

30 TAC 312 DRAFT RULE LANGUAGE

The following concepts and draft rule language (red text) are presented for stakeholder review and comment. The language below represents the primary changes needed to implement the ED's concepts for addressing odor. Additional minor revisions will be needed for implementation. The complete rule language revisions will be available for comment during a later step in the rulemaking process (Please see Next Steps on biosolids website).

NEW CLASS AA SEWAGE SLUDGE	
Concept 1:	<p>TCEQ proposes to separate the existing Class A sewage sludge classification into Class A and Class AA. See Table 1 below for additional information on this concept, including categories and requirements highlighting the differences which are specific to the types of pathogen treatment and method of land application. The management conditions for each category become more stringent as the treatment processes used for pathogen reduction used are less advanced. This approach provides additional incentives for permittees to select more advanced pathogen treatment processes (such as composting, heat drying, pasteurization, and other equivalent processes).</p> <p>New Class A would be based on treatment processes under pathogen alternatives 5 and 6 within 40 CFR Part 503, Subpart D. See attached Table 1.</p> <p>New Class AA would be based on treatment processes under pathogen alternatives 1 through 4 within 40 CFR Part 503, Subpart D. See Attached Table 1. TCEQ requests stakeholder input on the proposed separation of Class A and Class AA and looks forward to receiving alternate recommendations for a performance based criteria, such as % moisture content.</p> <p>30 TAC 312.82 will need to be updated to distinguish the pathogen treatment requirements between Class A and Class AA.</p>
§312.8.	<p>A new definition will be included for Class A sewage sludge.</p> <p>(17) Class A sewage sludge – Sewage sludge meeting one to the pathogen reduction requirements in §312.82(a)(3) of this title (relating to Pathogen Reduction).</p>
§312.8	<p>A new definition will be included for Class AA sewage sludge.</p> <p>(18) Class AA sewage sludge - Sewage sludge meeting one to the pathogen reduction requirements in §312.82(a)(2) of this title (relating to Pathogen Reduction).</p>
§312.82(a)(2)	<p>Compliance Alternatives Class AA - will now include treatment alternatives §312.82(a)(2)(A) through (D) from existing rule. See attached Table 1.</p>
§312.82(a)(3)	<p>Compliance Alternatives Class A – add new §312.82(a)(3) to state that Class A includes treatment alternatives §312.82(a)(2)(E) and (F) from existing rule. See attached Table 1.</p>
APPLICABILITY OF MANAGEMENT PRACTICES	
Concept 2:	<p>Update applicability section within §312.41</p>
§312.41(b)	<p>Outlines applicable requirements for Class A - See Table 1</p> <p>Bulk sewage sludge which meets the metal concentrations in 312.43(b)(3) of this title (relating to Metal Limits), the pathogen requirements in 312.82(a)(3) of this title (relating to Pathogen Reduction), and one of the vector attraction reduction requirements in 312.83(b)(1)-(8) of this title</p>

	(relating to Vector Attraction Reduction) shall be designated Class A. Section 312.42 of this title (relating to General Requirements) is applicable when Class A bulk sewage sludge is applied to the land.
§312.41(b)	<p>Outlines applicable requirements for Class AA – See Table 1</p> <p>Bulk sewage sludge which meets the metal concentrations in 312.43(b)(3) of this title (relating to Metal Limits), the pathogen requirements in 312.82(a)(2) of this title (relating to Pathogen Reduction), and one of the vector attraction reduction requirements in 312.83(b)(1)-(8) of this title (relating to Vector Attraction Reduction) shall be designated Class AA. Sections 312.44(<i>reference to applicable requirements for new Class AA</i>), of this title (relating to Management Practices) shall apply when Class AA bulk sewage sludge is applied to the land.</p>
MANAGEMENT PRACTICES	
Concept 3:	State applicability of core management practices within §312.44 for bulk sewage sludge to address odor. This would include the following new requirements for Class AA and “core requirements” applicable to all Class A, Class AA, and Class B sewage sludge.
	<p>This is an existing requirement for Class B which will now be applicable to all classes of sewage sludge.</p> <p>Land application of Class A, Class AA, and Class B bulk sewage sludge must not cause or contribute to the harm of a threatened or endangered species of plant, fish, or wildlife or result in the destruction or adverse modification of the critical habitat of a threatened or endangered species.</p>
	<p>This is an existing requirement for Class B which will now be applicable to all classes of sewage sludge. It is intended to address odor at land application sites due to rainfall.</p> <p>Class A, Class AA, and Class B bulk sewage sludge must not be applied during rainstorms or during periods in which surface soils are water-saturated.</p>
	<p>Adverse Weather and Alternative Plan – Intended to address odor at land application sites due to adverse weather conditions. This is a new requirement which shall apply to the wastewater permit holder/generator of Class A, Class AA, or Class B sewage sludge.</p> <p>The person who prepares Class A, Class AA, and Class B bulk sewage sludge shall submit an Adverse Weather and Alternative Plan. The plan shall address instances when the sewage sludge cannot be applied to the land application site due to adverse weather or other conditions such as wind precipitation, field preparation delays, and site access limitations.</p>
	<p>This is an existing requirement for Class B which will now be applicable to all classes of sewage sludge. It is intended to address proper land application and odor at land application sites.</p> <p>Class A, Class AA, and Class B bulk sewage sludge must be applied uniformly over the surface of the land.</p>
	<p>This is an existing buffer zone requirement for Class B which will also now be applicable to Class AA sewage sludge.</p> <p>(D) 750 feet, established school, institution, business, or occupied residential structure.</p>
	This is an existing buffer zone requirement for Class B which will also now

	<p>be applicable to Class AA sewage sludge.</p> <p>(E) 50 feet, public right-of-way and property boundaries.</p>
Concept 6:	<p>Nuisance condition control - This is an existing requirement for Class B which will now be applicable to all classes of sewage sludge.</p> <p>(1) A land application site location must be selected and the site operated in a manner to prevent public health nuisances.</p> <p>(2) Sewage sludge debris must be prevented from blowing or running off site boundaries or into surface waters.</p>
Concept 7:	<p>BMPs to address tracking biosolids off-site – Complaints made by public that sludge material is seen on the roadways. This will assist in regulating Class AA material that is tracked off-site by transporters to and from the land application site.</p> <p>This is a new requirement and will be applicable to Class AA and Class B sewage sludge.</p> <p>(3) When necessary to address nuisance conditions occur, the operator shall:</p> <p>(C) design and utilize appropriate controls to prevent off-site tracking during the transport of sewage sludge material.</p> <p>This is an existing requirement for Class B which will now be applicable to all classes of sewage sludge. It is intended to ensure that trucks transporting sludge are appropriately covered to prevent spillage of material during transport.</p> <p>A permit holder of a Class A, Class AA or Class B sewage sludge site may not accept sewage sludge, unless the sludge is transported to the land application unit in a covered container with the covering firmly secured at the front and back.</p>
Concept 8:	<p>Clarify ED’s authority to add more stringent requirements to a wastewater permit such as requiring an Odor Control Plan. If necessary to address nuisance odors, a permittee may be required to develop an Odor Control Plan which would include:</p> <ul style="list-style-type: none"> • Investigation of odor source • Evaluation of the processing from beginning to end (WWTP, transport and land application) • Implementation of corrective action measures for odor control • Implementation of Best Management Practices • Requirement of deadline to submit the plan (90 days) • Certification by a Professional Engineer licensed in the State of Texas • Implementation schedule • Submission of progress reports • Submission of final report upon successful implementation <p>312.44(j)(4)(A) Pursuant to the authority vested in the commission or executive director in 30 TAC § 312.6 of this title (relating to additional or</p>

	<p>more stringent requirements), a person who prepares sewage sludge that is applied to the land, to any person who applies sewage sludge to the land, to sewage sludge applied to the land, and to the land on which sewage sludge is applied, on a case by case basis may be subject to an Odor Control Plan.</p>
	<p>312.50(a)(10) In the event a person who prepares sewage sludge that is applied to the land or who applies sewage sludge to the land, is subject to an Odor Control Plan as described in 30 TAC § 312.44(J)(4)(A) of this title (relating to Odor Control Plan), that person must comply with the terms of the applicable Odor Control Plan.</p>
Concept 9:	<p>Staging of biosolids away from odor receptors. This will decrease the potential for nuisance odors on neighboring properties. For Class AA and B.</p>
	<p>312.50(c) Staging of sewage sludge on-site, prior to land application, is allowable without executive director approval. Staging of sewage sludge may only occur for a maximum of seven calendar days. To prevent nuisance conditions from occurring, the operator shall stage the sewage sludge away from receptors to the extent that is practicable in order to:</p> <ul style="list-style-type: none"> (1) prevent off-site dust migration from the staging area; and (2) prevent objectionable odors that may occur from the staging area.
Concept 10:	<p>Incorporation/injection of sludge at land application sites. Class AA sludge will be held to more stringent site management conditions unless incorporated/injected into the surface of the land as a vector attraction reduction option. If incorporated into the soil, Class AA would be exempted from the new Class AA management practices and would be subject to Class A requirements. The intent is to promote land application through incorporation into the soil, when feasible.</p> <p>If Class AA sewage sludge is injected below the surface of the land is <i>Class AA</i> with respect to pathogens, as described in §312.82 (relating to Pathogen Reduction), it shall be exempt from Class AA management requirements and shall adhere to all Class A requirements within this subchapter.</p>
Concept 11:	<p>Posting signage at application sites – Intended to address concerns that neighboring landowners have no knowledge of the land application activity taking place on an adjacent property.</p>
	<p>312.44(l) A permit holder of a Class AA or Class B sewage sludge site shall post a sign that is visible from a road or sidewalk that is adjacent to the premises on which the land application unit is located stating that a sewage sludge beneficial land application site is located on the premises.</p>

Table 1

Core Requirements applicable to Class A, AA and B:

1. Clarify ED authority to add more stringent requirements such as requiring an Odor Investigation and Control Plan.
2. Prohibit land application during rain or on saturated soils
3. Require cover on trucks
4. Nuisance condition prohibition
5. Submittal of an Adverse Weather and Alternative Plan

	Treatment Process	Bacteria Levels	Requirements
Class A	Pathogen Alternatives 5 or 6 PFRP*	Fecal < 1000	Core Requirements
Class AA (incorporated)	Pathogen Alternatives 1 thru 4	Fecal < 1000	Core Requirements only if incorporated into soil
Class AA	Pathogen Alternatives 1 thru 4	Fecal < 1000	Core Requirements plus the following: <ol style="list-style-type: none"> 1. Post signage at application sites 2. Buffer zones to odor receptors 3. Staging of biosolids away from odor receptors 4. BMPs to address tracking biosolids off-site
Class B	PSRP**	Fecal < 2 million	Core Requirements plus the following: <ol style="list-style-type: none"> 1. Staging of biosolids away from odor receptors 2. BMPs to address tracking biosolids off-site

*PFRP – Process to Further Reduce Pathogens

**PSRP – Process to Significantly Reduce Pathogens

Table 1

Class B Pathogen Alternatives - Process to Significantly Reduce Pathogens (PSRP)

Aerobic Digestion
Anaerobic Digestion
Air Drying
Composting
Lime Stabilization

Class AA Pathogen Alternatives

Alternative 1: Time and temperature
Alternative 2: High pH, high temperature and time
Alternative 3: Concentrations of enteric viruses and helminth ova – known process
Alternative 4: Concentrations of enteric viruses and helminth ova-unknown process

Class A Pathogen Alternatives

Alternative 5: Process to Further Reduce Pathogens (PFRP)
Composting
Heat Drying
Heat Treatment
Thermophilic aerobic digestion
Pasteurization
Alternative 6: Equivalent to PRFP (EPA approval)