: Yard trimmings, land-clearing debris, agricultural residuals generated and processed on site, untreated and unpainted wood, or any combination thereof.

2. Feedstock Category B: Agricultural residuals generated off site, herbivorous animal manure generated at a zoo, and/or source-separated organics.

3. Feedstock Category C: Sewage sludge and biosolids not managed as part of a treatment works under an NPDES or LAS permit.

4. Feedstock Category D: Dissolved air flotation (DAF) skimmings or sludge generated from food processing and dewatered septage.

(b) Prohibited feedstocks include:

1. Asbestos-containing wastes.

2. Biomedical wastes.

3. Painted and treated wood.

4. Any other prohibited wastes included in 391-3-4-.04(6).

(5) Design and Operating Standards for Composting Facilities by Class.

(a) Class 1 Composting ~~and Mulching~~ Facilities

~~1. Facilities composting, grinding, chipping, and/or mulching only Category A feedstock do not require a Solid Waste Handling Permit. A permitted solid waste handling facility shall submit a minor modification prior to adding a Class 1 composting operation on site.~~

2. A permitted solid waste handling facility shall submit a minor modification prior to adding a Class 1 composting operation on site.

(b) Class 2 Composting Facilities

1. Facilities composting Category A and B feedstocks that meet both of the following criteria may operate under a Permit-by-Rule for Composting Facilities:

- (i) Facilities receiving less than 500 tons of Category B feedstock per calendar month.
- (ii) For Class 2 facilities, Category B feedstocks shall be restricted to exclude the receipt of non-vegetative food processing residuals and manures.

2. The design standards for Class 2 facilities include:

- (i) The composting area shall be constructed to maintain its structural integrity under operating conditions and be capable of supporting vehicular traffic.
- (ii) The composting facility shall be adequate in size and capacity to manage the projected volume of compost and residue generated. The areas for storing feedstocks prior to processing shall be clearly defined and the maximum capacity specified.
- (iii) For windrow operations, the maximum composting process windrow size and minimum composting process windrow spacing shall match the capability and requirements of the equipment used at the facility.

3. The operating standards for Class 2 facilities include:

- (i) The composting facility shall have a sign at its entrance that lists the name of the facility, hours of operation, feedstocks accepted, and emergency contact information.
- (ii) The composting facility shall have storm water control measures.
- (iii) The composting facility shall prevent flow of contact water from the active composting area into surface water and curing or finished compost areas.
- (iv) Suitable measures to control vectors shall be applied.
- (v) Suitable measures to control odors shall be applied.
- (vi) Suitable measures to prevent, control, and extinguish fires shall be applied.
- (vii) By the end of each operating day, all incoming Category B feedstock must be processed into the active composting area, transferred to leak-proof containment, or mixed with bulking material and covered in a manner that minimizes nuisance odors and scavenging by vectors.
- (viii) No material shall be stored in excess of the designated capacity.
- (ix) Storage of finished compost on site is limited to 12 months, unless approved by the Division

on a case-by-case basis.

(x) Non-compostable material and solid waste generated on site shall be stored in a waste container and then either recycled or disposed of at a permitted solid waste facility.

(xi) Facilities accepting Category B feedstocks from off site shall track incoming feedstocks and finished compost. Records documenting compliance of the composting facility with these Rules shall be kept for a minimum of three years in a form suitable for submission to or inspection by the Division. Records shall include the weight or volume (in tons or cubic yards) of the feedstocks accepted, total compost produced, and any amount sold or used. Records shall be retained at the composting facility unless an off- site storage location is approved by the Division.

(xii) Operation and management shall be under the supervision and control of an individual properly trained in the operation of such facilities at all times. Facility operations managers must be able to document training in the basics of composting facility operations.

(xiii) Notice of final closure shall be provided to the Director within 60 days from final receipt of feedstock. Any site not receiving feedstock in excess of 180 days, unless properly closed or otherwise approved by the Division, shall be deemed closed and in violation of these Rules. Notice of closure shall include documentation that all feedstocks and active, curing, and final compost materials have been removed from the facility and that the site has been stabilized in accordance with the Manual for Erosion and Sediment Control in Georgia.

(c) Class 3 Composting Facilities

1. Any composting facility that is neither exempt under 391-3-4-.16(3), nor meets the conditions for Class 2 Composting Facilities in 391-3-4-.16(5)(b), shall obtain a permit in accordance with following requirements:

2. Class 3 composting facilities may compost Category A and B feedstocks.

3. The design standards for Class 3 facilities include:

(i) The composting facility shall be designed by a professional engineer licensed to practice in Georgia.

(ii) An all-weather compost pad shall be designed, constructed, and maintained to (1) prevent ponding and impede downward migration of potential contaminants from contact water; (2) reliably transmit any free liquid present during the storage, treatment, and processing of materials laterally to a containment structure to prevent liquids from entering surface water or groundwater; (3) support vehicular traffic; and (4) prevent conditions that could contribute to or cause contamination.

(iii) Surfaces on which composting takes place shall be graded with a slope between 2% and 6% to prevent ponding of water.

- (iv) The site shall be graded to prevent the flow of water from the active composting area into curing or finished compost areas.
 - (v) Prior to receiving feedstocks, the Division shall 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 of the written certification, the facility owner or operator may commence composting operations.
 - (vi) The owner or operator shall fully satisfy all applicable financial responsibility requirements, as provided by Chapter 391-3-4-.13. The financial assurance mechanism shall be updated at least annually for inflation and for any modifications required and approved by the Division.
 - (vii) An as-built survey of the facility, prepared by a Georgia-registered professional surveyor, shall be submitted with the engineering certification.
 - (viii) Contact water collection and removal systems shall be designed for incorporating the liquid back into the compost piles or for removal and treatment in a manner approved by the Division. Contact water may be used in the composting operation for moisture addition only in active compost piles that have not completed the process to further reduce pathogens.
 - (ix) The maximum composting process windrow size and minimum composting process windrow spacing shall match the capability and requirements of the equipment used at the facility.
 - (x) The composting facility shall submit a site-specific odor minimization plan that includes, at a minimum, the following:
 - (I) A complaint response protocol.
 - (II) A description of operating procedures for minimizing odor.
 - (IV) A description of the processes and technologies used to control odors.
 - (IV) A description of procedures to monitor odor, including sampling frequencies and method(s) used to measure odors.
 - (xi) The composting facility shall submit a contingency plan detailing corrective or remedial actions to be taken in the event of equipment breakdown; odors; unacceptable waste delivered to the facility; spills; and other undesirable conditions such as fire, dust, noise, vectors, unusual traffic conditions, and litter. The plan shall also include the proposed emergency provisions for equipment breakdown or power failure.
4. The operating standards for Class 3 include:

- (i) Operation and management shall be under the supervision and control of an individual properly trained in the operation of such facilities at all times. Facility operations managers must be able to document training in the basics of composting facility operations.
- (ii) The facility shall install and maintain storm water management controls.
- (iii) Suitable measures to control vectors shall be applied.
- (iv) Suitable measures to prevent, control, and extinguish fires shall be applied.
- (v) By the end of each operating day, all incoming Category B feedstock shall be processed into the active composting area, transferred to leak-proof containment, or mixed with bulking material and covered in a manner that minimizes nuisance odors and scavenging by vectors. Prior to being incorporated into the active composting area, feedstocks with free liquid shall be mixed with drier feedstocks, bulking material, or compost so that the liquid is promptly absorbed and not allowed to flow from the mixing area.
- (vi) Compost processing time and temperatures shall be sufficient to kill weed seeds, reduce pathogens and vector attraction, and produce compost that meets the stability necessary for the intended use. Pathogen and vector attraction reduction compliance shall be achieved as follows:
 - (I) Windrow composting: The compost material shall be maintained at a minimum average temperature of 55°C or higher for 15 days or longer. During the period when the compost is maintained at 55°C or higher, there shall be a minimum of five turnings of the windrow. The 15 or more days at or above 55°C do not have to be continuous.
 - (II) Aerated static pile or in-vessel composting: The compost material shall be maintained at a minimum average temperature of 55°C or higher for three consecutive days, followed by at least 14 days at over 40°C with an average temperature of over 45°C.
- (vii) Facilities using aerated static piles shall insulate piles to ensure that all parts of the decomposing material reach and maintain temperatures at or above 55°C for a minimum of three days.
- (viii) The all-weather compost pad must be maintained to its specified slope and resist deformation that would cause ponding or increase infiltration of contact water.
- (ix) Storage of finished compost on site is limited to 12 months, unless approved by the Division on a case-by-case basis.
- (x) Non-compostable material and solid waste generated on site shall be stored in a waste container and then either recycled or disposed of at a permitted solid waste facility.
- (xi) Records shall be maintained to track incoming feedstocks and finished compost. By September 1 of each year, operators shall submit a report to the Division that includes the weight or volume (in tons or cubic yards) of the feedstocks accepted, total compost produced, and any amount sold or used in the previous fiscal year (July 1 - June 30).

(xii) Records documenting compliance of the composting facility with these Rules shall be kept for a minimum of three years in a form suitable for submission to or inspection by the Division. Records shall be retained at the composting facility unless an off-site storage location is approved by the Division.

(xiii) A facility odor minimization plan shall be maintained and updated as stipulated in the following:

(I) The odor impact minimization plan shall be revised and submitted to the Division for any major modification as described in 391-3-4-.16(7).

(II) The odor impact minimization plan shall be reviewed annually by the operator to determine if any revisions are necessary.

(III) The odor impact minimization plan and results of the odor monitoring shall be used by the Division to determine whether the facility is following the procedures approved in its permit and its design and operational plan.

(xiv) The composting facility shall have a sign at its entrance that lists the name of the facility, permit number, days and hours of operation, feedstocks accepted, and emergency contact information.

(xv) The composting facility shall be closed in accordance with Rule 391-3-4-.11.

(d) Class 4 Composting Facilities

1. Any composting facility that is neither exempt under 391-3-4-.16(2), nor meets the conditions for Permit-by-Rule for Composting Facilities in 391-3-4-.16(4)(b), shall obtain a permit in accordance with following requirements:

2. Class 4 composting facilities may compost Category A, B, and C feedstocks.

3. Class 4 composting facilities shall comply with the design and operating standards for Class 3 composting facilities and the additional design and operating standards listed below:

(i) The design standards for Class 4 include:

(I) The compost pad for the receiving, mixing, and active composting areas shall prohibit ponding and limit infiltration of contact water by being uniformly graded at a minimum slope of 2%. The compost pad shall contain a layer to limit infiltration. This layer shall either be one foot in thickness with a hydraulic conductivity not exceeding 1×10^{-5} cm/sec or an approved alternative which meets or exceeds this specification for the purpose of limiting infiltration. The layer to limit infiltration shall be constructed on a prepared and compacted subsurface, and overlain by a wearing surface that will resist deformation, prevent ponding, and prevent the infiltration of contact water. A minimum separation of five feet is required between the bottom

of the infiltration layer and the seasonal high water table. Industrial waste proposed for the use in the construction of the compost pad shall be approved by the Division.

(II) Contact water shall be contained in a tank with secondary containment or in an impoundment with a liner system consisting of a one-foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. The liner shall be overlain by a protective marker layer of sand or stone no less than one foot in thickness. An alternate liner system with the equivalent ability to limit infiltration may be approved by the Division.

(ii) The operating standards for Class 4 include:

(I) The composting pad shall be maintained and repaired as needed. Cracks or other defects identified in the wearing surface shall be promptly repaired under the supervision of the facility manager. Any repairs or reconstruction of the layer limiting infiltration shall be completed under the supervision of a professional engineer, who shall prepare a report and certification of the repairs. A copy of the report(s) shall be maintained in the facility's operating records. Compost materials shall not be placed in areas with damage to the infiltration layer, and berms or other diversions shall be installed to prevent run-on of contact water into these areas.

(II) Facilities that compost biosolids or sewage sludge shall comply with all applicable federal regulations regarding sludge management at 40 CFR 501; 40 CFR 503; and 40 CFR 503, Subpart B.

(III) Groundwater monitoring systems shall be designed and installed in accordance with 391-3-4-.14. Additionally:

(A) Monitoring parameters shall be established based on the hydrogeologic data related to the site, the type of feedstocks accepted at the facility, and waste characterization analyses performed on incoming feedstocks.

(B) Monitoring shall be conducted semi-annually, at a minimum.

(IV) By the end of each operating day, all incoming Category B and C feedstocks shall be processed into the active composting pile, transferred to leak-proof containment, or mixed with bulking material and covered in a manner that minimizes nuisance odors and scavenging by vectors.

(e) Class 5 Composting Facilities

1. Class 5 composting facilities may compost Category A, B, C, and D feedstocks.

2. Class 5 composting facilities shall comply with the design and operating standards for Class 3 and 4 composting facilities and the additional design and operating standards listed below:

(i) The design standards for Class 5 include: Reserved.

(ii) The operating standards for Class 5 include:

(I) The feedstock receiving and mixing areas shall be in an enclosed structure. The receiving area of the composting operation shall be constructed of asphalt, concrete, or a composite liner system. Receiving entrances shall be closed and under negative pressure during receipt and processing of Category D feedstocks.

(II) By the end of each operating day, all incoming Category B, C, and D feedstocks shall be processed into the active composting pile, transferred to leak-proof containment, or mixed with bulking material to minimize nuisance odors and scavenging by vectors.

(f) Class 6 In-vessel Composting and Anaerobic Digestion Facilities

1. Class 6 facilities employ in-vessel composting or anaerobic digestion. These facilities may process Category A, B, C, and D feedstocks.

2. The design standards for Class 6 facilities include:

(i) A description of the basic site design.

(ii) A description of the type of technology to be used, including a copy of the drawings and specifications of the composting or digestion equipment and a process flow diagram that includes the types of the major material handling equipment and material flow.

(iii) A description of the unit's requirements for power, water, and wastewater removal.

(iv) A description of the type and quantities of feedstock to be processed.

(v) A description of the storage capacity for feedstocks, products and digestate, if applicable.

(vi) Anticipated annual operational capacity in cubic yards or gallons per day.

(vii) A description of the proposed methods used to control spills, run-off, litter, odors, dust, rodents, and insects, including the storage of feedstocks, compost and digestate, leak-prevention and spill release measures, and the methods to monitor effectiveness for control measures.

(viii) The facility shall have a site-specific odor minimization plan that includes, at a minimum, the following:

(I) A complaint response protocol.

(II) A description of operating procedures for minimizing odor.

(III) A description of the processes and technologies used to control odors.

(ix) A contingency plan detailing corrective or remedial actions to be taken in the event of

equipment breakdown; odors; unacceptable waste delivered to the facility; spills; and other undesirable conditions such as fire, dust, noise, vectors, unusual traffic conditions, and litter. The plan shall also include the proposed emergency provisions for equipment breakdown or power failure.

3. The operating standards for Class 6 facilities include:

(i) Operation and management shall be under the supervision and control of an individual properly trained in the operation of such facilities at all times. Facility operations managers must be able to document training in the basics of composting and/or anaerobic digestion operations through a course approved by the Division.

(ii) The facility shall have a sign at its entrance that lists the name of the facility, permit number, days and hours of operation, feedstocks accepted, and emergency contact information.

(iii) The facility shall install and maintain storm water management controls.

(iv) Suitable measures to control vectors shall be applied.

(v) Suitable measures to prevent, control, and extinguish fires shall be applied.

(vi) The operator shall take measures to prevent spillage and promptly respond to any leaks or spills that occur.

(vii) By the end of each operating day, all incoming Category B, C, and D feedstocks shall be processed, transferred to leak-proof containment, or mixed with bulking material and covered in a manner that minimizes odors and scavenging by vectors. For facilities with an anaerobic digester, the feedstocks can be stored in leak-proof containers with lids that prevent vector or odor problems for a period of time to allow for proper organic loading of the digester. This time period shall not exceed four days.

(viii) Digestate not contained in an in-vessel digester, sealed container, or sealed structure, shall, within 24 hours, be removed from the site and either disposed or processed at a permitted solid waste facility or incorporated into a permitted, on-site compost operation. Digestate may be stored in a sealed container or sealed structure for up to nine months. By-products from the separation of digestate shall be stored separately and in sealed containers.

(ix) Non-compostable waste shall be stored in a waste container and then recycled or disposed of at a permitted solid waste facility.

(x) For in-vessel composting operations, the operator shall ensure that the composting process reduces pathogens. The compost material shall be maintained at a minimum average temperature of 55°C or higher for three consecutive days, followed by at least 14 days at over 40°C with an average temperature of over 45°C.

(xi) Facilities employing anaerobic digestion must minimize the uncontrolled release of biogas.

(xii) Notice of final closure shall be provided to the Director within 60 days from final receipt of feedstock. Any site not receiving feedstock in excess of 180 days, unless properly closed or otherwise approved by the Division, shall be deemed closed and in violation of these Rules. Notice of closure shall include documentation that all feedstocks, compost materials and digestate have been removed from the facility and that the site has been stabilized in accordance with the Manual for Erosion and Sediment Control in Georgia.

(6) Criteria for Siting Composting Facilities.

(a) Class 2 composting facilities shall comply with the following criteria:

1. The facility shall not be located in the 100-year floodplain.
2. A 50-foot undisturbed buffer shall be maintained between the composting operation and the property line.
3. A 200-foot buffer shall be maintained between the composting operation and any adjacent residences and/or drinking water supply wells.
4. A 50-foot buffer shall be maintained between the composting operation and all streams.
5. A description of surrounding land uses up to a ½-mile radius shall be provided.
6. Airport safety restrictions, as required by Rule 391-3-4-.05(1)(c) for MSWLF units, shall be met.

(b) Classes 3-6 composting facilities and anaerobic digestion facilities shall comply with the following criteria:

1. The facility shall submit a letter from the local government authority stating that the proposed facility complies with local zoning and land use ordinances.
2. The facility shall submit written verification by the applicant that the facility is consistent with the local or regional solid waste management plan, as required in Rule 391-3-4-.02(4)(c) 5.
3. The facility shall not be located in the 100-year floodplain.
4. The facility shall submit a map of the topographic setting depicting features, including all upstream and downstream drainage areas affecting or affected by the proposed site, floodplain, gullies, karst conditions, wetlands, unstable soils, and percent slope.
5. A 100-foot undisturbed buffer shall be maintained between the composting operation and the property line.
6. A 500-foot buffer shall be maintained between the composting operation and any adjacent

residences and/or any drinking water supply wells.

7. A 50-foot buffer shall be maintained between the composting operation and all streams.

8. A description of surrounding land uses up to a ½-mile radius shall be provided.

9. Airport safety restrictions as required by Rule 391-3-4-.05(1)(c) for MSWLF units, shall be met.

10. The facility shall submit a site assessment report, prepared by a professional geologist or geotechnical engineer registered in Georgia, addressing the above-listed criteria.

(c) In addition to meeting the Class 3 siting requirements, Class 4 and 5 composting facilities shall comply with the following siting criteria:

1. Submission of a hydrogeological assessment, as specified in 391-3-4-.05(1)(j) may be required.

2. Submission of an odor assessment that includes, at a minimum:

(i) The proximity of existing odor receptors;

(ii) An evaluation of the site and operation characteristics to determine the potential for impacts on the neighboring community from the off-site migration of odors from the proposed facility; and

(iii) A description of the design considerations or practices to be implemented to control the potential impacts of off-site odors generated from the facility.

(7) Permit Modifications for Class 3-6 Facilities.

(a) All modifications of existing facilities shall be classified as follows:

1. Major modifications include those changes which substantially alter the design of the facility, management practices, the types or categories of feedstocks processed, or the technologies employed, and due to the nature of the changes, would likely impact the facility's ability to adequately protect human health and the environment. Major modifications, therefore, require closer review and public input than minor modifications.

2. Major modifications shall include, but are not limited to, the following:

(i) A modification which adds a new solid waste handling process. This shall include, but not be limited to, the addition of a materials recovery facility, a composting operation co-located at an anaerobic digestion facility, baling operation, shredding operation, or liquid solidification operation.

(ii) A modification which involves a change to a site suitability requirement, which could have

originally impacted the siting of the facility.

3. 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 do not prevent the facility from responding in a timely manner. These changes include common variations in the type and quantities of feedstocks 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.

(i) Minor modifications shall include, but are not limited to, the following:

(I) Changing the name of the facility.

(II) A modification which involves the relocation of access roads.

(III) A modification which adds scales.

(IV) A modification which involves the addition or removal of on-site structures.

(V) A modification which involves the addition of or a change to a groundwater or surface water monitoring system.

(VI) A modification which involves the addition or removal of a Permit-by-Rule facility.

(VII) A modification which involves the removal of any solid waste handling facility.

(VIII) A modification which involves the addition of or a change to a closure or post-closure plan.

(IX) A modification which involves the addition of or a change to a method of contact water handling and/or treatment.

(X) A modification which involves the addition of a corrective action plan.

(XI) A modification which involves a change in ownership, or in the case of a corporation of over five percent of the stock in a corporation holding a permit, but does not involve the transfer of the permit.

4. All major modifications shall be subject to the following requirements:

(i) Submission of a completed application for a permit modification.

(ii) Submission of supporting documents accompanying the application for a permit modification that describe the exact change(s) to be made to the permit conditions and supporting documents referenced by the permit that explain why the change is needed.

(iii) Submission of a revised design for the requested change(s).

(iv) Submission of written verification by the applicant, as required by Rule 391-3-4-.05(1)(a), that the facility, as proposed to be modified, conforms to all local zoning/land use ordinances, if any.

(v) Submission of written verification by the applicant that the facility, as proposed to be modified, is consistent with 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 plan.

(vi) Submission of written verification by the applicant that a public hearing was held by the governing authority of the county or municipality in which the facility requesting the modification is located, not less than two weeks prior to granting approval of the modification. Submission of a typed transcript of the hearing. 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 30 days prior to such hearing.

(8) Testing.

(a) Class 3-6 composting facilities and anaerobic digestion facilities that compost on site shall meet the following test standards and requirements:

1. Samples and measurements taken for the purpose of product testing shall be representative of the composting activity and shall be conducted in accordance with methods and procedures approved by the Director.

2. The minimum number of samples that shall be collected and analyzed is shown in the table below. Samples to be analyzed shall be composted prior to the analysis.

Compost Quantity¹ (tons/yr)	Frequency
1 - 6,200	Once per quarter
6,201 - 17,500	Once every two months
Greater than 17,500	Once per month

¹Either the amount of finished compost applied to the land, prepared for sale or given away on an "as is" (wet weight) basis.

If test results show the finished product is stable and in compliance with both metals and pathogens standards for a two-year period, the facility may request a reduction in the frequency of testing, provided there are no changes in feedstocks composted at the facility. Class 3 facilities may test for pathogens and trace metals at half the frequency, but overall testing for all other characteristics must be as defined in the table above.

3. All compost shall be tested for stability in accordance with methods and procedures approved by the Director.

(i) The stability results shall be documented in the facility's operating records.

4. All compost shall be tested for the presence of pathogens in accordance with methods and procedures approved by the Director.

(i) Either the density of fecal coliform in the finished compost shall be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the finished compost shall be less than three MPN per four grams of total solids (dry weight basis) before the compost may be sold, given away, or applied to the land.

5. All compost shall be analyzed for metals in accordance with methods and procedures approved by the Director.

(i) The following pollutant concentrations shall not be exceeded:

Pollutant Monthly average concentration (milligrams per kilogram) ¹

Arsenic	41
Cadmium	39
Copper	1,500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2,800

1 On a dry weight basis.

(b) For Class 6 facilities that operate an anaerobic digester, the facility shall, at a minimum, monitor or test the following:

1. Chemical Oxygen Demand shall be tested daily if the feedstocks change on a daily basis or weekly if the feedstocks are consistent or if the digester is at steady state, with steady state being defined as the treatment level or the gas production is constant for at least three Hydraulic Retention Times (HRT).

2. Alkalinity shall be measured daily if the feedstocks change on a daily basis or weekly if the feedstocks are consistent or if the digester is at steady state, with steady state being defined as the treatment level or the gas production is constant for at least three Hydraulic Retention Times (HRT).

3. Gas production shall be monitored.

(c) Digestate that has not been analyzed for metal concentration, pathogen concentration, and

any other contaminants as stipulated by the Division, or is known to contain any metal in amounts that exceed the maximum metal concentrations in 391-3-4-.16(8)(a)(5)(i), shall be designated for disposal or additional processing.

(d) The Division may approve alternative methods of compliance to meet the requirements of this section including, but not limited to, sampling frequencies.

Authority: O.C.G.A. Secs. 12-8-20 et seq.,

Rule 391-3-4-.19 Scrap and Used Tire Management

(1) Applicability.

(a) Scrap tire handling shall be regulated from the point of generation through the point of final disposition. The provisions of this Rule, except where exemptions apply, shall apply to all persons presently engaged in, or proposing to be engaged in, the retail sale of new replacement tires, handling of scrap tires, and/or the collection, inventory and marketing of used tires.

(b) All persons subject to regulation under this Rule shall, in addition to the requirements of 391-3-4-.19, handle scrap tires in accordance with the provisions of O.C.G.A. 12-8-20, et seq., and the Rules for Solid Waste Management, Chapter 391-3-4, applicable to solid waste.

(2) Definitions. For the purposes of this Rule:

(a) "Beneficial reuse" means the use of scrap tires for purposes other than its original intended use and that have been approved by the Division prior to reuse.

(b) "Enclosure" means structure with four sides and roof or an area surrounded by a wall or fence with the purpose of controlling or limiting access.

(c) "End user" means the last person who uses the scrap tires, chips, crumb rubber, or similar materials to make a product with economic value, or, in the case of energy recovery, the person who uses the heat content or other form of energy from the incineration, combustion or pyrolysis of waste tires, chips or similar materials.

(d) "Financial Assurance" means a mechanism designed to demonstrate that funds will be available to ensure compliance with statutory, regulatory and permit requirements of tire carriers and processors. The financial mechanism must be either a surety bond or an irrevocable letter of credit.

(e) "Manufacturer" means a person who produces new tires from raw materials for the original intended use on, but not limited to, automobiles, trucks, motorcycles, trailers, recreational vehicles, construction equipment, earth-moving equipment and aircraft.

(f) "Mixed Tires" means a group of tires that may consist of "used tires," "retreadable casings," and "scrap tires."

- (g) "Organized Site Cleanup Activity" means scrap tire abatement activities conducted by a government entity, non-profit, or other organization.
- (h) "Point of Final Disposition" means a location approved by the Division to receive scrap tires including, but not limited to, scrap tire processors, scrap tire sorters and end users.
- (i) "Residuals" means by-products resulting from the processing of scrap tires including, but not limited to, fibers, metals, inner tubes and rims.
- (j) "Retreadable Casing" means a scrap tire suitable for retreading. This includes casings that have value as a potential retreaded tire. This does not include casings with tread separation, unrepaired cuts, corroded belts, sidewall damage, run-flat or skidded.
- (k) "Retail Dealer" means a person actively engaged in the business of selling new replacement tires. Retail dealers may also be, but are not limited to, manufacturers, wholesalers, and others who sell new replacement tires to the ultimate consumer.
- (l) "Scrap Tire" means a tire that is no longer suitable for its original intended purpose because of wear, damage, or defect.
- (m) "Scrap Tire Generator" means any person who generates scrap tires including, but not limited to, tire retailers; retail dealers; retreaders; scrap tire processors; scrap tire sorters; automobile dealers; private company vehicle maintenance shops; used tire dealers; garages, and service stations; and city, county, and state governments.
- (n) "Scrap Tire Processing" means any method, system, or other treatment designed to change the physical form, size, or chemical content of scrap tires for beneficial use.
- (o) "Scrap Tire Processor" means any person approved through a permit issued by the Division to receive and process scrap tires, but shall not include a registered secondary metals recycler operating a scrap metal shredder for the purpose of shredding metallic scrap, including scrap automobiles containing five or fewer scrap tires per automobile into specification grades of scrap metal.
- (p) "Scrap Tire Sorter" means any person, other than a registered scrap tire generator or a scrap tire processor, who handles mixed tires by separating used tires and retreadable casings from scrap tires and is approved through a permit by the Division.
- (q) "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.
- (r) "Tire Carrier" means any person engaged in collecting or transporting tires, other than new tires. For the purpose of this Rule, tire carrier does not include a transporter of scrap or crushed vehicles.

(s) "Tire Manifest" means a form or document used to identify the quantity, composition, origin, routing and destination of scrap tires during transportation from the point of generation to a point of final disposition and to track used tires from the point of generation to another location.

(t) "Tire Retailer" means any person, other than a used motor vehicle parts dealer licensed in accordance with Chapter 47 of Title 43, engaged in the business of selling new replacement tires or used tires.

(u) "Tire Retreader" means any person actively engaged in the business of retreading scrap tires by scarifying the surface to remove the old surface tread and attaching a new tread to make a usable tire.

(v) "Ultimate Consumer" means the last person who receives and uses a new replacement tire.

(w) "Used Tire" means a tire which has a minimum of 2/32inch of road tread and which is still suitable for its original purpose but is no longer new. A tire retailer shall inventory and market used tires in substantially the same fashion as a new tire and be able to provide satisfactory evidence to the division that a market for the tire exists and that the tire is in fact being marketed as a used tire. A used tire shall not be considered solid waste.

(x) "Used Tire Dealer" means a tire retailer selling used tires as defined in this Rule.

(3) Retail Dealers.

(a) Beginning July 1, 1992, a tire management fee is imposed upon the retail sale of all new replacement tires in this state of \$1.00 per tire sold. The fee shall be collected by retail dealers at the time the retail dealer sells a new replacement tire to the ultimate consumer; provided, however, that a Georgia tire distributor who sells tires to retail dealers must collect such fees from any retail dealer who does not have a valid scrap tire generator identification number issued by the Division.

1. New replacement tires include, but are not limited to, automobile, truck, heavy equipment, motor bike, boat and other trailers, aircraft, and recreational vehicles.

2. Local and state governments are not exempt from the fee.

3. The fee shall not be imposed on the sale of:

(i) Tires with a rim size less than 12 inches;

(ii) Tires from any device moved exclusively by human power; or

(iii) Tires used exclusively for agricultural purposes, except farm truck tires.

(b) Retail dealers shall remit fees and a quarterly tire fee report documenting the number of new replacement tires sold to the Division. The retail dealers shall use forms provided by the

Division. The fee and report shall be remitted by the 30th day of April, July, October, and January of each year, covering the period for the preceding quarter.

(c) In collecting, reporting, and paying the fees due under this section, each distributor or retailer shall be allowed the following deductions, but only if the amount due was not delinquent at the time of payment:

1. A deduction of three percent of the first \$3,000.00 of the total amount of all fees reported due on such report; and
2. A deduction of one-half of one percent of the portion exceeding \$3,000.00 of the total amount of all fees reported on such report.

(4) Scrap Tire Generators.

(a) Any person who generates scrap tires in this state shall have a scrap tire generator identification number (ID number #) issued by the Division. The ID number shall be used on tire manifests. A separate ID number shall be required for each business location.

(b) The following persons shall not be required to have an ID number:

1. Scrap tire generators who generate scrap tires at out-of-state locations and ship their scrap tires to a point of final disposition in Georgia; and
2. A licensed used motor vehicle parts dealer or registered secondary metals recycler, who does not generate scrap tires for disposal or recycling.
3. A municipal solid waste collector holding a valid solid waste collection permit under authority of this part whose primary business is the collection of municipal solid waste;
4. A private individual transporting no more than 10 of the individual's own or a private individual transporting more than 10 tires if such individual can provide proof of purchase with receipt for such tires;
5. Any person transporting tires collected as part of an organized site cleanup activity;

(c) Scrap tire generators shall initiate a tire manifest to track scrap tires during transportation from the point of generation to an approved point of final disposition. The tire manifest shall include the following information:

1. Name, address, county, telephone number and scrap tire generator identification number;
2. An estimate of the number (accurate to within 10% of actual number) or weight of scrap tires to be transported;
3. Signature of the generator certifying the estimate and the date the scrap tires were picked up;

4. Name, address, telephone number and permit number of the tire carrier;
5. Signature of the permitted tire carrier, the date of pickup from the generator and the date of delivery to the point of final disposition;
6. Name, address, telephone number and permit number of the point of final disposition;
7. Signature of authorized representative at the point of final disposition certifying the weight (in tons or number of tires) and the date received from the tire carrier.

(d) If a generator chooses to use tons of tires rather than actual numbers of tires on the tire manifest for passenger and truck tires, the following conversion factor must be used:

1. Passenger Tires: 2000 lb. (one ton) = 89 tires (22.5 lb/tire)
2. Truck Tires: 2000 lb. (one ton) = 17 tires (120 lb/tire)

(e) Scrap tire generators shall ensure that any person collecting and transporting their scrap tires hold a valid tire carrier permit issued by the Division and that their scrap tires were delivered to the point of final disposition designated by the generator on the scrap tire manifest.

(f) Scrap tire generators shall retain a copy of the tire manifest signed and dated by the carrier at the time the scrap tires were collected or transported. This tire manifest copy should be kept until the generator receives the original tire manifest signed by the generator, carrier and point of final disposition. The original tire manifest shall be kept on-site for a period of three years.

(g) A scrap tire generator shall notify the Division in writing of any carrier who fails to return a properly completed tire manifest to the generator within 30 days from scrap tire pickup. Such notification shall be filed within 15 days following any failure of the carrier to deliver the tire manifest with original signature to the generator.

(h) Scrap tire generators may designate whether a tire, because of wear, damage, or defect, is a "used tire", or "retreadable casing" as defined in these Rules. However, if a generator fails to designate which tires are "used", or "retreadable casings" then all tires transported shall be considered scrap tires and must be indicated on the tire manifest.

(5) Tire Carriers.

(a) Unless otherwise exempted, any person collecting or transporting scrap or used tires shall have a tire carrier permit issued by the Division. A permit shall not be issued unless the financial assurance, as provided for in these Rules, has been submitted and approved by the Division.

(b) A separate permit and financial assurance instrument shall be required for each tire carrier business location.

(c) A tire carrier shall transport scrap tires only to a point of final disposition as defined in these

Rules.

(d) Storage of scrap tires by tire carriers is prohibited.

(e) The permitted tire carrier shall maintain financial assurance in a format provided by the Division. The required financial assurance is as follows:

1. \$10,000.00 for carriers transporting up to 5,000 scrap tires per month.
2. \$20,000.00 for carriers transporting more than 5,000 scrap tires per month.

(f) The permitted tire carrier shall submit a quarterly report to the Division on forms provided by the Division. Reports shall be submitted by the 30th day of April, July, October and January of each year and cover the reporting period for the preceding calendar quarter. The tire carrier shall retain copies of the quarterly reports, tire manifests, invoices and weight tickets for three years at their place of business or other location approved by the Division. The tire carrier shall make these records available for review upon request by the Division.

(g) The permitted tire carrier shall display a decal issued by the Division on both the driver's and passenger's doors on each vehicle used to collect or transport tires. A decal shall not be required for a tire carrier that collects tires exclusively from outside this state and transports them directly to a scrap tire processor or end user within this state.

1. By August 1st of each year, tire carriers shall purchase decal(s) for each vehicle used to collect or transport tires.

2. The tire carrier shall pay the Division a nominal fee for each decal issued.

3. Decals are valid for a one-year period and shall expire on July 31st of each year.

(h) It shall be the responsibility of the permitted tire carrier to return the tire manifest, with the three required original signatures, to the scrap tire generator no later than 30 days from the date on which the carrier collected the scrap tires from the generator.

(i) The following persons shall not be required to have a tire carrier permit:

1. A tire retailer transporting its own used tires, if such dealer can provide proof of purchase with receipt for all used tires being transported and a document verifying the origin, route and destination of such used tires;

2. A municipal solid waste collector holding a valid solid waste collection permit under authority of this part whose primary business is the collection of municipal solid waste;

3. A private individual transporting no more than 10 of the individual's own tires or a private individual transporting more than 10 tires if such individual can provide proof of purchase with receipt for such tires;

4. A company transporting the company's own tires to a scrap tire processor or end user or for proper disposal;
5. Any person transporting tires collected as part of an organized site cleanup activity;
6. The United States, the State of Georgia, any county, municipality, or public authority.
7. Other persons, as approved by the Division, on a one time or temporary basis, as needed to further the intent of O.C.G.A. 12-8-20, et seq., that scrap tires be reused or recycled rather than disposed.

(6) Scrap Tire Storage.

(a) No person may store more than 25 scrap tires anywhere in this state.

(b) If scrap tires are secured in a locked enclosure or are otherwise adequately secured in a manner suitable to prevent unauthorized access, then paragraph (6)(a) of this Rule shall not apply to the following:

1. A solid waste disposal site permitted by the Division, if the permit authorizes the storage of scrap tires prior to their disposal;
2. A tire retailer or a publicly owned vehicle maintenance facility with not more than 1,500 scrap tires in storage;
3. A tire retreader with not more than 3,000 scrap tires in storage, so long as the scrap tires are of the type the retreader is actively retreading;
4. A licensed used motor vehicle parts dealer registered with the Secretary of State's office, a registered secondary metals recycler or a privately owned vehicle maintenance facility that operates solely for the purpose of servicing a commercial vehicle fleet with not more than 500 scrap tires in storage; and
5. A permitted scrap tire processor or sorter that has received approval prior to October 28, 2015 or holds a current permit, so long as the number of scrap tires in storage does not exceed the quantity approved by the Division. The Division may grant a waiver for the enclosure requirement if the person requesting the waiver can definitively show a significant and unique economic hardship which would impair the person's ability to continue operating his or her business.
6. A farm with 100 or fewer scrap tires in storage or in use for agriculture purposes. In addition, the Division may grant waivers to allow the storage or use of more than 100 scrap tires for agricultural purposes, if such storage or use does not pose a threat to human health or the environment.

(c) Any person storing scrap tires is subject to the following requirements:

1. Unless otherwise specified in an approved plan by the Division, all scrap tires shall be stored in a manner (e.g. under roof, secured tarp, or the like to prevent water accumulation) that controls the breeding and harborage of mosquitoes, rodents and other vectors;

2. Activities involving open flames and other flammable materials (oil, gas, fuel) shall not be allowed within 25 feet of a scrap tire storage area, with the exception of maintenance activities involving torches and welding equipment, as long as a fireproof barrier is used;

3. A 50-foot wide fire lane shall be placed around the perimeter of each scrap tire pile.

4. All persons engaged in the collection, storage or processing of scrap tires, retreadable or used tires shall control the presence of vectors or other nuisance pests associated with storage of the tires. Such pests may include, but are not limited to, mosquitoes, rats, mice, snakes and other animals living in or adjacent to the tire storage. Permitted or approved facilities shall maintain records for three years that include, but are not limited to:

(i) Type of control method used;

(ii) If chemical control - the name of the chemical(s);

(iii) Dates and amounts of chemical(s) used; and

(iv) Chemical storage location.

(7) Criteria for Scrap Tire Processors, Sorters and Disposal Facilities.

(a) Processing operations shall include, but not limited to, shredding, chopping, chipping, splitting, pyrolysis, microwave, and cryogenic operations. Provided financial assurance requirements of these rules have been met, permitted scrap tire processors in existence on the effective date of this Rule may continue to operate under their existing permit. Existing facilities requesting modifications after the effective date of this Rule must fully comply with this Rule. Scrap tire processing facilities shall meet the following requirements:

1. All scrap tire processors located in this state shall submit an application and obtain a permit issued by the Director prior to operation. No person may process scrap tires without a permit issued from the Director.

2. A permitted scrap tire processor shall maintain financial assurance in a format provided by the Division in the amount of \$20,000 for each business location.

3. All scrap tire processors shall have and follow an operations plan approved by the Division. The facility owner(s) or authorized representatives shall submit a written request to modify an

approved operations plan. Any proposed modification to the facility and/or operations shall not be implemented until approved by the Division.

4. The operations plan shall include, zoning approval, proof of fire inspection, operational narrative, site plan and drawing of the operation, and shall be designed by a professional engineer licensed to practice in Georgia.

5. Processors must show that they have the necessary operable equipment in place to process scrap tires prior to receiving scrap tires for processing.

6. ~~Storage Requirements~~ In addition to the scrap tire storage requirements in section (6) of these Rules, the following requirements apply:

(i) Storage limits are based on the processing equipment capability, proof of market, recycling rate and available storage space; ~~and~~.

(ii) Storage of scrap tires shall not exceed a 30 day operating supply. Prior approval for increased storage limits must be approved by the Division if 30 day operating supply cannot be met; ~~and~~.

~~(iii) Requirements for Storage in Buildings.~~

~~Scrap tires stored indoors will be managed in accordance with "The Standard for Storage of Rubber Tires," NFPA 231D, 1998 edition, published by the National Fire Protection Association or recommendation of local fire authority.~~

~~(iii) (iv) Requirements for Storage in Trailers.~~

Any processor with tires, product or residuals in enclosed trailers shall be subject to the following requirements:

(I) Trailer storage areas must be clearly depicted on a site plan; ~~and~~.

(II) Storage area shall be no greater than 10,000 square feet per storage area.

(III) A minimum of two feet must be maintained between trailers (side-to-side and end-to-end). No more than two rows of trailers per storage area may be stored at any facility. Such storage must be end-to-end and the trailer must be stored in a manner that allows direct removal of the trailer if needed. Empty trailers stored in the area designated for scrap tire storage are subject to the same separation requirements.

(IV) A 50-foot wide fire lane shall be placed around the perimeter of each scrap tire storage area. The fire lane shall be kept free of debris, vehicles, trailers, weeds, grass and other potentially combustible material.

~~(iv) (v) Processors must meet the following Requirements for Tires, Processed Tires, Product, and Residuals Stored on the Ground.~~

(I) A tire, processed tire, product, or residual pile shall have no greater than the following maximum dimensions:

I. Area: 10,000 square feet. ~~;~~ ~~and~~

II. Height: 15 feet.

(II) A 50-foot wide fire lane shall be placed around the perimeter of each pile with the exception of noncombustible materials (rims, wires, etc.). The fire lane shall be kept free of debris, vehicles, trailers, weeds, grass and other potentially combustible material. Existing processors may comply with the fire lane requirements documented on an approved plan until the plan is modified.

(III) Storage of whole tires, products, and residuals near buildings is prohibited unless:

I. A non-combustible/non-flammable barrier (firewall) is constructed in accordance with applicable state or local firewall requirements and a 25-foot fire lane, unless otherwise set by the local fire authority or a Georgia State Certified Fire Inspector, is maintained between the firewall and the building. ~~;~~ ~~and~~

II. The whole tires, processed tires, products, and residuals shall not exceed the height of the firewall.

7. ~~General Operation Standards~~. Scrap tire Pprocessors shall meet the following operational requirements:

(i) Access to the processing facility and fire lane(s) for emergency vehicles shall be unobstructed at all times, with the exception of routine loading or unloading operations, provided the vehicles are attended by their drivers during that time.

(ii) In the event of fire, the owner or operator shall immediately take all necessary steps to control and extinguish the fire and control any resulting runoff (i.e., water, oil or other fluid residue).

(iii) The run-off resulting from fires or fire suppression actions shall be prevented by berms or other detention structures approved by the Division from entering drains and waters of the state. Material(s) used in berm construction must be non-combustible, non-flammable and prevent run-off.

(iv) The facility owner or operator shall provide documentation that the local fire authority or a Georgia State Certified Fire Inspector conducted a fire safety survey. The facility owner or operator shall arrange for an additional fire safety survey as part of any modification request that would increase the amount of scrap tires in storage.

(v) Operations involving the use of open flames shall not be conducted within 25 feet of a scrap tire stockpile, processed tire stockpile or processing equipment. An exception is allowed for maintenance activity using torches or welding equipment, as long as fireproof curtains or other fireproof barrier shields the ignition source from storage or equipment areas.

(vi) Access to the facility shall be controlled using fences, gates or other means of security.

(vii) An attendant shall be present when the scrap tire processing facility is open for business if the facility receives tires from persons other than the operator of the facility.

(viii) Any residuals from scrap tire processing shall be managed so as to be contained on-site and shall be controlled and disposed of in a permitted solid waste handling facility or be properly recycled.

(ix) A scrap tire processing facility shall not accept any scrap tires for processing if it has reached its approved or permitted staging limit. At least 75 percent of both the scrap and processed tires that are accumulated by the scrap tire processing facility each calendar quarter, and 75 percent by weight or volume of all scrap tires previously received and not recycled, reused or properly disposed during the preceding calendar quarter shall be processed and removed from the facility for disposal or recycling from the facility during the quarter or disposed of in a solid waste handling facility approved to accept scrap tires.

(x) Communication equipment shall be maintained at the scrap tire processing facility to ensure that the facility attendant or operator can contact local emergency response authorities in the event of a fire. The facility will notify the Division within 24 hours in the event of a fire requiring a response by the local fire jurisdiction.

(xi) The emergency/contingency portion of the operations plan shall include, but not be limited to:

(I) A list of names and numbers of persons to be contacted in the event of a fire, flood or other emergency; ~~;~~

(II) A list of the emergency response equipment at the facility, its location and how it should be used in the event of a fire or other emergency; ~~and;~~

(III) A description of the procedures that should be followed in the event of a fire, including procedures to contain and dispose of the oily material generated by the combustion of large numbers of tires.

(xii) Facility shall have storm water control measures.

(xiii) Facility shall have erosion and sediment control measures.

8. Scrap tire processors Recordkeeping and Reporting requirements.

(i) The owner or operator of a scrap tire processing facility shall retain required records for three years and make such records available for inspection by the Division. Required records include, but are not limited to:

(I) Copies of the tire manifests for all tires received;

(II) If more than ten scrap tires were delivered by a person who is not a permitted tire carrier or generator, the number or weight of tires delivered, the date and the person's name, address, telephone number and signature;

(III) Properly dated, numbered and signed weight tickets, from certified scales at the facility or from a certified public or private scale, for scrap tires or processed tire materials received at or leaving the facility;

(IV) For all scrap tires shipped for reuse or retreading, the quantity and type (passenger car, truck tires, off the road, or others) shipped and the name and location of the person receiving the tires; ~~and~~.

(V) For all processed tires and residuals, invoices and shipping tickets identifying the date, weight, name, address and phone number of the point of final disposition.

(ii) Owners and operators of scrap tire processing facilities shall submit a quarterly report to the Division. The quarterly report shall be submitted by the 30th day of April, July, October and January. The report shall include, but not limited to, the following:

(I) The facility name, address and permit number;

(II) The calendar quarter and year covered by the report;

(III) The total weight of scrap or processed tires received at the facility during the period covered by the report;

(IV) The total weight of scrap tires, processed tires, residuals and used tires shipped from the facility during the period covered by the report; ~~and~~.

(V) The amount of scrap, processed tires or residuals remaining on site.

9. Scrap tire processors shall meet the following requirements for the closure of scrap tire processing facilities.

(i) The owner or operator shall provide procedures in the operations plan for closing the facility, including, but not limited to:

(I) Notification to the Division of intent to close 30 days prior to the scheduled date for closing;

(II) Closure activities and schedule for completion;

(III) Control of access to the site; ~~and,~~

(IV) Notification to the Division when all closure activities are completed.

(b) Sorters.

1. Sorters in existence on the effective date of this Rule may continue to operate under their existing approval. New or existing facilities requesting modifications after the effective date of this Rule must be permitted by the Division.

2. All sorters shall have and follow an operations plan approved by the Division. The facility owner(s) or authorized representatives shall submit a written request to modify an approved operations plan. Any proposed modification to the facility and/or operations shall not be implemented until approved by the Division.

3. The operations plan shall include, zoning approval, proof of fire inspection, operational narrative, and site plan and drawing of the operation.

4. ~~Storage Requirements~~ In addition to the scrap tire storage requirements in section (6) of these Rules, the following requirements apply:

(i) Storage limits are based on the permit.

~~(ii) Scrap tires stored indoors will be managed in accordance with "The Standard for Storage of Rubber Tires," NFPA 231D, 1998 edition, published by the National Fire Protection Association or recommendations of local fire authority.~~

~~(ii)-(iii) Requirements for Storage in Trailers.~~ Any sorter with tires stored in enclosed trailers shall be subject to the following requirements:

(I) Trailer storage areas must be clearly depicted on a site plan; ~~and,~~

(II) Storage area shall be no greater than 10,000 square feet per storage area.

(III) A minimum of two feet must be maintained between trailers (side-to-side and end-to-end). All trailers in the storage area must be stored in a manner that allows an unobstructed path for direct removal of the trailer at all times. Empty trailers stored in the area designated for scrap tire storage are subject to the same separation requirements.

(IV) A 50-foot wide fire lane shall be placed around the perimeter of each scrap tire storage area. The fire lane shall be kept free of debris, vehicles, trailers, weeds, grass and other potentially combustible material.

~~(iii)-(iv)~~ Sorters must meet the following requirements for Tires stored on the Gground:

(I) A tire stockpile shall have no greater than the following maximum dimensions:

- I. Area: 10,000 square feet; ~~and.~~
 - II. Height: 15 feet.
- (II) A 50-foot wide fire lane shall be placed around the perimeter of each pile with the exception of noncombustible materials (rims, wires, etc.). The fire lane shall be kept free of debris, vehicles, trailers, weeds, grass and other potentially combustible material.
- (III) Storage of whole tires near buildings is prohibited unless:
- I. A non-combustible/non-flammable barrier (firewall) is constructed in accordance with applicable state or local firewall requirements and a 25-foot fire lane, unless otherwise set by the local fire authority or a Georgia State Certified Fire Inspector, is maintained between the firewall and the building; ~~and.~~
 - II. The whole tires shall not exceed the height of the firewall.

5. ~~General Operation Standards.~~ Sorters shall meet the following operational requirements:

- (i) Access to the sorter facility and fire lane(s) for emergency vehicles shall be unobstructed at all times, with the exception of routine loading or unloading operations, provided the vehicles are attended by their drivers during that time.
- (ii) In the event of fire, the owner or operator shall immediately take all necessary steps to control and extinguish the fire and control any resulting runoff (i.e., water, oil or other fluid residue).
- (iii) The run-off resulting from fires or fire suppression actions shall be prevented by berms or other detention structures approved by the Division from entering drains and waters of the state. Material(s) used in berm construction must be non-combustible, non-flammable and prevent run-off.
- (iv) The facility owner or operator shall provide documentation that the local fire authority or a Georgia State Certified Fire Inspector conducted a fire safety survey. The facility owner or operator shall arrange for an additional fire safety survey as part of any modification request that would increase the amount of scrap tires in storage.
- (v) Operations involving the use of open flames shall not be conducted within 25 feet of a scrap tire stockpile. An exception is allowed for maintenance activity using torches or welding equipment, as long as fireproof curtains or other fireproof barrier shields the ignition source from storage or equipment areas.
- (vi) Access to the sorter facility shall be controlled using fences, gates or other means of security.
- (vii) An attendant shall be present when the scrap tire sorter is open for business if the sorter facility receives tires from persons other than the operator of the facility.

(viii) A scrap tire sorter facility shall not accept any scrap tires if it has reached its approved or permitted storage limit. At least 75 percent of both the scrap tires that are accumulated by the scrap tire sorter facility each calendar quarter, and 75 percent by weight or volume of all scrap tires previously received and not reused or properly disposed during the preceding calendar quarter shall be removed from the facility for disposal or recycling from the facility during the quarter or disposed of in a solid waste handling facility approved to accept scrap tires.

(ix) Communication equipment shall be maintained at the scrap tire sorter facility to ensure that the facility attendant or operator can contact local emergency response authorities in the event of a fire. The facility will notify the Division within 24 hours in the event of a fire requiring a response by the local fire jurisdiction.

(x) The emergency/contingency portion of the operations plan shall include, but not be limited to:

(I) A list of names and numbers of persons to be contacted in the event of a fire, flood or other emergency;

(II) A list of the emergency response equipment at the facility, its location and how it should be used in the event of a fire or other emergency; ~~and~~

(III) A description of the procedures that should be followed in the event of a fire, including procedures to contain and dispose of the oily material generated by the combustion of large numbers of tires.

(xi) Facility shall have storm water control measures.

(xii) Facility shall have erosion and sediment control measures.

6. Sorters must meet the following Recordkeeping and Reporting requirements.

(i) The owner or operator of a scrap tire sorter facility shall retain required records for three years and make such records available for inspection by the Division. Required records include, but are not limited to:

(I) Copies of the tire manifests for all tires received;

(II) If more than ten scrap tires were delivered by a person who is not a permitted tire carrier or generator, the number or weight of tires delivered, the date and the person's name, address, telephone number and signature;

(III) For all scrap tires shipped for reuse or retreading, the quantity and type (passenger car, truck tires, off the road, or others) shipped and the name and location of the person receiving the tires; ~~and~~

(IV) For all sorter scrap tires, invoices and shipping tickets identifying the date, weight, name, address and phone number of the point of final disposition.

(ii) Owners and operators of scrap tire sorter facilities shall submit a quarterly report to the Division. The quarterly report shall be submitted on the 30th day of April, July, October and January. The report shall include, but not be limited to, the following:

- (I) The facility name, address and permit number;
- (II) The calendar quarter and year covered by the report;
- (III) The number or tons of scrap tires received at the facility during the period covered by the report;
- (IV) The number or tons of scrap tires shipped from the facility during the period covered by the report; ~~and~~
- (V) The number or tons of scrap tires remaining on site.

(iii) ~~Municipalities~~ Municipalities operating sorter facilities for the purpose of collection are exempt from the reporting and recordkeeping requirements contained in 391-3-4-.19(7)(b)6(ii).

7. Sorters must meet the following requirements for the Closure of Scrap Tire Sorter Facilities.

(i) The owner or operator shall provide procedures in the operations plan for closing the facility, including, but not limited to:

- (I) Notification to the Division of intent to close 30 days prior to the scheduled date for closing;
- (II) Closure activities and schedule for completion;
- (III) Control of access to the site; ~~and~~
- (IV) Notification to the Division when all closure activities are completed.

(c) Disposal Operations: All solid waste disposal facilities (landfills and thermal treatment technology facilities) having a valid Solid Waste Handling Permit issued by the Director are approved to receive scrap tires except as provided in O.C.G.A. 12-8-40-.1(b).

(8) Recycling and Beneficial Reuse of Scrap Tires.

(a) For the purposes of this Rule, the following criteria will be used to determine if scrap tires are being recycled:

1. The scrap tires or processed scrap tires 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.

2. Scrap tires or processed scrap tires are not accumulated speculatively if the person accumulating them can show there is a known use, reuse, or recycling potential for them; that they can be feasibly sold, used, reused or recycled; and during the ~~preceeding~~preceding 90 days, the amount of scrap or processed scrap tires recycled, sold, used or reused equals at least 75 percent by weight or volume of the tires received during the 90-day period.

3. 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 scrap tires in question to a recognized recycling facility or for proper use or reuse from the accumulation point. Proof must be provided that there is a known market or disposition for the scrap tires or processed scrap tires and must show that they have the necessary equipment to do so, prior to receiving scrap tires for processing.

4. A scrap tire is "sold" if the generator of the scrap tire or the person who processed the scrap tire received consideration or compensation for the material because of its inherent value.

5. A scrap tire is "used, reused, or recycled" if it is either:

(i) Employed as an ingredient (including use as an intermediate) in a process to make a product (e.g., utilizing crumb rubber to make rubber-asphalt); or

(ii) Employed in a particular function or application as an effective substitute for a commercial product (e.g., using shredded tires 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 technology facility or utilizing shredded tires as a soil amendment, aggregate, etc., or

(iii) Reused for its original intended purpose as a used tire, or reused for other purposes approved by the Division, such as playground equipment, erosion control, etc.

(b) Persons proposing to use more than 25 scrap tires in a beneficial reuse project shall submit a proposal and be approved by the Division prior to commencing beneficial reuse project.

(9) Used Tire Dealers

(a) Any person who acts as a used tire dealer in this state shall have a used tire dealer identification (ID) number issued by the Division, which shall be used on tire manifests. A separate ID number shall be required for each business location, except mobile locations.

(b) Used tire dealers shall obtain a tire carrier permit for transportation of used tires other than their own.

(c) Used tire dealers transporting tires other than their own shall initiate a tire manifest to track used tires from the point of generation to another location. The following information shall be provided on the tire manifest:

1. Name, address, county, telephone number and used tire dealer ID number;
2. The number of used tires to be transported;
3. Signature of the generator and the date the used tires were picked up;
4. Name, address, telephone number and permit number of the tire carrier;
5. Signature of the tire carrier, the date of pickup from the generator and the date of delivery to final location;
6. Name, address, telephone number and permit number of business location receiving the used tires;
7. Signature of authorized representative at the business received from the tire carrier.

(d) Used tire dealers shall keep an inventory of all used tires to be updated quarterly. Such inventory shall contain, at a minimum, number of tires at the business location categorized by rim size.

(e) Used tire dealers shall implement suitable measures to control vectors.

Authority: O.C.G.A. § 12-8-20 et seq.