Sustainable Materials Management to Protect Tomorrow

Govanta Camden Project Overview

July 2022

Covanta Camden in the Community

Community Events

- CCSD Back to School Festival
- Subaru "Back to School" Bash
- Cramer Waterfront Park opening
- CCPD Pride March
- CFFS Juneteenth Celebration
- Camden Young Life 5K run
- Seeds of Hopes Ministries 5K run
- Sr Peg Hynes Memorial Golf Classic
- Camden City Job Fair
- EMR Shoes 4 Souls Community Shoe Drive for Children
- WCMD Job Fair

Donations

- Camden School Foundation
- HOC Turkey Baskets
- Morgan Village Circle Community STEM Program
- Wholesome Riches
- Cathedral Kitchen
- Staley Park Panthers
- Camden High School Football Team

Community Beautification Projects

- CFET Earth Day Cleanup (24 hrs)
- Porter's Daughters Garden @ Filmore St.
- HB Wilson School Garden
- A New View Program
- Camden Strong Neighbor Cleanups (71 hrs)
- Camden County PD Neighborhood Cleanup

Community Services

- Fall Sustainability Festival *
- Wholesome Riches food pantries
- Heart of Camden Fundraiser
- Heart of Camden Toy Drive
- KROC Center Angel Tree Toy Drive
- JOP Hall Senior Center Food Drive
- CCSD Holiday Food Drive
- Community Information Sessions (CCSD, WS, MV)





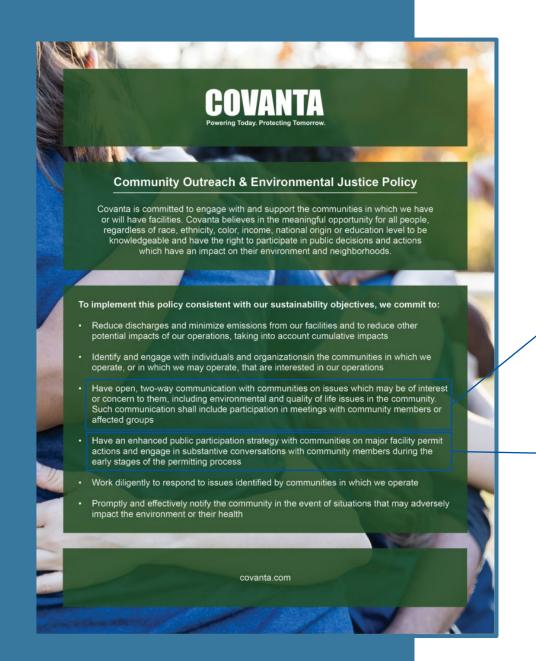
415

2021 hours of community service

28

Number of organizations Covanta Camden partnered with in 2021





Community Outreach & Environmental Justice Policy

We are committed to...

Having open, two-way communication with communities on issues which may be of interest or concern to them...

Having an enhanced public participation strategy with communities on major facility permit actions and engage in substantive conversations with community members during the early stages of the permitting process.



EJ for Covanta – not just words BUT ACTION!

New Baghouses

- Newark, NJ
- Huntsville, AL
- Hillsborough, FL
- SEMASS, MA

New NOx Controls

- Newark, NJ
- Fairfax, VA (WIP)
- Huntsville, AL
- Alexandria, VA (WIP)
- Stanislaus, CA (in planning)

In Planning/Permitting

- Camden, NJ Baghouse
- Chester, PA NOx Reduction



Our 2019 Sustainability Goals include – "We've committed to implement five projects by 2023 to further reduce emissions in EJ communities. We will also set a science-based GHG reduction target by 2022 to drive further reductions."

World Leader In Waste-to-Energy



41 modern WTE facilities in North America/ Europe



Annually recycle approximately 600,000 tons of metal the equivalent amount of steel can build six Golden Gate Bridges



Annual capacity to process **21 million tons** of waste



3,800 professionals employed in North America



Generate 10 million megawatt hours—enough clean energy to power over 1 million homes



High focus on improving sustainability and encouraging a circular economy



Waste Management Hierarchy

- The US EPA and the EU have ranked the most environmentally sound strategies for municipal solid waste disposal in a landfill is considered the worst and final option
- The EU has set a target for all 27 countries to landfill 10% or less of all waste generated by 2035 in its landmark Landfill Directive







Benefits of Waste-to-Energy

Helping to solve some of our biggest challenges

Environmentally sustainable waste management that complements recycling

- Best solution after recycling waste volume reduced by 90%
- Attractive to businesses and governments seeking zero landfill disposal option

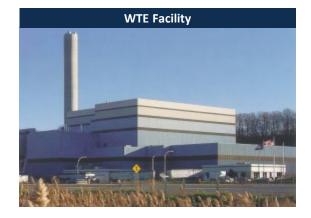
Generates clean and reliable renewable energy

- Baseload power 24 / 7; located near demand centers
- Complements other renewables

Combats climate change

- Net reducers of greenhouse gases 1:1 CO2 offset for each ton of waste processed
- Fewer fossil fuels burned: 1 ton of waste $\approx \frac{1}{4}$ ton of coal
- Methane from landfills: 80+ times more potent than CO2 as a greenhouse gas over a 20-year period









Covanta Camden Camden, NJ

The Covanta Camden Energy Recovery Center is an award-winning Waste-to-Energy Facility that serves the municipalities in Camden County and the surrounding region with reliable and sustainable waste management.



Less waste in landfills reduce greenhouse gas emissions by 333,450 tons of CO₂.

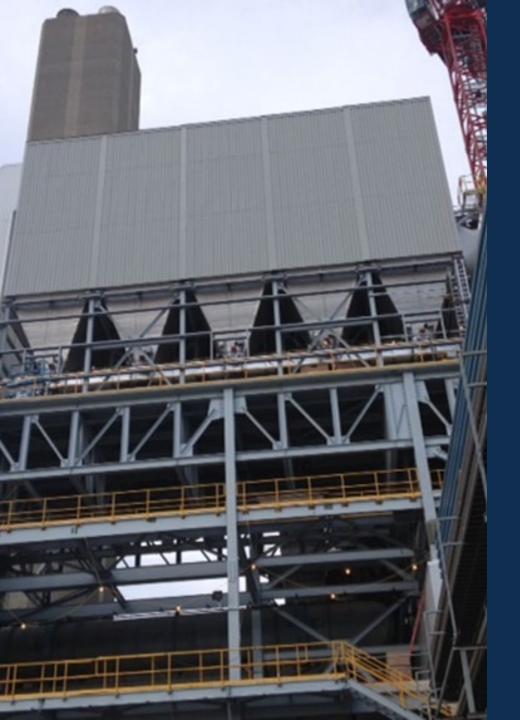


We use waste to produce **21 megawatts** of electricity 24/7, powering **14,000 homes** in a year.



We also recover **13,700 tons** of metal for recycling annually - enough to build **11,000 cars**.





Covanta Camden

- The Camden facility is proposing to upgrade our Air Quality Control (AQC) System with a \$60 million dollar investment.
 - Installation of a state-of-the-art fabric filter baghouses
 - Higher efficiency of acid gas removal with a dry recirculating ash system.
 - Enhanced existing SNCR system for NOx control
- A new AQC system will significantly reduce most emissions including particulates, lead, mercury, dioxin, and acid gases.
- With these lower emissions Covanta will propose lower emission limits.
- No increase in permitted throughput
- Receive and process liquid wastes
- Develop a Community Benefits Agreement (CBA) with the local community.



Covanta Camden

The facility proposes to process Liquid Wastes.

- No waste permit increases.
- Liquid waste will displace MSW and reduce the amount of MSW processed.
- Liquid waste will not impact emissions.
- Provides funding for AQC upgrades for emissions reductions
- Provides resources for a more robust Community Benefits Agreement





Liquid Direct Injection (LDI)

What is LDI?

LDI is an environmentally sound manner to dispose of non-hazardous liquid waste streams.

How does LDI work?

Non-hazardous liquids are directly sprayed into the combustion zone of the boiler.

What kinds of liquids are disposed of?

Non-hazardous liquids are typically at least 95% water and used as process wash waters in the pharmaceutical, food, or other industrial or manufacturing operations.



Examples of Liquids to be Processed at Covanta

Typical liquids are from tank rinses and line flushes from various manufacturing and industrial applications such as:





Food and Beverage

Adhesives, Coatings & Latex Paint



Nutrition, Fibers, Vitamins & Minerals



Pharmaceutical & Biotechnology

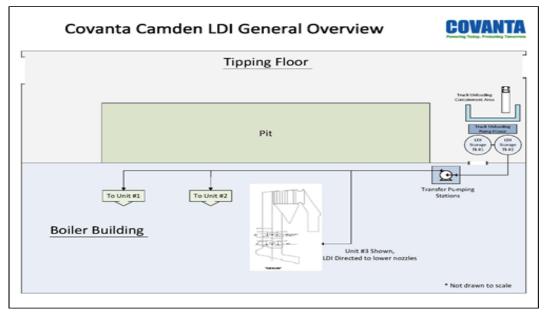
For example, processing tanks at a latex paint facility may require periodic cleaning and will be rinsed with water to remove the product. This rinse water would be a suitable liquid for processing at our plant. This liquid would be similar to when you rinse your paint brush after painting at your home.





Liquid Direct Injection (LDI)





How will you handle the liquids?

Tanker trucks used to transport liquids.

Liquids sampled prior to receipt.

Liquids held in storage tanks prior to combustion in the boiler.

Same process as in our WTE plants located in Niagara Falls, NY, Indianapolis, IN and our former Warren County, NJ plant.

What are the impacts of LDI?

No impact on emissions.

No increase in truck traffic.

No impact on odors.

Reduced use of reagents during the combustion process.



Frequently Asked Questions (FAQs)



4

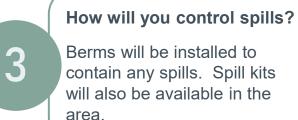
Will processing liquids increase truck traffic?

No, throughput will remain the same so truck traffic may actually decrease.



How will odors be controlled?

The storage tanks will be located indoors where negative pressure will be maintained. The tanks will also be fitted with activated carbon filters.



Will noise increase?

The liquids will be stored and off loaded indoors so noise will not increase.



Has Covanta processed liquids at other WTE facilities?

Yes! Covanta regularly processes liquids at our Niagara, Indianapolis, and our former Warren County, NJ sites.



How are liquids approved to be processed at Covanta?

Covanta has a rigorous approval process which include data sheet and analytical review and generator certification.



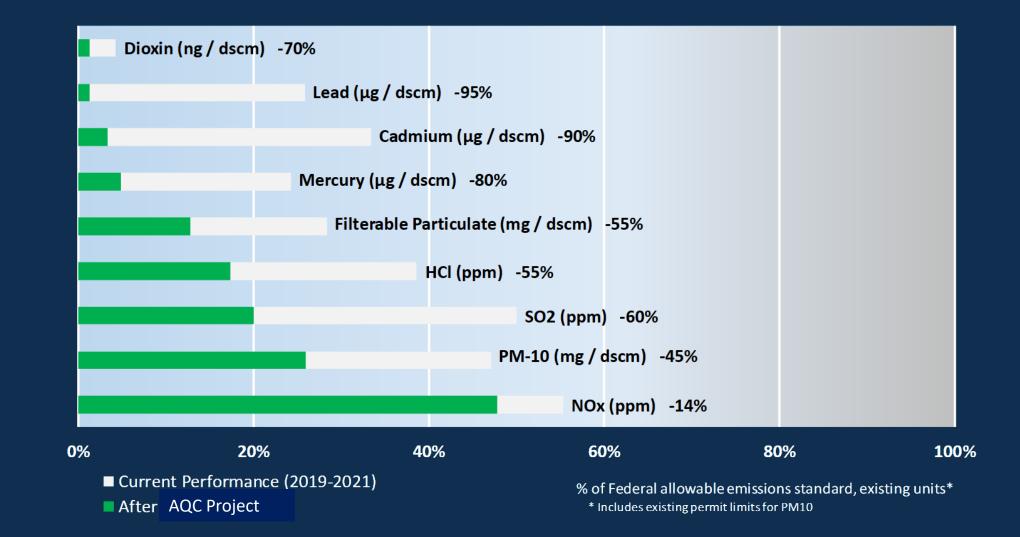
How Do Our Emissions Compare to Other Sources in the Air Shed? Local air emissions* in Camden County, NJ & local area (see map) Industrial Fuel Covanta **Residential Fuel** Combustion Onroad **Commercial Fuel** Camden 2020 Other Mobile Combustion Other mobile Vehicles Combustion Sources 0.01% sources 13% 7% 35% 8% 20% 6% Industrial **Onroad Diesel** Industrial 17% Processes 15% TOTAL Vehicles 11% Processes Residential VOCs **PM**₁₀ NOx Onroad 20% 14% Fuel Gas 3% Other Mobile Vehicles 15% Combustion Stations Sources 14% Other 9% 27% 14% 27% 1.7% 22% sources 0.9% **Onroad Gasoline** Covanta Other **Biogenics** -Covanta Vehicles Other **Camden 2020** Sources Commercial Vegetation and Soil **Camden 2020** Sources Cooking Excluding Dust Sources, which make up Excluding Solvent Use, which makes up 46% 45% of the total inventory. of the total inventory.

* Based on the 2017 US EPA National Emissions Inventory; the most recently released complete inventory. Where available, the facility's 2017 emissions were replaced with the reported 2020 emissions.

Continuous Emissions Monitoring (CEMS) Data for CVA Camden can be found at: https://www.covanta.com/where-we-are/our-facilities/camden



Expected AQC Project Emissions Reductions





Covanta Camden Community Benefits Agreement (CCCBA)

- Long-term commitment with organized groups representing the people of in our neighborhoods of Waterfront South and Morgan Village
- Providing meaningful involvement and financial resources to our community
- A committee our local representatives will decide what local projects receive funds
- Projects must benefit Waterfront South and Morgan Village.
- Fund to be administered by Community Foundation of South Jersey (CFSJ)

Covanta has recently conducted meetings concerning the Project with the following:

- City of Camden Councilwoman Boucher
- Heart of Camden Executive Director Morales
- City of Camden Mayor Carstarphen and staff
- Morgan Village Circle Community Development Corporation
- Camden County Solid Waste Recycling Coordinator
- Camden City School District Board of Education
- Camden Collaborative Initiative (CCI)
- NJDEP Air, Sustainable Waste, and Environmental Justice groups
- State Senator Nilsa Cruz-Perez
- State Assemblyman Moen
- State Assemblyman Spearman



On-Going Community Benefits

• Since purchasing the Covanta Camden facility, Covanta has heavily invested in the community. Last year, we invested \$50,000 to support programs in the community. We are committed to continuing those efforts.

Continued Engagement with the Community

- Partner with local organizations to assist in various community engagements activities, fund raising events, plant tours or other items. Covanta expects to assist in at least twelve such activities per year.
- Covanta will provide each employee with up to 16 hours per year to volunteer with full compensation.
- Covanta Camden employees and family members will volunteer for at least 250 hours per year.

Additional Environmental Initiatives

- Support Electric Vehicle Charging stations in the community
- Support anti-Illegal dumping initiatives
- Covanta will dispose of up to 50 tons of MSW, at no cost, generated by non-profits during clean-up events.
- Promote recycling and E-waste/mercury collection

Employment, Education and Training

- Covanta will adopt a "hire local" initiative whereby local workers are sought out and trained by Covanta.
- Covanta will establish a Camden college summer internship program for local youth.
- Covanta will provide funding needed to train Fire Department personnel including at least an annual drill.
- Covanta will sponsor an annual \$2,500 scholarship through the Camden School Foundation.



Covanta Camden Community Benefits Agreement Committee

- 1. Community Representative from Waterfront South—Appointed by Waterfront South.
- 2. Community Representative from Morgan Village— Appointed by Morgan Village.
- 3. Non-Profit, Local Business or Faith-Based Organization Representative nominated by the Community Representative from Waterfront South.
- 4. Non-Profit, Local Business or Faith-Based Organization Representative nominated by the Community Representative from Morgan Village.
- 5. Covanta Representative
- 6. The Mayor or the Mayor's representative
- 7. Ward 1 Council Member

Additional Funding Opportunities

Covanta would be willing to work with the community to identify additional types of revenue enhancements that could benefit both the facility and the community.



Liquids		
Approximate Year	Fixed Funding to	Liquids Processing
	Covanta Camden	funding to Covanta
	Community Benefits	Camden Community
	Fund	Benefits Fund
2022 - CBA signed and approved	\$50,000	
~2023 - Air permit received	\$50,000	
~2024 – Solid Waste permit received	\$50,000	
~2025 – BH 1 installed; 8,000 tons liquids processed	\$50,000	\$16,000
~2026 – BH 2/3 installed; 16,000 tons liquids processed	\$50,000	\$32,000
~2027 – BH Complete; 25,000 tons liquids processed	\$50,000	\$50,000

- 1. At the signing of the CCBA by the organized groups serving Waterfront South and Morgan Village.
- 2. Upon receipt of the permit changes from NJDEP for the Title V and Solid Waste permits
- 3. The total amount of funding from liquid waste processing may vary yearly, and will depend on final state approvals, the timing of equipment installation, and the amount liquid wastes disposed of each year.
- 4. Contribution of \$2 a ton for liquid waste processed expected to process up to 25,000 tons, after the completion of the Air Quality Control System.



Next Steps

- Continuing Community Engagement
 - Community organizations / residents
 - Elected officials
- Finalize Community Benefits
 Agreement
- City of Camden Resolution 7/12/22
- AQC System / LDI Application Camden County & NJDEP

Wholesome Riches 42 followers

Thank you everyone for another great turnout Monday at both of our food distribution events! Another outstanding team from Covanta in Camiden heiped us serve more than 100 families at H8. Wilson Family School, and we received additional support at Veterans Memorial Family School from a group of students there and from Tricla and Silvana of the Food Bank of South Jersey. Thank you to the Food Bank and Covanta for your dedication to the community! #CamdenNJ #FairviewCamden #MorganVillage #CentervilleCamden #FastCamden #CramerHill #CamdenCountyNJ #SouthJersey #ServingCamden #Food #Community #CommunityResources #FoodDistribution #FoodBankCountJersey #SchoolPantyProgram #MobileMinistry #Covanta

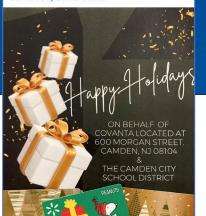
+ Follow ..





Thank you Covanta for gifting some of our students with gift cards to help them for the holiday!

Your generosity is very much appreciated! #HappyHolidays



Angela's Post

...

Angela Boldurian

<

I have been dreaming of a school garden / outdoor classroom for many years. And after weeks of coordinating & working in phases, our learning garden is finally ready. Thank you to Michele Pilla & Wholesome Riches for the soil & mulch, to Dewey Hutton & volunteers from Covanta Energy for clearing the area & donating the lumber, to Contractor Services of Camden for donating the necessary equipment to move mounds of soil & mulch, & to Lee Hanks & volunteers from Alabama for bringing this all to life, So excited for our students. This is the perfect example of TEAMWORK & COMMUNITY SERVICE.





Creative Arts Morgan Village Academy @CreativeCMD

Hey CAMVA Family! U Have you ever heard of a business in Camden City, but didn't know their purpose? Check out this video from @Covanta that briefly teaches you how they create #ENERGY from #WASTE! CCSDPartner #COVANTA #TogetherWeCan myoutube.com/watch?v=CSI7i8...



Covanta Energy-from-Waste - How it works





Thank You

Bernardino, Jack Area Manager jbernardino@covanta.com

(732) 956-1436

