

# Product Information & Use Guide for Liberty's PAG-07 Product

An exceptional quality biosolids approved for distribution in New York and Pennsylvania

The "PAG-07" material is made from stabilized municipal biosolids and quicklime. These ingredients are blended together in a patented pasteurization Process to Further Reduce Pathogens (PFRP), as required by United States Environmental Protection Agency (EPA), New York State Department of Environmental Conservation (DEC), and Pennsylvania Department of Environmental Protection (DEP), prior to public distribution. "**Exceptional Quality Biosolids**" is sewage sludge as defined by Title 25 Pa. Code §271.1 that meets the pollutant quality standards listed in Title 25 Pa. Code §271.914(b)(1) and (3), one of the **Class A** pathogen reduction alternatives listed in §271.932(a), and one of the vector attraction reduction options listed in §271.933(b)(1)-(8). Nutrient values provided here.

Working density: 52-62 lb/cubic foot

Solids content: 40% average

	Dry Weight	As Delivered
Total Neutralizing Value*	52%	21%
Percent Passing 20 Mesh Sieve**		70%
Percent Passing 100 Mesh Sieve**		39%
Minimum Fineness Score**	57%	57%
Effective Neutralizing Value	30%	12%
Average Calcium	23.4%	9.6%
Average Magnesium	0.62%	0.24%
Average Sulfur	1,10%	0.43%

<sup>\*</sup>as calcium carbonate equivalence

### THE PAG-07 MATERIAL CONTAINS THE FOLLOWING QUANTITIES OF MAJOR NUTRIENTS

Average quantities of nutrients in as-delivered material

Nutrient	Percent	Lbs / Ton
0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.61	22.2
Organic Nitrogen (N)	1.61	32.2
NH4-N	0.06	1.10
First year plant available Nitrogen (PAN)*	0.52	10.4
Phosphorus (as P <sub>2</sub> O <sub>5</sub> )	0.96	19
Soluble Potash (as K <sub>2</sub> O)	0.05	1.0

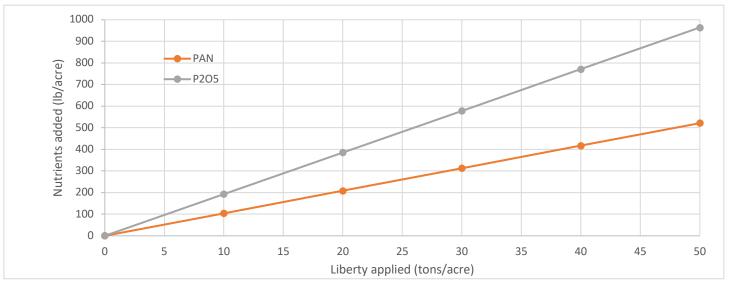
<sup>\*</sup>Assumes 30% mineralization of the Organic N in the first growing season application plus all NH4-N (therefore incorporation).



<sup>\*\*</sup>for the quicklime admixture

## RECOMMENDED APPLICATION RATE BASED ON CROP NITROGEN REQUIREMENT

Amount of first year Plant Available N (PAN) and P (P2O5) added with Liberty's PAG-07 application



It is recommended that soils be tested for liming requirement and to base Liberty application rates on the test results. Application rates are based on lime requirements, then crop nitrogen needs. It is recommended that spreading be done at the lower rate. For optimum crop yields, supplement with other fertilizers only if necessary. Liberty may not be applied at a rate greater than the agronomic loading rate unless a greater rate is approved by the DEP in writing. Use of this product in a manner inconsistent with this label is prohibited.

The Liberty Exceptional Quality Biosolids-Derived Material processed in accordance with the PA DEP Processing Permit No. 603455 and distributed in accordance with PA DEP Permit No. PAG-07-2203. ("PAG-07" or "Product") is manufactured by Liberty Processing & Soils LLC at the Liberty Processing & Soils Facility located at 12 Tremont Road, Tremont, PA 17981.

## Questions? Please contact a Liberty Representative.

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## LAND APPLICATION, STORAGE REQUIREMENTS

## and EXCEPTIONS for PAG-07 in Pennsylvania ("Product")

Excerpted from PA DEP Permit No. PAG-07 2203

## LAND APPLICATION REQUIREMENTS (Permit No. PAG-07-2203 SECTION E.)

- 1. Exceptional quality biosolids may not be applied to the land at a rate that is greater than the agronomic rate, unless a greater application rate is approved by DEP in writing for land reclamation activities.
- 2. Agronomic rates must be calculated in accordance with the most current version of DEP's Biosolids Training Manual. The Penn State Agronomy Guide, documented yields, or other applicable information sources may be used to determine appropriate yields and nutrient needs for the purposes of calculating application rates.
- 3. For bulk agricultural activities that are within the direct control of the permittee or agent for the permittee, the permittee must notify the appropriate regional DEP office in writing a minimum of 24 hours prior to commencing land application activities for the first time. This notification can be accomplished via e-mail, facsimile, or mail. The notification must contain the following information:
  - a. Name, address, and phone number of permittee(s)
  - b. General permit number(s)
  - c. Name, address, and phone number of land applier
  - d. Name and address of land application site (the address must be the location of the site and not a PO Box or Rural Route number)
- 4. Exceptional quality biosolids land applied to a reclamation site shall be incorporated into the soil within 24 hours of land application.
- 5. [...] If DEP determines that a specific management practice or general requirement is necessary to protect the environment from reasonably anticipated adverse effects, DEP will notify the permittee of the applicable requirements in the letter granting approval of coverage under this General Permit.

#### STORAGE REQUIREMENTS (Permit No. PAG-07-2203 SECTION G.)

Bulk storage activities at land application sites within the direct control of the permittee or agent for the permittee must follow best management practices (BMP) to minimize and control conditions that would create a public or environmental hazard. BMPs should include:

- 1. Minimizing run-on and runoff from the storage area.
- 2. Storage should not be conducted within 100 feet of a perennial stream, within 33 feet of an intermittent stream, or within 50 feet of a property boundary, unless it is conducted within an enclosed building or other structure. Measures should be taken to minimize and control odors and dust emissions from the storage areas.
- 3. If the storage area requires earth disturbance, such as in the construction of berms, the applicable BMPs as indicated by Chapter 102 should be utilized. These BMPs can be part of or be an amendment to the existing farm conservation or erosion and sedimentation plan. If no plan exists, a Chapter 102 erosion and sedimentation plan may be required.
- 4. Refer to USEPA's Guide to Field Storage of Biosolids, EPN832-B-00-007 (July 2000) for additional information on appropriate BMPs.
- 5. Storage of bulk exceptional quality biosolids within the direct control of the permittee or agent for the permittee cannot be stored longer than 1 year unless otherwise approved by DEP.



#### **EXCEPTIONS (Permit No. PAG-07-2203 SECTION 3.)**

The following beneficial uses of biosolids are <u>not</u> covered by this General Permit:

- Land application of biosolids for beneficial use in watersheds classified as "Exceptional Value (EV)" in Title 25 Pa.
   Code Chapter 93;
- b) Land application of biosolids fo beneficial use that is not, or will not be in compliance with any of the requirements, terms or conditions of this General Permit.
- Land application of biosolids for beneficial use that was produced by a person who has failed and continues to fail to comply or has shown a lack of ability or intetion to comply with a regulation, permit, schedule of compliance or order issued by DEP;
- d) Land application of biosolids for beneficial use that DEP determines an individual permit is required o ensure compliance with the Clean Water Action, the Clean Stream Law, or the Solid Waste Management Act and rules and regulations promulgated thereto;
- e) The beneficial use of biosolids mixed with residual waste, include food processing waste, unless residual waste is authorized for beneficial use via a general permit or determined to be a coproduct as stated in Section A.6. of this General Permit; and

DEP may deny approval of coverage under this General Permit and require submittal of an application for an individual permit based on a review of the NOI or other information submitted or otherwise available to DEP.

