

**RULES OF
GEORGIA DEPARTMENT OF
AGRICULTURE**

**CHAPTER 40-31
SOIL AMENDMENTS**

Table of Contents

Subject 40-31-1	General Provisions
40-31-1-.01	Definitions
40-31-1-.02	Prohibitions Applicable to All Soil Amendments
40-31-1-.03	Sampling and Analysis
40-31-1-.04	Registration and Renewal Requirements Applicable to All Soil Amendments
40-31-1-.05	Labeling
40-31-1-.06	Tonnage Reports
Subject 40-31-2	Provisions Applicable to Industrial By-product Derived Soil Amendments
40-31-2-.01	Applicability of Subject
40-31-2-.02	Supplemental Registration and Renewal Requirements
40-31-2-.03	Control of Industrial By-product Derived Soil Amendments
40-31-2-.04	Supplemental Restrictions and Prohibitions
40-31-2-.05	Records
40-31-2-.06	Elemental Concentration Limits
Subject 40-31-3	Nutrient Management Plans
40-31-3-.01	Nutrient Management Plan Required
40-31-3-.02	Nutrient Management Plan Components
40-31-3-.03	Maps
40-31-3-.04	Soils Information
40-31-3-.05	Soil Amendment Analysis
40-31-3-.06	Material Identification and Application Method
40-31-3-.07	Additional Monitoring Requirements

Subject 40-31-1 General Provisions

40-31-1-.01 Definitions

As used in this Chapter, the term:

- (1) “Act” means the Georgia Soil Amendment Act of 1976, O.C.G.A. § 2-12-70, *et seq.*, as amended.
- (2) “Accredited laboratory” means a laboratory certified to ISO 17025 standards, or as otherwise approved by the Department.
- (3) “Adulterated” means any soil amendment:
 - (a) Which contains any deleterious or harmful agent in sufficient quantity to be injurious to beneficial plants, animals, or aquatic life when applied in accordance with the directions for use shown on the label;
 - (b) Whose composition differs substantially from that offered in support of registration or shown on the label;
 - (c) Which contains noxious weed seeds; or
 - (d) Which contains domestic septage, unless:
 1. treated to Class A or exceptional quality sludge standards in accordance with a sludge management plan approved under a permit issued by EPD, or
 2. constituting compost produced by a Class I, II, or III composting or anaerobic digester facility in accordance with rules enforced by or a permit issued by EPD.
- (4) “Apply” means to put a soil amendment on the land, whether topically, with or without subsequent incorporation into the soil, by subsurface injection, or otherwise.
- (5) “Biosolids” will have the same meaning as defined in Ga. Comp. R. and Regs. r. 391-3-6-.17.
- (6) “Buffer” means a vegetated setback where a soil amendment is not applied, such as to reduce the runoff of nutrients, sediment, or soil amendments.
- (7) “Bulk” means in non-packaged form.
- (8) “Containment vessel” means any structure, container, vessel, pit, lagoon, or repository that is utilized to contain or hold a soil amendment for storage or transportation purposes.
- (9) “Commissioner” means the Georgia Commissioner of Agriculture.
- (10) “Compost” means a biologically stable material derived from the composting process.

(11) “Composting” means the controlled biological decomposition of organic matter accomplished by mixing and piling in a way that promotes aerobic decay and inhibits pathogens, viable weed seeds, and odors.

(12) “Current representative analysis” means an analysis performed within six months of its submission to the Department or inclusion in an NMP identifying the components of the soil amendment, including at a minimum those components set forth in Ga. Comp. R. and Regs. r. 40-31-3-.05. Current representative analyses are performed by an accredited laboratory exercising good laboratory practices, and results are presented on the testing laboratory’s letterhead and indicate the analytical method utilized.

(13) “Department” means the Georgia Department of Agriculture.

(14) “Distribute” means to import, consign, offer for sale, sell, barter, or otherwise supply, whether for a fee or not, a soil amendment to any person in Georgia, whether directly or indirectly.

(15) “Domestic septage” means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

(16) “Domestic sewage” means water and wastewater from humans or from household operations that is discharged to or otherwise enters a treatment works.

(17) “Dwelling” means the interior or exterior of a structure, all or part of which is designed or used for human habitation.

(18) “Environmental contact” means the land application of a soil amendment or the storage of a soil amendment in a containment vessel that is not fully sealed or encapsulated.

(19) “EPD” means the Georgia Environmental Protection Division.

(20) “Industrial by-product” means any industrial waste which is capable of beneficial use, reuse, or recycling as a soil amendment.

(21) “Industrial by-product derived soil amendment” or “IBD soil amendment” means any soil amendment derived from one or more industrial by-products or sewage sludge, including, but not limited to, drinking water treatment plant residuals.

(22) “Industrial waste” means any discarded material generated through industrial, commercial, mining, manufacturing, or agricultural operations. Industrial waste includes solid, liquid, semisolid, contained gaseous material, or a combination thereof. Industrial waste does not include un-manipulated animal manure or sewage sludge.

(23) “Label” means the display of written, printed, or graphic matter upon the immediate container of the soil amendment.

(24) “Labeling” means all written, printed, or graphic matter accompanying any soil amendment and all advertisements, brochures, posters, and television, radio, and oral claims used in promoting its sale.

(25) “Landowner” means any person with any real property interest, including but not limited to leasehold interests, in a site where soil amendments are applied or stored after distribution.

(26) “Mulch” means any organic or inorganic soil surface cover used to help retain moisture longer in the soil by impeding evaporation, to act as a physical barrier to discourage weed growth, to help maintain a constant temperature by insulating the soil, to discourage runoff and soil erosion by shielding the soil surface from water abrasion, to promote water absorption and retention, or some other similar purpose. Mulch is a soil amendment only when its product labeling claims to be a soil amendment or provides directions for incorporation into the soil.

(27) “Non-agricultural biosolids” means biosolids where such materials have not been treated to Class A or exceptional quality sludge standards as used in Ga. Comp. R. and Regs. r. 391-3-6-.17.

(28) “Nutrient management plan” or “NMP” means a written plan prepared, signed, and dated by a NMP Specialist certified by the Department, a certified crop advisor, or other qualified professional if approved in writing by the Department, detailing the parameters for application of an IBD soil amendment at a site in the context of the soil characteristics, agricultural practices, and other geographic and practical considerations at that site, as set forth in this Chapter.

(29) “Other ingredients” means non-soil-amending ingredients present in a soil amendment.

(30) “Percent” or “Percentage” means the parts per 100 by weight.

(31) “Person” means an individual, corporation, sole proprietorship, partnership, limited partnership, limited liability company, limited liability partnership, professional corporation, enterprise, franchise, association, trust, joint venture, or other entity, whether for profit or nonprofit.

(32) “Precipitation event” means continuous precipitation which results in a total measured precipitation equal to or greater than one-tenth of an inch.

(33) “Processed” means deliberately treated or manipulated to modify or transform physical, chemical, or biological characteristics of the natural state of the substance.

(34) “Product control contractor” means any person other than a registrant who distributes, transports, stores, or applies an IBD soil amendment. Each landowner or lessee that stores or applies an IBD soil amendment on their land or leasehold will be considered a product control contractor.

(35) “Product name” means the designation under which a soil amendment is offered for distribution.

(36) “Registrant” means any person who registers a soil amendment under the Act.

(37) “Saturated soil” means soil in which all voids are filled with water or another liquid such as to render the liquid visible on the soil’s surface either when the soil is undisturbed or upon compression of the soil by equipment used to apply a soil amendment.

(38) “Sewage sludge” will have the same meaning as defined in Ga. Comp. R. and Regs. r. 391-3-6-.17.

(39) “Soil-amending ingredient” means a substance from which a soil amendment derives its value.

(40) “Soil amendment” means a substance defined as such by the Act. With respect to sewage sludge, the term “soil amendment” may only include biosolids treated to Class A or exceptional quality sludge standards in accordance with a sludge management plan approved under a permit issued by EPD or constituting compost produced by a Class I, II, or III composting or anaerobic digester facility in accordance with rules enforced by or a permit issued by EPD.

(41) “Un-manipulated manure” means the excreta of animals when not artificially mixed with any material other than that which has been used for bedding, sanitary, or feeding purposes for the manure-producing animals or for the preservation of the manure, or when the excreta has not been subjected to processing other than composting, and provided such composted products are distributed in bulk only.

(42) “Usefulness” means a soil amendment’s ability to be distributed, transported, stored, and applied, so as to obtain the benefit of the soil amendment’s value, while complying with the requirements of this Chapter.

(43) “Value” means a soil amendment’s actual ability to change the characteristics of soil or another growth medium to:

- (a) increase penetrability of water or air;
- (b) increase water-holding capacity;
- (c) alleviate or decrease soil compaction; or
- (d) otherwise enhance its physical properties.

Statutory Authority: O.C.G.A. § 2-12-70, *et seq.*

40-31-1-.02 Prohibitions Applicable to All Soil Amendments

(1) A person must not register, distribute, or apply a soil amendment which contains any amount of non-agricultural biosolids or material collected by a grease trap associated with a food-production facility, such as but not limited to, a restaurant.

(2) A person must not distribute:

- (a) An unregistered soil amendment;
- (b) An unlabeled or improperly labeled soil amendment;
- (c) A misbranded soil amendment; or
- (d) An adulterated soil amendment.

(3) A person must not fail to promptly, and in no event longer than 14 days, produce complete and accurate records required by the Act or this Chapter upon a request by the Commissioner or the Commissioner's duly designated agent.

(4) A person must not fail to comply with a stop sale, stop use, or removal order.

Statutory Authority: O.C.G.A. §§ 2-12-73, 2-12-76, 2-12-77, 2-12-80, and 2-12-81.

40-31-1-.03 Sampling and Analysis

(1) The Commissioner or his duly designated agent is authorized to collect samples of a soil amendment upon demand without charge or cost from any public or private premises within this State where a soil amendment is manufactured, processed, packed, stored, distributed, held for distribution, applied, or held for application, and from any vehicle or container used to transport, hold, or apply a soil amendment. Any registrant, product control contractor, or landowner with control over a soil amendment must comply with the Commissioner's efforts to sample and analyze the soil amendment.

(2) The Commissioner may determine methods of sampling and analysis deemed suitable to assess compliance with the Act and this Chapter.

Statutory Authority: O.C.G.A. §§ 2-12-78 and 2-12-80.

40-31-1-.04 Registration and Renewal Requirements Applicable to All Soil Amendments

(1) Each prospective registrant of a soil amendment must submit a draft copy of the soil amendment's label to the Commissioner along with the registration request forms provided by the Department.

(2) In addition to information required to be submitted to the Department upon the Department's soil amendment registration request forms, the Commissioner or the Commissioner's duly appointed agent may require a prospective registrant to submit either proof of specific claims made for a proposed soil amendment, or, if no specific claims are made, proof of the soil amendment's usefulness and value.

(a) If the Commissioner or the Commissioner's duly appointed agent requires a prospective registrant to submit proof of specific claims or proof of usefulness and value, the applicant must furnish experimental data demonstrating the purported specific claims or usefulness and value of the prospective soil amendment.

1. The Commissioner may require that such experimental data have been developed from tests conducted under conditions identical to or closely related to those conditions present in this State. The Commissioner may reject experimental data not developed under such conditions.

2. The Commissioner may rely on the advice of University of Georgia College of Agricultural and Environmental Sciences experiment station personnel or other university personnel in evaluating experimental data on a proposed soil amendment.

(b) Failure of experimental data furnished by a prospective registrant to prove specific claims made about a prospective soil amendment, or in the absence of specific claims, the soil amendment's usefulness and value, will lead to the Commissioner's rejection of the soil amendment's registration unless the registrant provides supplemental information proving the specific claims made about a prospective soil amendment, or in the absence of specific claims, the soil amendment's usefulness and value.

(c) If the Commissioner did not require a registrant to submit experimental data proving the specific claims made regarding a soil amendment, or in the absence of specific claims, the soil amendment's usefulness and value, upon the initial registration of a soil amendment, the Commissioner may require the submission of the experimental data specified by the Act upon the soil amendment's renewal. Failure of experimental data to prove specific claims made regarding a soil amendment, or in the absence of specific claims, the soil amendment's usefulness and value, will lead to non-renewal of the soil amendment's registration unless the registrant provides supplemental information proving the specific claims made about the soil amendment, or in the absence of specific claims, the soil amendment's usefulness and value.

(3) Registration of a soil amendment with the Commissioner will not entitle a person registering, distributing, transporting, storing, or applying the soil amendment to violate any law, regulation,

or ordinance, including zoning ordinances or zoning decisions appropriately adopted or enforced by a local government pursuant to O.C.G.A. § 2-1-6, as amended.

Statutory Authority: O.C.G.A. §§ 2-12-73 and 2-12-80.

40-31-1-.05 Labeling

(1) Each soil amendment label must include the following:

- (a) The product name;
- (b) A statement of specific claims, or, if no specific claims are made, the soil amendment's value;
- (c) The concentration of soil amending and other ingredients;
- (d) Directions for use;
- (e) The net weight or volume; and
- (f) The name and address of the registrant.

(2) A registrant, either directly or through a product control contractor, if applicable, must ensure that any recipient of a soil amendment distributed in a bulk shipment receives a label, a physical or electronic copy of which must be provided to the person to whom the soil amendment is distributed by the time of delivery.

(3) A registrant, either directly or through a product control contractor, if applicable, must ensure that a soil amendment's labeling is not false or misleading to any person in any particular, including but not limited to, to the recipient of a soil amendment, as to the usefulness, value, quality, analysis, type, or composition of the soil amendment.

Statutory Authority: O.C.G.A. §§ 2-12-76 and 2-12-80.

40-31-1-.06 Tonnage Reports

(1) Any registrant who distributes a soil amendment in Georgia must file a semiannual report to the nearest whole ton with the Commissioner recording soil amendments distributed within Georgia in containers over 10 pounds in weight, and in bulk, and must submit the tonnage fee calculated at \$0.30 per ton for the tonnage distributed to non-registrants. Registrants must report and calculate tonnage reports and the tonnage fee based on a soil amendment's weight at the time of delivery, and must include the weight of any liquid components. Registrants may not report and calculate tonnage reports and the tonnage fee on a dry weight basis. Each tonnage report must include the following:

(a) Registrant's name, address, telephone number, and email address;

(b) Name, title, and signature of registrant's representative;

(c) Total tonnage of each registered soil amendment distributed by the registrant during the semiannual period; and

(d) Total combined tonnage of all registered soil amendments distributed by the registrant during the semiannual period.

(2) All tonnage reports and tonnage fees must be provided to the Commissioner no later than the thirtieth day after the end of the semiannual period, as follows:

(a) For the period January 1 through June 30, tonnage reports and tonnage fees are due by July 30, and

(b) For the period July 1 through December 31, tonnage reports and tonnage fees are due by due January 30.

(3) Tonnage reports filed with the Commissioner and lacking any information required by this Rule will be considered incomplete and the registrant that filed the report will be considered in violation of the Act and this Chapter if the report is not complete or the tonnage fee is not received by the Commissioner on or before the due date listed.

Statutory Authority: O.C.G.A. §§ 2-12-75 and 2-12-80.

Subject 40-31-2
Provisions Applicable to Industrial By-product Derived Soil Amendments

40-31-2-.01 Applicability of Subject

(1) This Subject applies to all registrants, product control contractors, and landowners, as applicable, distributing, transporting, storing, and applying IBD soil amendments, except that the requirements set forth in Ga. Comp. R. and Regs. r. 40-31-2-.03, 40-31-2-.04, 40-31-2-.05, and 40-31-2-.06 of this Subject shall not apply to registrants, product control contractors, and landowners, as applicable, to the extent those parties distribute, transport, store, or apply IBD soil amendments:

- (a) Constituting biosolids treated to Class A or exceptional quality sludge standards in accordance with a sludge management plan approved under a permit issued by EPD;
- (b) Constituting compost produced by a Class I, II, or III composting or anaerobic digester facility in accordance with rules enforced by or a permit issued by EPD; or
- (c) Constituting forest products or soil amendments derived from industrial by-products generated solely from forest products, excluding chemical by-products of pulp digestion, slates, clays, shells, gypsum, and lime, as provided in O.C.G.A. § 2-12-80(1)(B).

(2) The requirements established in this Subject are in addition to generally applicable requirements set forth in other Subjects of this Chapter.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-2-.02 Supplemental Registration and Renewal Requirements

(1) A registrant must identify a prospective soil amendment as “derived from an industrial by-product” in the registration application if the soil amendment contains any amount of industrial by-product. In addition to generally applicable application requirements, the registrant of a prospective soil amendment derived from an industrial by-product must also submit the following as part of the registration request:

- (a) The name and contact information of each person generating an industrial by-product proposed to be incorporated into the soil amendment and the address of the industrial by-product generation site;
- (b) The SIC Code or NAICS Code of each industry from which each industrial by-product proposed to be incorporated into the soil amendment has been derived;
- (c) A description of the industry process or processes producing each industrial by-product proposed to be incorporated into the soil amendment;
- (d) A description of the intended use of the soil amendment that includes, but is not limited to, intended impacts on the properties of the soil to which the soil amendment is applied, crops supported by the application of the soil amendment, application rates of the soil amendment, and the intended frequency and timing of application;
- (e) A description of any general site or application restrictions; and
- (f) A current representative analysis of the soil amendment.

(2) The registrant must identify a prospective soil amendment as “derived from sewage sludge” in the registration application if the soil amendment contains any amount of sewage sludge. In addition to generally applicable application requirements, the registrant of a soil amendment derived from sewage sludge must also submit the following as part of the registration request:

- (a) The classification of all sewage sludge proposed to be incorporated into the soil amendment, as defined in Ga. Comp. R. and Regs. r. 391-3-6-.17;
- (b) The name, contact information, and EPD permit or registration numbers of each facility generating sewage sludge proposed to be incorporated into the soil amendment and the address of the sewage sludge generation site;
- (c) A description of the intended use of the soil amendment that includes, but is not limited to, intended impacts on the properties of the soil to which the soil amendment is applied, crops supported by the application of the soil amendment, application rates of the soil amendment, and the intended frequency and timing of application;
- (d) A description of any general site or application restrictions; and
- (e) A current representative analysis of the soil amendment.

(3) The registrant must identify a prospective soil amendment as “derived from drinking water treatment plant residuals” in the registration application if the soil amendment contains any amount

of drinking water treatment plant residuals. In addition to generally applicable application requirements, the registrant of a soil amendment derived from drinking water treatment plant residuals must also submit the following as part of the registration request:

- (a) A description of the treatment process or processes producing the drinking water treatment plant residuals proposed to be incorporated into the soil amendment;
 - (b) The name, contact information, and any EPD permit or registration numbers of each facility generating drinking water treatment plant residuals proposed to be incorporated into the soil amendment and the address of the drinking water treatment residuals generation site;
 - (c) A description of the intended use of the soil amendment that includes, but is not limited to, intended impacts on the properties of the soil to which the soil amendment is applied, crops supported by the application of the soil amendment, application rates of the soil amendment, and the intended frequency and timing of application;
 - (d) A description of any general site or application restrictions; and
 - (e) A current representative analysis of the soil amendment.
- (4) A registrant seeking renewal of a soil amendment derived from an industrial by-product must include a current representative analysis with the registration renewal request and submit any information required by this Rule not previously submitted by the registrant.

Statutory Authority: O.C.G.A. §§ 2-12-73 and 2-12-80.

40-31-2-.03 Control of Industrial By-product Derived Soil Amendments

(1) The registrant of an IBD soil amendment must distribute, store, transport, and apply the IBD soil amendment through the registrant's own action or pursuant to a written agreement with one or more product control contractors for the distribution, storage, transport, or application of the registrant's soil amendment.

(2) If a registrant utilizes one or more product control contractors for the distribution, storage, transportation, or land application of an IBD soil amendment, then the registrant must ensure the following:

(a) That each product control contractor is under written agreement to comply with the provisions of the Act and this Chapter;

(b) That each product control contractor possesses the necessary knowledge, skills, and equipment to comply with the provisions of the Act and this Chapter;

(c) That each product control contractor is directed by the registrant as an agent of the registrant;

(d) That each product control contractor is audited by the registrant at least twice per calendar year for operational compliance with the Act and this Chapter during the duration of the written agreement; and

(e) That if the product control contractor utilizes a subcontractor, that the product control contractor does so pursuant to a written agreement that requires the subcontractor operate by the same standards required of the product control contractor pursuant to this Chapter.

(3) If a registrant utilizes a product control contractor for the distribution, storage, transportation, or application of an IBD soil amendment, then the registrant must retain a copy of all written agreements with that product control contractor for two years following the termination or expiration of the written agreement. A registrant must provide written agreements with product control contractors to the Department upon request.

(4) Each registrant, either through the registrant's own action or through the action of a product control contractor, must provide any landowner that receives one or more IBD soil amendments with a physical or electronic copy the Act and this Chapter no later than the initial distribution of an IBD soil amendment.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-2-.04 Supplemental Restrictions and Prohibitions

(1) Registrants must ensure that no person other than the registrant or a product control contractor distributes, stores, transports, or applies the registrant's IBD soil amendment. Each registrant shall be deemed responsible for any distribution, storage, transport, or application of its registered soil amendment in violation of this Rule. Each calendar day where this restriction is violated will be considered a separate violation.

(2) Registrants, either through the registrant's own action or through the action of a product control contractor, and product control contractors, must:

(a) Ensure all IBD soil amendments are screened to remove visible plastics or other visible inorganic material prior to environmental contact. Any IBD soil amendment containing visible plastics or inorganic material will be deemed adulterated;

(b) Ensure that all IBD soil amendments are applied in accordance with the applicable Nutrient Management Plan;

(c) Store all IBD soil amendments in containment vessels marked with the Registrant's name and phone number in bold-print letters, not less than twelve inches in height, and displayed on a contrasting background. If a containment vessel is incapable of being marked, detached signage may be used that otherwise meets the criteria of this subsection; and

(d) Maintain the following buffers:

1. A buffer of 100 feet must be maintained between any well and an area on which an IBD soil amendment is applied;

2. A buffer of 150 feet must be maintained between any sinkhole, as defined in O.C.G.A. § 12-4-142(5), and an area on which an IBD soil amendment is applied;

3. A buffer of 100 feet must be maintained between any property line and an area on which an IBD soil amendment is applied. The 100-foot buffer may be reduced if the current owner of the adjacent property provides a written waiver consenting to the IBD soil amendment application being closer than 100 feet to the adjoining property line;

4. A buffer of 100 feet must be maintained between any water of the State and an area on which an IBD soil amendment is applied; and

5. A buffer of 300 feet must be maintained between any inhabited dwelling and an area on which an IBD soil amendment is applied unless such dwelling is located on the landowner's property. The 300-foot buffer may be reduced if the current owner of a dwelling provides a written waiver consenting to the IBD soil amendment application being closer than 300 feet.

(3) Registrants, either through the Registrant's own action or through the action of a product control contractor, and product control contractors, must not:

- (a) Apply an IBD soil amendment in a manner that harms beneficial plants, animals, or aquatic life;
- (b) Apply an IBD soil amendment during a precipitation event;
- (c) Apply an IBD soil amendment to saturated soil;
- (d) Transport or store an IBD soil amendment in a containment vessel that fails to prevent leaking, spilling, or leaching of the IBD soil amendment;
- (e) Transport an IBD soil amendment in a containment vessel that is not covered or encapsulated;
- (f) Load or unload a containment vessel in a manner that fails to prevent the leaking or spilling of the IBD soil amendment beyond the intended storage or application site;
- (g) Intermingle an IBD soil amendment with another product, including but not limited to other soil amendments, in a containment vessel, unless all products in the containment vessel are soil amendments registered by the same registrant;
- (h) Store an IBD soil amendment in an earthen containment vessel, including, but not limited to an earthen pit or lagoon, that does not meet the design and construction criteria prescribed by Natural Resources Conservation Service, including minimum freeboard volumes set forth therein;
 - 1. Locations of earthen containment vessels used to house IBD soil amendments in a Georgia county may be requested from the Department by that county's Board of Commissioners;
- (i) Store an IBD soil amendment on a site for longer than 180 calendar days;
- (j) Apply an IBD soil amendment to an area without vegetative cover;
- (k) Apply an IBD soil amendment in a manner inconsistent with the application site NMP or at an application site without an NMP;
- (l) Apply an IBD soil amendment in excess of application rates detailed in an NMP, so that total application of a nutrient exceeds the agronomic rate detailed in the NMP;
- (m) Fail to apply lime, gypsum, or other materials to maintain a pH within the optimum range for crop production, between 6.0 to 7.5, upon fields to which an IBD soil amendment is applied during the period when registrant's product is being delivered to or applied at a site; or
- (n) Apply an IBD soil amendment during wind conditions that cause, or might reasonably be expected to cause, the IBD soil amendment to reach any surface water or to cross the boundary of the landowner's property.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-2-.05 Records

(1) Each person who distributes an IBD soil amendment, whether directly or through a product control contractor, must maintain records of each distribution. Each distribution record must be maintained for one year and must be made available to the Commissioner or the Commissioner's designated agent upon request. Each IBD soil amendment distribution record must include the following:

- (a) Distributed product name;
- (b) Quantity distributed in either tons or gallons;
- (c) Date and time of distribution;
- (d) Name and contact information of the distributor, whether the registrant or a product control contractor; and
- (e) Name and contact information of the landowner receiving distribution of the soil amendment, if different from the product control contractor.

(2) Each person who applies an IBD soil amendment must maintain records of each application. Each application record must be maintained for one year and must be made available to the Commissioner or the Commissioner's designated agent upon request. Each IBD soil amendment application record must include the following:

- (a) Applied product name;
- (b) Quantity applied in either tons or gallons;
- (c) Date and time of application; and
- (d) Method of application.

Statutory Authority: O.C.G.A. §§ 2-12-75 and 2-12-80.

40-31-2-.06 Elemental Concentration Limits

(1) Registrants and product control contractors must ensure that IBD soil amendments they distribute, transport, store, or apply comply with the following elemental ceiling concentration limits:

Element	Ceiling Concentration (mg/kg) (dry weight basis)
Arsenic	75
Cadmium	85
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
Selenium	100
Zinc	7500

(2) Registrants and product control contractors must ensure that IBD soil amendments they distribute, transport, store, or apply to agricultural land or sites likely to result in contact with the public comply with the following monthly average elemental concentration limits:

Pollutant	Monthly Average Concentrations (mg/kg) (dry weight basis)
Arsenic	41
Cadmium	39
Copper	1500
Lead	300
Mercury	17
Nickel	420
Selenium	100
Zinc	2800

(3) If the elemental concentration limits in Ga. Comp. R. and Regs. r. 40-31-2-.06(2) cannot be met where IBD soil amendments are applied to agricultural land or sites likely to result in contact with the public, registrants and product control contractors must instead ensure that IBD soil amendments they distribute, transport, store, or apply to agricultural land or sites likely to result in contact with the public comply with the following annual elemental loading rates:

Pollutant	Annual Elemental Loading Rate (lbs/acre)
Arsenic	37
Cadmium	35
Copper	1338
Lead	268
Mercury	15

Nickel	375
Selenium	89
Zinc	2498

Statutory Authority: O.C.G.A. § 2-12-80.

Subject 40-31-3
Nutrient Management Plans

40-31-3-.01 Nutrient Management Plan Required

(1) The registrant, the registrant's product control contractor, and the landowner, as applicable, must ensure a nutrient management plan is procured for each site where an IBD soil amendment will be applied, and must ensure the nutrient management plan is amended as required.

- (a) No registrant or product control contractor may apply an IBD soil amendment to a site until forty-eight hours after a nutrient management plan is obtained for the site.
- (b) The registrant, the registrant's product control contractor, and the landowner, as applicable, must each ensure the nutrient management plan for a site is submitted to the Commissioner prior to application at that site.
- (c) Registrants, product control contractors, and landowners distributing, transporting, storing, or applying IBD soil amendments registered prior to the adoption of this Subject must achieve compliance with this Subject within ninety days of its effective date.

(2) An NMP prepared pursuant to this Subject must be amended within sixty days to reflect changes in crops grown at the site, IBD soil amendments applied, soil amendment application methods, application site locations, or material site conditions.

- (a) In addition to amendments required to reflect changes at an application site, an annual farm assessment must be completed for any site continuing to receive IBD soil amendments beyond the calendar year in which the initial NMP was prepared. This reassessment must include, at minimum, new analyses of soil and soil amendments as described in Ga. Comp. R. and Regs. r. 40-31-3-.04 and 40-31-3-.05.

(3) Registrants, product control contractors, and landowners, as applicable, shall be exempt from compliance with this Subject for sites receiving, storing, or applying only IBD soil amendments:

- (a) Constituting biosolids treated to Class A or exceptional quality sludge standards in accordance with a sludge management plan approved under a permit issued by EPD;
- (b) Constituting compost produced by a Class I, II, or III composting or anaerobic digester facility in accordance with rules enforced by or a permit issued by EPD; or
- (c) Constituting forest products or soil amendments derived from industrial by-products generated solely from forest products, excluding chemical by-products of pulp digestion, slates, clays, shells, gypsum, and lime, as provided in O.C.G.A. § 2-12-80(1)(B).

40-31-3-.02 Nutrient Management Plan Components

(1) Each NMP must include at least the following, substantially in the form of NMP published by the Department:

- (a) A description of the property, including the property's address;
- (b) Maps required in this Subject, in color;
- (d) Information regarding the soils of the application site;
- (e) Information regarding agricultural operations at the site, including crops, animal husbandry, and related yield goals;
- (f) Nitrogen and phosphorous application rates for the crops to be grown on each application area based on published literature for crops in Georgia;
- (g) Required practices to maintain a pH within the optimum range for crop production, between 6.0 to 7.5, including by supplementally applying liming, gypsum, or other materials, during the period when a registrant's product is being applied at a site;
- (h) Maximum hydraulic loading rates in inches per hour or gallons per hour and the maximum total hydraulic loading amount per application for IBD soil amendments applied by subsurface injection;
- (i) Information outlining the required timing and method of IBD soil amendment application;
 - 1. NMPs will specify that IBD soil amendments with greater than or equal to 15% moisture content be applied via subsurface injection.
 - 2. NMPs will specify that IBD soil amendments with less than 15% moisture content be applied by topical application followed by incorporation into the soil within 6 hours of application.
- (j) A current representative analysis of the IBD soil amendments prior to land application;
- (k) Best management practices to protect human health and the environment; and
- (l) If the application site was not previously covered by a NMP, a certified statement by the landowner detailing the product registration numbers, area of application, and dates of application of IBD soil amendments received during the past six months.

(3) No NMP may contain requirements or recommendations inconsistent with this Subject.

(4) All records relating to NMP development, amendment, and compliance, including but not limited to calibration and maintenance records, must be retained for a period of thirty-six months beyond the useful life of the NMP and must be provided to the Department upon the Department's request.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-3-.03 Nutrient Management Plan Maps

(1) An NMP must include at least the following maps, in color:

(a) An aerial map of the site delineating areas where soil amendments will be applied, which includes:

1. The total acreage of the site and the total acreage of the area to which a soil amendment will be applied; and
2. The GPS coordinates or latitude and longitude of the centroid of proposed application fields.

(b) A topographic map or maps identifying:

1. Boundaries of all areas where soil amendments will be applied, including buffer areas;
2. On-site access roads;
3. Areas of the site located in a 100-year floodplain;
4. Location of all dwellings on or adjacent to the application site;
5. Location of all public wells on-site or within five hundred feet of the site;
6. Location of all private wells on-site and within two hundred and fifty feet of the site;
7. Surface waters, such as ponds, lakes, rivers, or streams, on or adjacent to the application site; and
8. Natural or manmade drainage areas, including intermittent streams and ditches, on or adjacent to the application site.

(2) Each NMP map must include:

- (a) A north arrow;
- (b) The date the map was prepared;
- (c) A legend with map symbols if the map includes symbols; and
- (d) A bar scale on the map.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-3-.04 Soils Information

- (1) Each NMP must include crop and soils information. Natural Resources Conservation Service soils surveys must be used to identify the soil series.
- (2) Each NMP must include a soils survey map with the application fields clearly delineated and soils series descriptions including texture, permeability, slope, drainage, depth to seasonal high-water table, and erodibility.
- (3) The pH of the soil in each proposed application field within a site must be based upon a composite sample of all soil types found in proposed application field.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-3-.05 Soil Amendment Analysis

(1) Each NMP must include a current representative analysis of each IBD soil amendment intended for application at the site analyzed in the NMP.

(2) Each current representative analysis included in a NMP must include the following:

- (a) Ammonia as N, %
- (b) Total Kjeldahl Nitrogen, %
- (c) Total Nitrogen, %
- (d) Nitrate as N, %
- (e) % Volatile Solids
- (f) % Total Solids
- (g) pH, standard units
- (h) Total Phosphorus as P, %
- (i) Total Potassium as K, %
- (j) Arsenic, mg/kg
- (k) Cadmium, mg/kg
- (l) Copper, mg/kg
- (m) Lead, mg/kg
- (n) Mercury, mg/kg
- (o) Molybdenum, mg/kg
- (p) Nickel, mg/kg
- (q) Selenium, mg/kg
- (r) Zinc, mg/kg
- (s) Aluminum, mg/kg

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-3-.06 Material Identification and Application Method

(1) Each NMP must provide the registration number of each soil amendment under the NMP.

(2) Each NMP must specify the method of application for each soil amendment under the NMP, and include a detailed description of all operational procedures.

Statutory Authority: O.C.G.A. § 2-12-80.

40-31-3-.07 Additional Monitoring Requirements

(1) Upon written request by the Commissioner, a landowner must collect and analyze soil, surface water, groundwater, stored soil amendment, or other samples in a manner and frequency specified by the Department.

(2) Upon written request by the Commissioner, a landowner must perform or contract for ambient monitoring of surface water or groundwater.

Statutory Authority: O.C.G.A. § 2-12-80.