



**2017 ANNUAL REPORT FOR THE
KENT COUNTY BIOSOLIDS MANAGEMENT PROGRAM**
Kent County Department of Public Works, 555 Bay Road, Dover, DE 19901

INTRODUCTION TO KENTORGANITE BIOSOLIDS

Kent County Levy Court's Department of Public Works operates the Kent County Regional Resource Recovery Facility (KCRRRF) and a County-wide collection and transmission system. The facility is located at 139 Milford Neck Road, Milford, DE. "Kentorganite" is the name given to the biosolids end-product produced at the KCRRRF.

Kentorganite is processed from the biosolids generated during the biological treatment of wastewater from residential customers, commercial establishments and industries that discharge to the County's sewer system. The biosolids are dewatered using belt filter presses, and then lime is added as a vector attraction reduction method. The material is sent to dryers that use indirect heat. This produces an "Exceptional Quality" biosolids product.

The biosolids end-product contains nitrogen, phosphorous, and lime and is used as both a soil conditioner and fertilizer on local farms instead of commercial products. These farms grow crops such as alfalfa, barley, corn, grass hay, pasture grasses, and soybeans. In compliance with our permits, Kentorganite's quality is continually tested to meet regulatory requirements of EPA (US EPA Section 503) and the State of Delaware (7 Del. Admin. Code §7103).

**BIOSOLIDS MANAGEMENT WITH AN
ENVIRONMENTAL, HEALTH & SAFETY MANAGEMENT SYSTEM (EHS-MS)**

The Kent County Department of Public Works (DPW) joined the National Biosolids Partnership (NBP) in 2003 and follows its Code of Good Practice in order to further ensure the quality of Kentorganite. The Code is a broad framework of goals and commitments to guide the production, management, transportation, storage, and use of biosolids. The facility became the eleventh wastewater facility to have its Biosolids Management Program (BMP) verified to NBP standards by independent auditors on December 7, 2005.

The Department of Public Works' interest in continual improvement led to the development of an Environmental, Health and Safety Management System (EHS-MS) for the Kent County Regional Resource Recovery Facility (KCRRRF) and the associated collection and transmission system. The EHS-MS which started with the NBP BMP certification standard was expanded to include Environmental (ISO 14001) and Health & Safety (OHSAS 18001) standards. The program was first certified to the additional standards on January 25, 2006.

2017 ANNUAL REPORTING OF COMPLIANCE AND PROGRESS

- **Production and Compliance:** During calendar year 2017, a total of 10,240 dry tons of Kentorganite were applied to local farms and all land-applied materials met our permit requirements.
- **Audits:** The County's EHS-MS is audited to verify its compliance with three (3) standards for recertification. In November 2017, audits of the EHS-MS were conducted. The interim audit of the NBP program aspects found all non-conformities from previous audits were effectively corrected. No additional nonconformities were found with respect solely to the NBP BMP aspects during the audit. However, nonconformities were found with respect to requirements of ISO 140001:2015 and OHSAS 18001:2007 which were subsequently addressed.
- **Goals:** The EHS-MS process is designed to produce biosolids in accordance with the NBP Code of Good Practice, to reduce the environmental impacts of wastewater operations, and to improve employee health & safety. Objectives are established to achieve improvement of facility operations in compliance with the 3 certification standards. Progress was made toward several of these objectives in 2017. In addition, "Goals, Objectives and Targets" were reviewed and revised on October 29, 2017.

For more information, please call the Department of Public Works at 302-744-2430.