NJ Composting Council

Isaac Bearg

Vice-President

ANJEC Conference

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Agenda

- Educational Program
- Preparing to divert food waste
- Home options
- NJ rules for composting
- Pickup/drop off (examples)
- On-site options
- What do you want from your program?
- Compost Utilization

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Mission

The NJCC advances compost manufacturing and utilization of organics/ food waste recycling programs to benefit our members, society, and the environment through advocacy, education and, research.

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Background

The NJ Organics Recycling Foundation is a 501c3 non-profit founded to promote research and education around organics waste recycling in New Jersey for the benefit of our environment and economy.

NJ Organics Recycling Foundation

Tax-Deductible Donations can be made at:

njorganicsrecyclingfoundation.org

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Education

- So you want to divert food waste…

1. Why is it important?
2. What can be composted?
3. What goes where?
4. Training

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The Data

- NJDEP **ESTIMATES 1.46** million tons of food waste was generated in the state during 2017 and more than 89% of that was disposed of

- Food waste is 22% of the MSW disposed in either a landfill or incinerator in New Jersey

- 45%+ of the waste to landfills/incinerators are organics

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The Issue

Large volumes of uneaten food are disposed in landfills, contributing to 16% of U.S. methane emissions. - NJ DEP

New EPA required capture systems continue to provide 25% of methane release.

Landfills are at capacity, neighbors, sustainability, etc

Untreated Leachete.

Unused valuable resource.

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The Generators

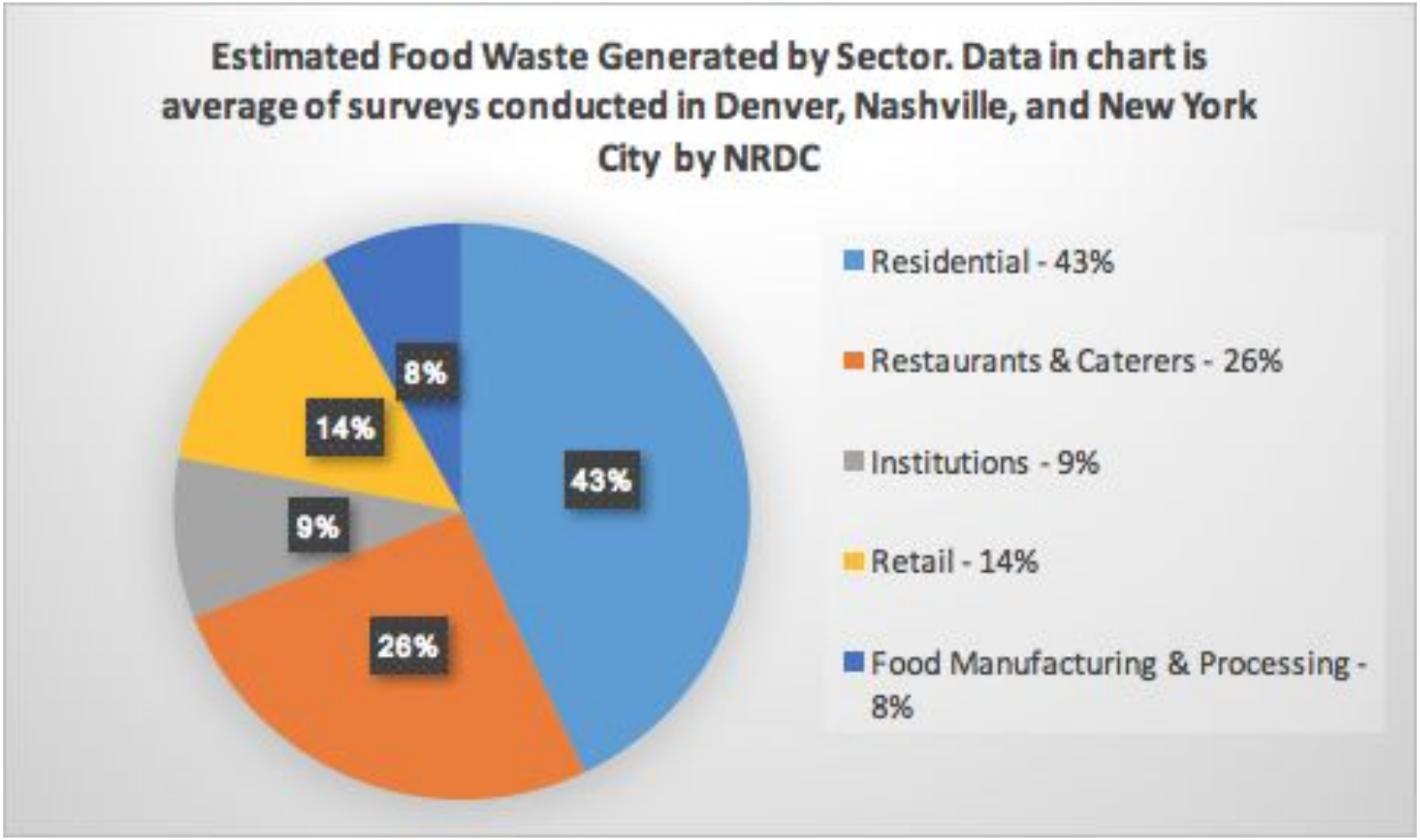

Table 1: NJDEP Draft Food Waste Reduction Plan

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The Issue

6.7% of all global greenhouse gases come from food waste. - UN Food and Agriculture Organization

New EPA require capture systems continue to provide 25% of methane release.

Landfills are at capacity, neighbors, sustainability, etc

Untreated Leachete.

Unused valuable resource.

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Benefits of Composting

- Improves soil structure, porosity and density
- Increases infiltration and permeability of heavy soils reducing erosion and runoff helping control stormwater issues
- Improves water holding capacity, reducing water loss and leaching in sandy soils
- Supplies and rehabilitates a variety of micro and macronutrient to the soil for nutrient dense food.
- Reduces toxic emissions and increases carbon sequestration.

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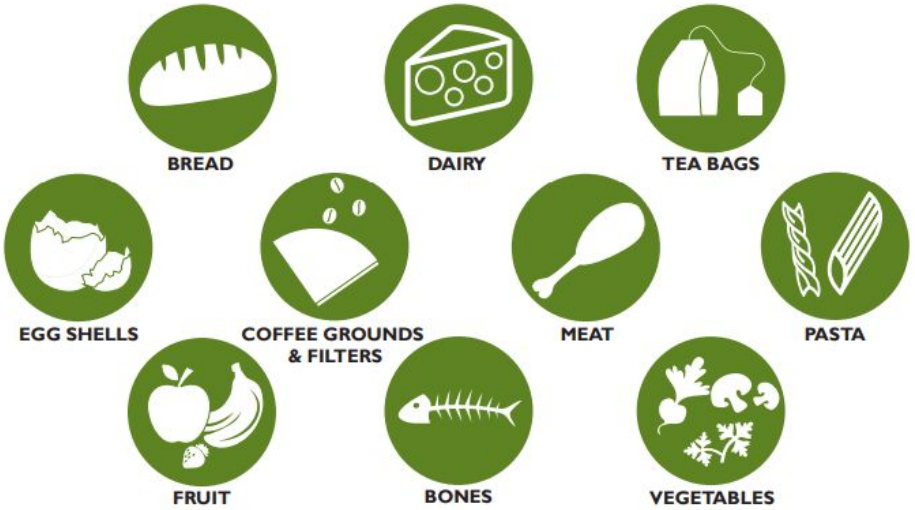
What do you accept?

Compostable Organics
THESE ITEMS ARE ACCEPTABLE

All food scraps and food residuals

Uneaten food and food waste residuals including peelings, shavings, ends, cores, cooked or uncooked food scraps



BPI® COMPOSTABLE

CERTIFIED COMPOSTABLE PACKAGING

BPI stands for Biodegradable Products Institute, and BPI provides a certification and labeling system for packaging that assures compostable products meet certain scientific standards for industrial composting. Approved packaging must be BPI certified compostable products with ASTM D6400 or D6868 standards. In addition to being certified, approved packaging must be easily identifiable as certified compostable such as green colored bags, green stripes, clearly labeled BPI, clearly printed COMPOSTABLE, etc. Visit www.bpiworld.org for a list of BPI certified compostable products. Please see FAQ on page 11 for more information.

Compost Contaminants
THESE ITEMS ARE NOT ACCEPTABLE

Non-food:
Plastic, Glass, Metal, Cardboard, Paper, Clothing, etc.

Bulk liquids, grease, animal fats, cooking oils, etc., condiment packaging, produce stickers, rubber bands, twist ties, latex gloves, etc., utensils/straws, aluminum foil, pizza boxes, frozen food boxes, corrugated cardboard, brewery waste, animal manures, coated paper products (paper cups, paper plates), non-certified packaging (products labeled "eco-friendly", "plant-based", etc.)

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Waste station Design

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Signage

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Preparing a Kitchen

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Fundamentals Of Compost

Part II

Jairo Gonzalez
Organics Recycler

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Backyard Composting

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BACKYARD COMPOSTING

WHAT DO I NEED TO GET STARTED?

Composter

COLLECTION CONTAINER

CARBON SOURCE

Pre-mixing the recipe

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AT LEAST A 1 TO 1 RATIO

EQUAL PARTS NITROGEN AND CARBON

(RATIO MAY VARY DEPENDING ON TYPE OF CARBON YOU'RE USING)

1 CONTAINER OF FOOD SCRAPS

1 CONTAINER OF CARBON MATERIAL

RECIPE FOR COMPOST

AT LEAST 1:1 RATIO OF NITROGEN TO CARBON

(VARIES DEPENDING ON CARBON SOURCE)

NITROGEN

=

GREENS

CARBON

=

BROWNS

OXYGEN

=

AIR

Strategies for Odor issues.

-Food waste items
-Recipe mixture
-Moisture
-Oxygen
-Temperature

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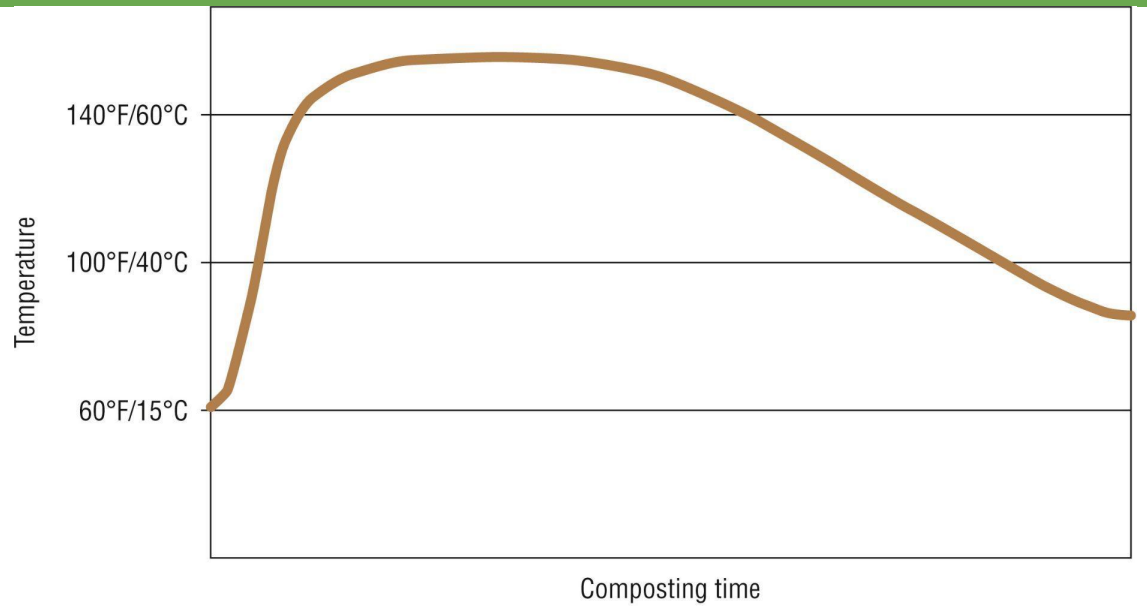
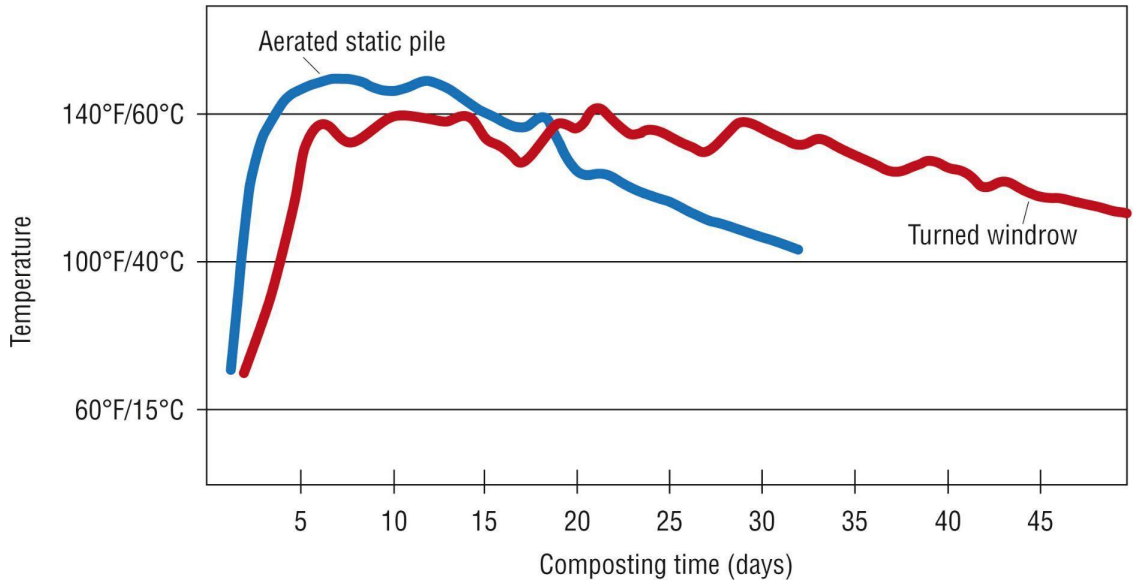
Phases of composting





How Much Time?

- 2 months to 2 years
- Depends on
  - Feedstocks
  - Management Intensity
  - Temperature/moisture/oxygen

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HOW SHOULD I COMPOST?

INSULATED TUMBLER

PROS

- Reaches temperatures of 110-160 degrees. Year round composting
- Can compost ALL food scraps
- Short breakdown time (6-8 weeks)
- Top quality material

CONS

- More expensive than some other tumblers

Other Compost Systems

HOW SHOULD I COMPOST?

NON-INSULATED TUMBLERS

PROS

- Less expensive
- Does the job

CONS

- Some concerns about quality of material
- Difficult to turn when full
- Can freeze in winter

OTHER COMPOST SYSTEMS

TWO BIN SYSTEM

PROS

- All in one system
- Animal proof
- Can handle all types of material

CONS

- Can be more labor intensive than tumblers
- Needs to be built: materials/labor

OTHER COMPOST SYSTEMS

EARTH MACHINE

PROS

- Simple + inexpensive

CONS

- Animals can burrow underneath
- Limits what kind of food you can compost
- Takes a long time to break down
- Hard to turn, hard to get out material

Pallet Composter

https://joegardener.com/video/how-to-make-a-compost-bin-using-free-shipping-pallets/

Garden Sifter

https://www.youtube.com/watch?v=z7prtsXv4wA&ab_channel=Earthkeeping

TUMBLER BEST PRACTICES

- Mash, Mix, Move
- Consistency of compost should be like a damp sponge; you don't usually need to wet your compost if using a tumbler; moisture comes from food scraps
- Use a sifter if you want a finely granulated compost
- Sifter also helpful to separate larger pieces that need to go back into tumbler for a second cycle
- The interior of a tumbler does not, and should not, need cleaning. You want the bacteria to remain there
- Tumblers not air tighter so exterior will get a bit mucky

Compost Spreader

Rules for Composting

Potential Legislation:

Schools and community gardens (A4557 + A4548)

Call your legislators, call your SWAC

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Pickup/Drop off

GARDEN STATE COMPOSTING

GREEN BUCKET COMPOST

NEIGHBORHOOD COMPOST

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Pickup/Drop off

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On-Site Options

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Questions for your Compost Program

Who is going to pay for it? - Residents, town, subsidy?

What will you accept?

How many locations and what are the hours?

Where do you want it to go? Compost? AD? distance?

Do you want any of it back?

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Do it yourself? Municipal Composting Queensboro Bridge

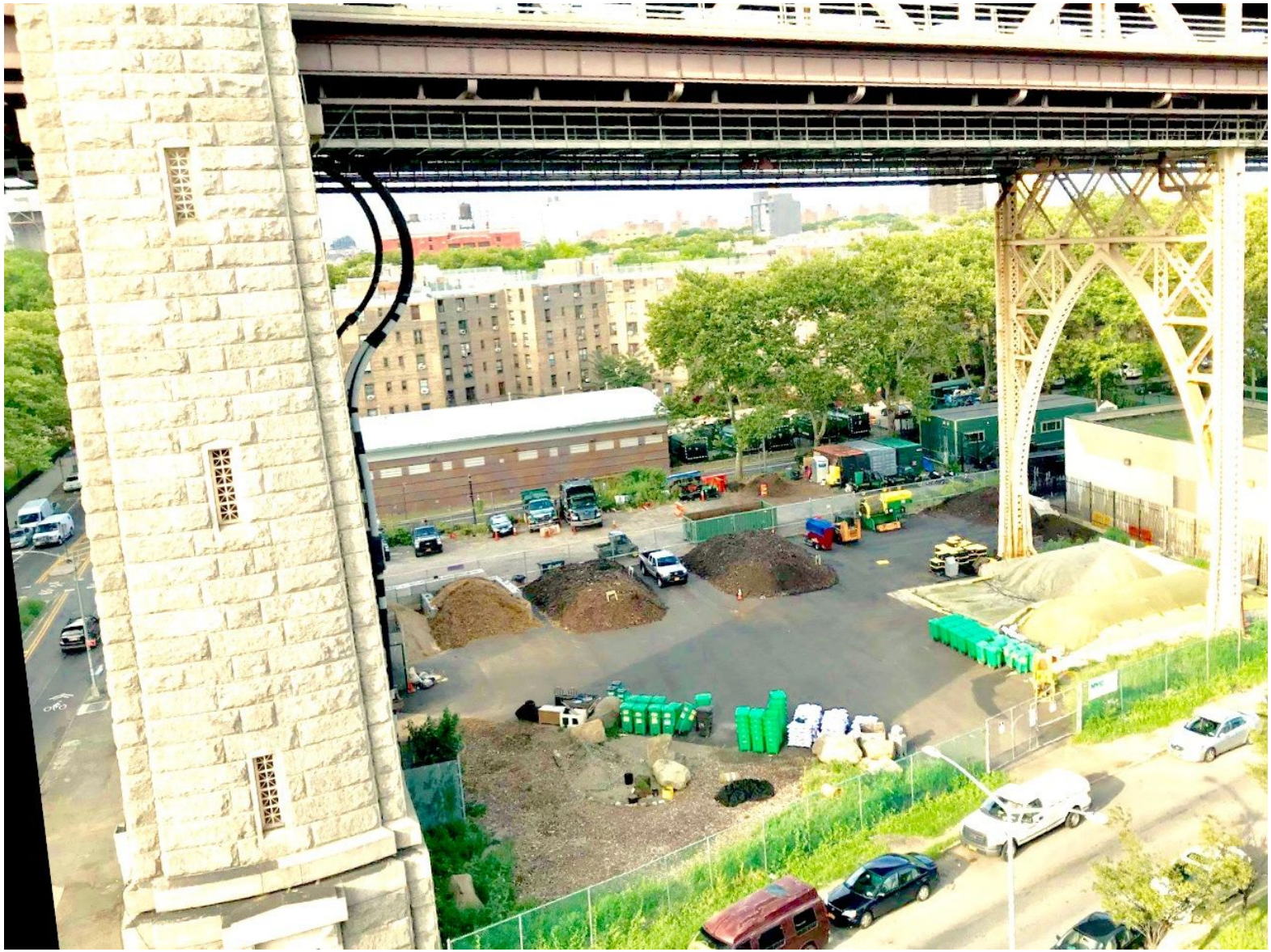

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Photo Credt: SCS Engineering

FINISHED COMPOST = BLACK GOLD

OUR GARDEN- ALL GROWN IN COMPOST

Compost Application

Soil application:

- Turf establishment
- Garden bed preparation
- Reclamation/remediation
- Nursery application
- Roadside

Surface applied

- Garden bed mulch
- Erosion control media
- Turf topdressing

Growing Media Component:

- Container/potting substrates
- Landscape
- Backfill mixes(tree and shrub)
- Golf courses
- Manufactured topsoil
- Environmental media - rootop,rain garden, bioretntion, structural soils etc.

- **Other**

Nutrient source, limiting agent, biological fungicide

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soil Application

Turf establishment

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soil Application

Garden bed preparation

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soil Application

Reclamation/remediation

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soil Application

Nursery application

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soil Application

Roadside

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Surface applied

Garden bed mulch

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Surface applied

Erosion control media

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Rain Garden

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Surface applied

Turf topdressing

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Growing Media Component

Container/potting substrates

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Growing Media Component

Landscape

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Growing Media Component

Backfill mixes

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Growing Media Component

Golf courses

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Growing Media Component

Manufactured topsoil

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Growing Media Component

Environmental media

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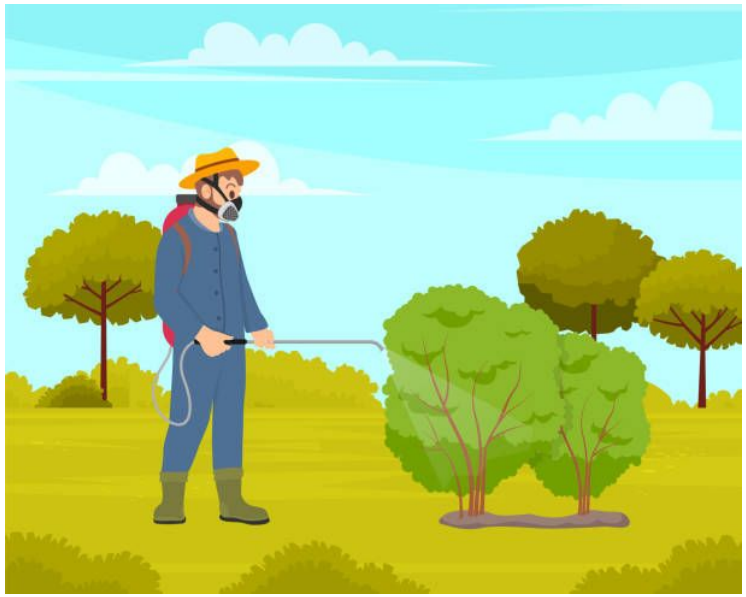
Other

Nutrient source, limiting agent, biological fungicide



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Email: contact@njcomposting.com

NJORF:

https://njorganicsrecyclingfoundation.org/

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