

TTD Number: (602)207-4829

Secondary Name: Barry Abbott

Address: Solid Waste Section
3003 North Central Avenue, T3011A
Phoenix, AZ 85012

Telephone Number: (602)207-2226, (800)234-5677 xt 2226 (AZ only)

TTD Number: (602)207-4829

6. An explanation of the rule, including the agency's reasons for initiating the rule:

This rule making is exempt from the Title 41 requirements, therefore, this is the only notice which is a notice of exempt final rulemaking. This rule is exempt by statute (A.R.S. § 49-701.01(C)) as a result of the director of ADEQ approving a petition for exempting a constituent from the definition of a solid waste.

On November 18, 1997, Pima County Wastewater Management Department, (Pima County) petitioned ADEQ to approve a state-wide exemption from the definition of solid waste for biosolids which have been applied to the land for use as a fertilizer or beneficial soil amendment within existing state and federal regulatory programs. The petition states in part, The final Soil Remediation Standards Rule, Title 18, Chapter 7, Article 2 have the unintended potential to impact the otherwise legal and environmentally beneficial application of biosolids to agricultural land and for reclamation of mined lands. As provided by A.R.S. § 49-701.01(C), Pima County Wastewater Management Department request a statewide exemption from the definition of solid waste for biosolids which are beneficially applied within the existing federal and state regulatory programs to land as a soil amendment, conditioner, or fertilizer.

Pima County went on to state that this exemption is appropriate to resolve the potential for sites to which biosolids have been legally applied that exceed the soil remediation level, a circumstance which could lead to regulatory action and a requirement to remediate the site. For instance, application of biosolids to mine tailings while environmentally beneficial, might be considered by ADEQ as adding solid waste (biosolids which is sludge

from a waste treatment plant) to the tailings which are already an exempted constituent. This would result in regulation of a substance that is already exempted from the solid waste program. The application of biosolids to land for beneficial use is regulated by federal regulations at 40 CFR Part 503 and Arizona rules. The EPA regulations and the state rules provide regulatory controls to assure that biosolids beneficially applied to land within the regulatory framework are 'unlikely to cause or substantially contribute to a threat to the public health or the environment.'

On February 17, 1998, the Director approved the petition to exempt land application of biosolids from the definition of solid waste as described in this exempt rulemaking.

How did biosolids become a part of the definition of solid waste? Solid waste is defined as garbage, trash, rubbish, waste tire, refuse, sludge from a waste treatment plant, water supply treatment plant or pollution control facility and other discarded material, including solid, liquid, semisolid or contained gaseous material. This definition is very broad and often subject to further interpretation. For purpose of regulating the application of sludge to the land for use as a fertilizer or beneficial amendment, A.R.S. § 49-761(F) defines sludge as meaning sewage sludge. Biosolids are defined in R18-13-1501 as:

Sewage sludge, including exceptional quality biosolids, which is placed on, or applied to the land in order to use the beneficial properties of the material as a soil amendment, conditioner, or fertilizer.

Biosolids do not include any of the following:

- A. Sludge determined to be hazardous in accordance with A.R.S. Title 49, Chapter 5, Article 2, and 40 CFR 261.
- B. Sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry-weight basis).
- C. Grit (for example, sand, gravel, cinders, or other materials with a high specific gravity) or screenings generated during preliminary treatment of domestic sewage by a treatment works.
- D. Sludge generated during the treatment of either surface water or groundwater used for

drinking water.

- E. Sludge generated by an industrial facility during the treatment of industrial wastewater, or industrial wastewater combined with domestic sewage.
- F. Commercial septage, industrial septage, or domestic septage combined with commercial or industrial septage.
- G. Special wastes, as defined and controlled under A.R.S. Title 49, Chapter 4, Article 9.

The Legislature created two processes for exempting constituents from the definition of solid waste. One is by statute, the other is by petition. To more precisely define solid waste that is regulated by ADEQ, some constituents are excluded from the definition by A.R.S. § 49-701.01(B). This statute contains all constituents identified as exempt from the definition of solid waste. These items are generally regulated by another program or do not require regulation because of the minimal impact on human health and the environment.

An example of a constituent that is not regulated is inert material. This constituent will not leach anything of consequence into the ground or ground water, therefore it should be exempt from regulation by ADEQ. Since inert material does not produce any kind of a release, and does not pose a threat to human health and the environment, it is not regulated.

The legislature allowed for a procedure to exempt substances from the definition of a solid waste by petition to ADEQ. This process is the basis behind this final exempt rulemaking. Pursuant to A.R.S. § 49-701.01(C)(1), a person may petition the Director of the Department of Environmental Quality (ADEQ) to exempt a substance as solid waste by submitting a written request to the Director. The request may be for a state-wide or site-specific exemption.

On November 18, 1997, Pima County Wastewater Management Department, (Pima County) petitioned ADEQ to approve a state-wide exemption from the definition of solid waste for biosolids which have been applied to

the land for use as a fertilizer or beneficial soil amendment within existing state and federal regulatory programs. On February 17, 1998, the Director approved the petition to exempt land application of biosolids from the definition of solid waste as described in this exempt rulemaking. Pursuant to A.R.S. § 49-701.01(C)(2) the Director shall initiate a rulemaking to add the substance to the list of exemptions. This rulemaking is a result of the approved petition submitted by Pima County.

What biosolids are affected by this exemption? Only biosolids that are a residue generated during the treatment of domestic sewage may be land applied in Arizona. Biosolids that are generated from any industrial process are not allowed to be land applied in Arizona, and therefore are still subject to regulation as solid waste.

Arizona soils become very dry and cracked from the intense heat and high silt and clay content. The agricultural industry has found the land application of biosolids to be a cost-effective solution to introduce organic constituents into the soil to improve the quality of the soil for the growing crops. Additionally, with the implementation of a state-wide mining land reclamation program, the mining industry is looking to land application of biosolids as a cost effective solution to revegetating mine tailing piles. Therefore, Arizona's agriculture and mining industries have found the land application of biosolids an important re-use of a waste.

The Land Application of Biosolids rule was effective April 23, 1996. However, ADEQ has been regulating the application of sewage sludge (now called biosolids) to land since 1979, when 40 CFR 257 was promulgated. In response to the 40 CFR 257 requirements, ADEQ's Solid Waste Section developed guidelines which established criteria for sewage sludge and the land to which the sewage sludge would be applied, in addition all sites had to be approved by ADEQ prior to the sewage sludge being applied to the land. Subsequently, ADEQ's Ground Water Protection Program and Aquifer Protection Permit Program (APP) allowed the land application of sewage sludge in accordance with the Solid Waste Section's guidelines to continue under a general permit. Therefore, land application of biosolids has been a regulated activity for many years. The result of the oversight of this activity by ADEQ is that continuous land application of biosolids since 1979 has been done in Arizona

and has not resulted in any known contamination of the groundwater when applied according to the rules. Consequently, biosolids which have been placed on or applied to the land in full conformity with all applicable state and federal statutes and regulations may be considered unlikely to cause or substantially contribute to a threat to the public health or the environment. Based on a finding of no threat to human health and the environment, the Director has determined that land application of biosolids in full conformity with applicable statutes and regulations should not be regulated as a solid waste. The exemption granted in this rulemaking applies only when the biosolids and the soil to which it has been applied remain at the site of application. Any soils excavated after land application of biosolids are not exempt from being a solid waste. This exemption contemplates agricultural sites being converted to residential sites in the future, as has been done in the past. Therefore, if a site meets all the requirements of this exemption and is later converted to residential or commercial use, it will not be subject to further regulatory action by the Department pursuant to any other regulatory program. This rule does not give any exemption for any other releases of contaminants or for pesticides applied to the land. The soil remediation levels set by the soil remediation rule are unaffected by this exemption, and may be applicable as required by market forces or parties other than the Department.

Today's rule is intended to clarify any questions about whether land-applied biosolids are defined as a solid waste and possibly subject to solid waste regulations outside the land application of biosolids rule.

7. **A showing of good cause why the rule is necessary to promote a statewide interest if the rule will diminish a previous grant of authority of a political subdivision of this state:**

Not Applicable.

8. **A summary of the economic, small business and consumer impact:**

A.R.S. § 49-701.01(C)(2) the Director shall initiate a rulemaking to add the substance to the list of exemptions. This rulemaking is exempt from the requirements of Title 41, Chapter 6, therefore no economic, small business and consumer impact summary is included.

9. **A description of the changes between the proposed rules, including supplemental notices, and final rules (if applicable):**

Not applicable.

10. A summary of the principal comments and the agency response to them:

A.R.S. § 49-701.01(C)(2) the Director shall initiate a rulemaking to add the substance to the list of exemptions. This rulemaking is exempt from the requirements of Title 41, Chapter 6. No comments were solicited or received.

11. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules.

Not applicable.

12. Incorporation by reference and their location in the rules.

Not applicable.

13. Was the rule previously adopted as an emergency rule?

No.

14. The full text of the rules follows:

TITLE 18. ENVIRONMENTAL QUALITY
CHAPTER 13. DEPARTMENT OF ENVIRONMENTAL QUALITY
SOLID WASTE MANAGEMENT

Article 2. ~~Reserved~~ Solid Waste Definitions; Exemptions

R18-13-201 Land Application of Biosolids Exemption

R18-13-201. Land Application of Biosolids Exemption

- A. This article applies only to biosolids as defined in R18-13-1501(7). The land application of biosolids, when placed on or applied to the land in full conformity with 18 A.A.C. 13, Article 15 and A.R.S. § 49-761(F), and if the site of land application has ceased to receive application of biosolids and all applicable site restrictions set by A.A.C. Title 18 have been satisfied, is exempt from the definition of solid waste found at A.R.S. § 49-701.01(A). This exemption applies only when the biosolids and the soil to which it has been applied remain at the site of the application.
- B. This exemption does not alter or set any new standard for the soil remediation standards found at 18 A.A.C. 7, Article 2.