



Metropolitan Water Reclamation District of Greater Chicago

100 East Erie Street
Chicago, IL 60611

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TRANSMITTAL LETTER FOR BOARD MEETING OF DECEMBER 15, 2016

COMMITTEE ON MONITORING AND RESEARCH

Mr. David St. Pierre, Executive Director

Report on Development of Composted Biosolids Program

Dear Sir:

The purpose of this report is to provide an update on the results of the recently concluded evaluation of proposals received under Request for Expression of Interest 15-EOI-03 (REOI), "Beneficial Use of Biosolids and Composted Biosolids," and to summarize plans for the District's biosolids composting program. The purpose of the REOI was to identify the most beneficial approach or approaches for an outside party to remove anaerobically digested biosolids from the District's facilities, and either distribute them for beneficial reuse, such as land application, or further process them for the purpose of resource recovery, including energy recovery. None of the seven proposals received met the primary goal of the REOI, which was to provide substantial financial savings compared to the District's current approach of handling biosolids. Consequently, District staff evaluated other approaches to biosolids management, including expanding the District's biosolids composting pilot program. The evaluation revealed that expanding the District's biosolids composting program is the most cost-effective and environmentally sustainable approach to process the District's biosolids for beneficial use while meeting the goals of the District's 2017 Strategic Business Plan. The success of the composting program will depend on efficient production in line with the Strategic Business Plan, a reliable long-term supply of composting feedstock, and development and implementation of sound strategy to market and distribute the product. The District's approach in these areas is as follows:

Production: To date, nearly 20,000 tons of composted biosolids have been produced at the District's Harlem Avenue and Calumet Solids Management Areas using open windrow composting. The composted biosolids are being beneficially used locally, such as for construction of Maggie Daley Park in the City of Chicago. The District has established a goal to produce 50,000 tons of composted biosolids in 2017 and 100,000 tons annually in 2018 and beyond. Through 2018, composted biosolids will be produced using the uncovered open

air windrow method. In 2019, we will begin to migrate from the open windrow composting method to the covered aerated static pile method to increase production capacity and mitigate odorous emissions. The District is currently designing a covered, aerated static pile composting facility at the Calumet Solids Management Area to process all biosolids produced at the Calumet Water Reclamation Plant. The facility, anticipated to be fully operational in early 2019, will have the capacity to produce approximately 100,000 tons, or 250,000 cubic yards, of composted biosolids annually. Meanwhile, the District will continue its current approach of producing lagoon-dewatered, air-dried Exceptional Quality biosolids for local distribution and dewatered Class B biosolids for farmland application, and will transition from these processes as the local markets for compost feedstock and composted biosolids grow and mature.

Composting Feedstock: Large volumes of vegetative materials, including woodchips and yard waste, are needed as feedstock to support a large-scale composting operation. Due to the recent passage of the Resource Recovery Ordinance, we have established a program to accept vegetative materials beginning fall 2016 for a fee of \$20 per ton. We also recognize that there is potential to establish long-term agreements with large feedstock suppliers and governmental agencies. Any proposed agreements that deviate from the terms set forth in the Ordinance, including new intergovernmental agreements, will be submitted to the Board of Commissioners for approval.

Marketing: Executive Staff outlined a strategy to fully develop the District's composting program while ensuring the continued success of the District's local Exceptional Quality air-dried biosolids and Class B biosolids Farmland Application Programs in the interim, including competitive, market-driven pricing and an extensive marketing campaign. The District will charge \$30 per cubic yard for composted biosolids, and residents and landscaping companies must pick up the product from the Harlem Avenue or Calumet Solids Management Area. Public entities, including golf courses and park districts, are exempt from the pickup requirement; the District will deliver to these entities at no charge as done historically for local distribution of Exceptional Quality air-dried biosolids. Staff will also work closely with the Illinois Landscape Contractors Association and local distributors to ensure that the District does not undercut local suppliers of compost. The District may adjust compost pricing based on information received from these entities. In addition, the District will continue to promote local distribution of composted biosolids by attending landscaping conferences and hosting events such as periodic "bucket days," whereby residents may pick up small quantities of composted biosolids at no charge to try on their lawns and/or gardens.

Respectfully Submitted, Thomas C. Granato, Director of Monitoring and Research, TCG:EWP:jvs