ASA
Biosolids Management Program

The Alexandria Sanitation Authority (ASA) plays a key role in protecting the environment and public health. ASA operates an Advanced Wastewater Treatment facility on a 33-acre site on the north bank of Hunting Creek near its junction with the Potomac River. ASA produces approximately 20 dry tons of biosolids every day. Biosolids are the nutrient-rich organic byproduct of biological wastewater treatment. These biosolids are treated and dewatered to a consistency similar to moist soil, and are about 30% dry solids by weight. Because of the moisture content, the biosolids produced total approximately 70 wet tons per day.

Biosolids can be recycled as fertilizer and land applied as a soil amendment. Land application of biosolids represents an environmentally responsible means of sustaining the production of our agricultural lands for future generations. This process returns valuable nutrients to the environment, benefits local farmers, and saves landfill space.

What are the benefits to land applying biosolids?

Biosolids recycling returns a useful resource to the environment. Biosolids are rich in nutrients, containing nitrogen and phosphorus along with other trace nutrients. The application of biosolids to land improves soil properties and plant productivity. Farmers can save anywhere from $75-$100 per acre, significantly improve their crop yield, and reduce erosion and runoff associated with the use of commercial inorganic fertilizers.

The application of biosolids on agricultural land is not only beneficial to farmers but it also benefits the community by helping local farmers stay in business and preserve open spaces.

ASA's plays a key role in protecting public health and the environment.

Are biosolids safe to use?

Yes. The Hampton Roads Sanitary District has established an extensive monitoring program on its Progress Farm to document the long-term effects and benefits of land applying biosolids. The Farm has been in operation for more than 20 years. Long-term scientific studies have repeatedly demonstrated that biosolids recycling is safe. Monitoring of biosolids, soils, water resources and plants continues to show benefits from recycling. These studies formed the basis for federal and local biosolids regulations.

What are the regulations for the land application of biosolids?

The federal biosolids rule is contained in 40 CFR Part 503. The state rule is contained in 12 VAC 5-585-10.

What is the future of our Biosolids Recycling Program?

ASA's aim is to continue to maximize the beneficial reuse of biosolids and to grow and strengthen its relationship with its stakeholders. In accordance with this goal, ASA has implemented an environmental management system (EMS), and is participating in the National Biosolids Partnership (NBP) a national program to recognize industry leaders and ensure and promote sustainable biosolids practices.

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ASA has implemented an environmental management system (EMS) to maintain and demonstrate environmental excellence in all aspects of our organization. We perform a critical mission for our community every day to protect public health and the environment, and we take our job very seriously. This program helps us accomplish that mission.

What is an EMS?

An EMS is a management framework for reducing environmental impacts and improving organizational performance over time. ASA is implementing the EMS to ensure continued excellence and demonstrate high performance to our communities in the following areas:

- Product and service quality
- Regulatory compliance
- Risk management and preparedness
- Credibility with stakeholders
- Record-keeping, documentation and information management

The EMS approach is based on the **Plan, Do, Check, Act** continual improvement cycle of total quality management (TQM). This process is used by public and private sector organizations around the world to provide high quality products and services and foster continual improvement over time.

ASA holds itself to a very high standard, and several key components of our EMS help us ensure continued operational excellence and demonstrate this to the communities we serve. These include:

- An environmental policy that states our high level principles for protecting the environment and public health.
- Performance improvement goals and performance indictors
- Procedures for communicating with stakeholders, responding to incidents, and managing documents and information.

Third Party Certification

As part of the process of developing and implementing an EMS, ASA participates in an independent verification process to bring in an outside set of eyes to review all aspects of our program. This process helps us continually improve all aspects of what we do.

To accomplish this, ASA is participating in the National Biosolids Partnership (NBP), an alliance formed by the U.S. Environmental Protection Agency (EPA), the Water Environment Federation (WEF) and the National Association of Clean Water Agencies (NACWA). The NBP facilitates independent certification of EMS programs for wastewater utilities across the country, and requires a rigorous program be in place to receive its certification.

How can you get involved?

We value your input! We invite the public to learn more about our program and our EMS, and welcome you to provide us input and feedback on our performance, improvement goals, independent certification, and any aspect of our operations. To learn more, please visit our website at www.alexsan.com, or contact us directly by phone at (703) 549-3381 or by e-mail at emsadmin@alexsan.com.

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