

## ***FAQs about the Solids Master Plan***

### **Background**

#### **What is the role of the Water Pollution Control Plant (WPCP)?**

- Safely and cost-effectively protect public health and the environment through reliable performance, quality customer service, and economic sustainability.
- Remove nutrients, other chemicals and pathogens from the liquid wastewater to protect the health the public and of our nation's waterways.
- Remove the solids from the liquid wastewater.
- Currently, dewater sewage sludge and mix with lime to achieve "Class B" quality biosolids, which is a nutrient-rich product that is applied to land in Virginia.

#### **What are Biosolids?**

Biosolids are "nutrient-rich organic materials resulting from the treatment of domestic sewage in a treatment facility. When treated and processed, these residuals can be recycled and applied as fertilizer to improve and maintain productive soils and stimulate plant growth," according to the Environmental Protection Agency (EPA). Further information can be found at: <http://www.epa.gov/biosolids/frequently-asked-questions-about-biosolids>.

### **Project Overview**

#### **What is the Solids Master Plan about?**

Arlington's Water Pollution Control Bureau (WPCB) began a Master planning process for the solids side of the WPCP in the Fall of 2015. This follows the Master Plan for the liquids side of the plant, completed in 2001, and updated in 2003.

The Master Plan is a document that focuses on the long-term ability of an agency to meet the needs of its constituents. It is forward-looking with respect to innovations that can solve identified problems and it has flexibility in its recommendations that allow the plan to adapt to a changing environment (e.g., population, demographics, vision, etc.).

#### **What are the goals of the Solids Master Plan?**

- Identify and develop a plan to design and replace aging infrastructure on the solids side of the plant. These projects may include the replacement of the gravity thickeners, bar screens, primary scum collection, motor control center in the Preliminary Treatment Building, and scum concentrator.
- Develop a longer-range plan to anticipate and respond to regulatory changes with selection of treatment options.
- The longer-range plan may make better use of valuable resources contained within the solids, be more energy-efficient than current processes, and produce energy.

**What is capacity of plant and how will this impact future growth in the County?**

The plant capacity is 40 million gallons per day (MGD). The plant is already rated to handle capacity of Arlington's population at 2040. The Master Plan process will examine capacity and population figures on a ten-year planning horizon.

**Will the plant expand outside of its current footprint?**

There are no plans to expand the plant beyond its existing footprint.

**How will the project be completed?**

The Solids Master Plan will be completed in a phased approach to maintain reasonable utility rates as follows:

- Study Phase 2015-2017
- Design and construction of immediate needs 2016 – 2020
- Design and construction of short-term improvements 2017 – 2020
- Design and construction of long-term improvements 2019 – 2026

**Is the public involved in the planning process?**

Staff meets regularly with key stakeholders from late 2015 – early 2017 once the plan is delivered. This includes an internal group that comprises County staff and an external group that is composed of residents close to the plant and community leaders, to ensure an open, two-way, transparent process where a broad and diverse group of stakeholders is involved and provides input to the process.

## Budget

**Where is the funding for the Master Plan projects coming from?**

Funding for the Solids Master Plan project is through the Utility Fund, which is funded entirely with the water and sewer rate. The projects are being phased over time for maximum affordability. The adjoining jurisdictions that have a portion of their flow treated at the WPCP also pay for their share of these projects.

**How much will it cost?**

Approximately \$170M has been designated in the 10-year Capital Improvement Program for the design and construction of the Immediate Needs and Long-Range projects. These costs are very preliminary and may change once the Master Plan study is complete. The Board is scheduled to adopt the 10-year CIP at the end of July 2016.

## Environment and Community

**As you evaluate criteria, is the environmental impact part of the consideration?**

Yes, the evaluation criteria includes several environmental criteria including: Carbon Footprint (greenhouse gas emissions and carbon sequestration), Resource Recovery Potential (focus on

heat, energy, nutrients, and organics), Energy Intensity (relative energy use of alternatives), Regulatory Permits (meeting all regulated health, safety and environmental requirements), and Gas and Product Quality (energy and use products and their ability to consistently meet expectations of use).

**What are the anticipated impacts on the surrounding community?**

Impacts of any treatment processes on the surrounding community are an important consideration of the Master Plan. Some of the criteria that will be used in selecting the long-range treatment alternative include safety, odors, and the amount of truck traffic to and from the WPCP. Therefore the community's needs are being factored into the decision-making process along with the other selection criteria.

## Regulations

**Who is the regulatory body responsible for the changes being made?**

The plant and its products are regulated by the Federal Government and the State. The Federal Agency is the Environmental Protection Agency and state agencies include State Department of Environmental Quality.