Louisville Green Transportation Packet



Haulers of Louisville Green are required to maintain a copy of this document at all times.

Louisville Green Loading and Scaling Instructions for Haulers

Revision Date: 5-13-2022

Approved By: Robin Such



Revision Number: 006 Odor Control and Biosolids Manager

To ensure proper loading, accuracy in weighing, and tracking of Louisville Green, haulers are instructed to follow the following procedures:

The address of the Louisville Green Production / Morris Forman Water Quality Treatment Center (MFWQTC) is 4522 Algonquin Parkway, Louisville, KY 40211.

- 1. Drivers are required to take one route in and out of the facility. This route has been chosen to reduce the truck traffic in the surrounding residential neighborhoods. A map of this route is included in the Care Plan which is given to each driver upon arrival at the facility.
- 2. Drivers will use the RIGHT lane of the entrance drive as to not impede MSD vehicle traffic. When the Security Guard is present, they will come from the guardhouse to the truck to get the information for the sign in sheet. The guardhouse is staffed 24 hours.
- 3. All drivers will stop at the security gate regardless of the time of day. If for some reason the Security Guard is not present at the gate, drivers will be required to contact the computer room via the intercom by pressing the white button or calling the Computer Room at 502-540-6774.
- 4. The driver must provide the Security Guard / Process Computer Room Operator with the following information: Photo ID, trucking firm, hauling destination, and if is the first time at the facility. The Security Guard will contact the Process Computer room for verification. Once verified, the Security Guard / Process Computer Room Operator will instruct the driver to proceed to the scale.
- 5. Drivers will enter the scale located to the left once inside the gate. The scale should show a green light indicating it is in service and ready to record the tare weight of the truck. Please drive slowly onto the scale. As the truck enters the scale, the light will turn red, however drivers should proceed until the cab is at the Entry Terminal. If the light does not turn from green to red, there may be a malfunction with the Entry Terminal.
- 6. If this is the first visit to the facility, a member of the MSD Operations staff will meet the driver at the Truck Scale. The Entry Terminal will display "ENTER CODE NUMBER". Drivers are to enter the 3 or 4 digit customer code they were given by the Process Support Supervisor and push "ENTER". The Entry Terminal will display "ENTER TRUCK NUMBER". Drivers will then enter the truck code provided by the Process Support Supervisor and push "ENTER". The Entry Terminal will then display, "PLEASE PULL FORWARD, HAVE A GREAT DAY". The Entry Terminal should also say "INBOUND STORED" at this point. The Driver may now proceed to the storage silo truck bay by exiting the truck scale to the right.



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7. The Louisville Green storage silo truck bays are located at the far west end of the Main Equipment building. At the "Y" in road, drivers will stay to the right and follow the upper road. The upper road will pass along the north side of the plant and down the hill. Proceed carefully to the west end of the plant. The storage silo truck bay can be seen to the left when traversing down the hill.

Please Note: Due to the layout of the facility, access to the silos is tight and tractors with full sleepers may find it difficult to position trucks in the bay. The current maximum height in the storage silo truck loading bay is 12'6". Trucks with stacks, sleeper cabs, or wind screens taller than 12'6" will not fit in the storage silo truck bay and will need pull past and then back into the bay.

8. If not already accompanying the driver, an MSD employee will meet the driver at the storage silo truck bay and help position the trailer under the appropriate silo discharge chute. If no MSD employee shows up within ten minutes of the trucks arrival, the driver should dial 6774 on the phone located on the east wall of the storage silo truck bay and inform the Process Computer Room Operator. Alternatively, call 502-540-6774.

Please Note: Due to MFWQTC staffing, haulers may experience delays at lunch times and operations shift changes.

- 9. Before beginning the loading procedure, the MSD Employee will verify the trailer is acceptable for loading. It is the driver's responsibility to ensure the trailer is in proper loading condition. This includes: no holes, gates sealed properly, tarp present and not torn and no water present. The driver will be asked to correct any issues before loading will begin.
- 10. The MSD Employee will operate the interface which controls the offloading of Louisville Green dust collection system. The MSD Employee will also direct the driver to move the truck forward or backward to ensure even loading of product in the truck. At no time is the driver allowed to operate any offloading equipment.
- 11. It is important for the driver to have functional pressure gauges on the front and rear axles of the equipment and to know what pressure the gauges must read to accurately load the equipment. MSD is not responsible for overloaded or under loaded vehicles. It is the driver's responsibility to inform the MSD Employee when the truck is correctly loaded.
- 12. The MSD Employee will take the temperature of the product as loaded in the truck in two locations. This is to ensure the material is safe for transport. The temperatures will be recorded on the Bill of Lading.
- 13. On completion of loading, the driver will move the vehicle out of the storage silo truck bay and immediately cover the load with the appropriate equipment, before moving to the scale. The driver should also inspect the gates for leakage before leaving the loading bay area. Proceed to the truck scale located at the front of the plant.



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- 14. When exiting the storage silo truck bay, turn left and follow the road next to the Main Equipment Building. This road will connect at the "Y", stay to the far right. Enter the scale, located on the left, in the opposite direction.
- 15. The scale should show a green light, indicating it is in service and ready to determine the gross weight of the truck. Please drive slowly onto the scale. As the truck enters the scale, the light will turn red, however drivers should proceed until the cab is at the Exit Terminal.
- 16. The Exit Terminal will display the Gross Weight as well as "ENTER CODE NUMBER".

BEFORE ENTERING IN ANY CODE

- 17. IT IS THE DRIVER'S RESPONSIBILITY TO CHECK THE GROSS WEIGHT OF THE VEHICLE DISPLAYED IN THE WINDOW OF THE EXIT TERMINAL TO ENSURE THE VEHICLE IS NOT OVERWEIGHT BEFORE ENTERING IN THE CODE.
- 18. If the Gross Weight is not acceptable, inform the MSD Employee the truck is overweight and product needs to be dumped. The MSD Employee will escort the driver to the dump pad beside Digester #3. It is the driver's responsibility to offload the appropriate amount of material. Return to the scale and re-weigh. The driver will repeat steps 16-18 to review the gross weight again. If the gross weight is acceptable, proceed to step 19.
 - NOTE: The driver will not be allowed to return to the silo for more product it too much material was offloaded on the dump pad.
- 19. The Exit Terminal will display "ENTER CODE NUMBER". Drivers are to enter the 3 or 4 digit customer code they were given by the Process Support Supervisor and push "ENTER". The Exit Terminal will display "ENTER TRUCK NUMBER". Drivers will then enter the truck code provided by the Process Support Supervisor and push "ENTER". The Exit Terminal will momentarily display "PRINTING", then "PLEASE PULL FORWARD, HAVE A GREAT DAY".
- 20. This completes the loading and scaling transaction. The MSD Employee will fill in the required information on the Bill of Lading. The driver will take the bottom two copies of the Bill of Lading Recipient and Haulers Copies and MSD will keep the top two copies.
- 21. The driver must exit the facility via the required route included in the Care Plan.



Care Plan for Haulers Including Emergency Plan

Revision Date: 05-13-22

Approved By: Robin Such

LOUISVILLE

Revision Number: 006 Odor Control and Biosolids Manager

If you are hauling Louisville Green from the Morris Forman Water Quality Treatment Center, you should receive a Bill of Lading and a Transportation Packet that includes: Best Management Practices for Transportation, an SDS for Louisville Green, Loading and Scaling Instructions for Haulers, Care Plan for Haulers Including Emergency Plan, and a Map of the required route in and out of the facility. Signing the Bill of Lading verifies you have received these documents.

It is important to follow the required route posted on the map. If you fail to do this, you may be denied product when you return.

It is expected the Biosolids will be transported and delivered in a responsible manner. Any irresponsible or careless transportation, handling, or storage practices may result in a hauler or customer being denied product in the future.

Upon delivery and unloading, the hauler will give the customer the paperwork provided during loading at the Morris Forman Water Quality Treatment Center.

Emergency Plan

In order to be prepared for an emergency, it is recommended the hauler have a broom, shovel, and large dust pan available during the transportation. The hauler should also have the SDS and Bill of Lading (including Best Management Practices for Transportation) provided to them at MSD's Morris Forman Water Quality Treatment Center.

If any problems are encountered during transport such as a spill or other emergency situation, refer to the MSDS and please take the following steps to inform MSD of the problem.

STEP #1: You are responsible for reporting any incidents that local laws require. Call 911 if you have a significant spill or incident. Although the Biosolids are not a hazardous material, a significant spill may require the aid of the local fire department and/or police department in order to ensure the spill is cleaned properly and the roadways and environment are in safe condition once again.

STEP #2: Notify MSD by calling the computer room at the Morris Forman Water Quality Treatment Center. The phone number is (502) 540-6774. You can speak with an MSD representative 24 hrs a day / 365 days per year. If there is any question about whether or not to notify MSD of a particular incident or emergency, please make the phone call to the computer room so MSD is aware of the situation.



Best Management Practices for Louisville Green Transportation

LOUISVILLE

Revision Date: 01-23-22

Approved by: Robin Such

Revision Number: 008

Odor Control and Biosolids

Manager

1. All haulers of Louisville Green will follow the scaling procedures supplied to them in the Hauler Care Plan upon arrival at the plant. The procedure includes weighing in, identifying the end user by customer number, loading, temperature measurement, weighing out, the appropriate date, load and ticket numbers, and signatures.

- 2. Every Louisville Green transporter should have a Louisville Green Safety Data Sheet (SDS) in the vehicle at all times when hauling the Biosolids. This identifies the Biosolids as not being hazardous or dangerous material.
- 3. Louisville Green haulers should check for haul routes that do not have road or bridge weight restrictions or low overpasses that cannot accommodate delivery vehicles. Haulers will follow the specified route into and out of the Morris Forman Water Quality Treatment Center (MFWQTC) supplied with the scaling procedures.
- 4. Haulers of Louisville Green should have their own emergency response plans in case of a vehicle accident or spill. Drivers and other operators should be trained on the actions required in the plan. Each vehicle should keep a copy of the plan in the truck at all times.
- 5. Vehicles transporting Louisville Green should not allow any material to spill or leak from the truck during transport. Vehicle seals should be inspected daily and replaced as needed.
- 6. Vehicles transporting Louisville Green should not allow material to become wet during transport.
- 7. Vehicles, trailers, and associated equipment should be fully functional when hauling. (i.e. Truck Gauges)
- 8. Each vehicle should be equipped with a scraper, shovel, and brooms so drivers can clean up any small spills that may occur.
- 9. Vehicles and associated equipment should be clean of foreign material when arriving at MFWQTC. Haul beds should be dry before Biosolids loading.
- 10. It is the responsibility of the truck driver to ensure the loaded truck meets all applicable federal, state and local transportation rules and regulations. (i.e. Gross Weight)
- 11. Transportation routes should be chosen to avoid watercourses and rough terrain. This should reduce the risk of contamination if there is a spill.
- 12. While on MSD Property, Haulers may call 502-540-6774 at any time and speak to a Computer Room Representative 24 hours a day/7 days a week.



Safety Data Sheet Louisville Green

Section 1. Identification

Product Name:	Louisville Green
Product Description:	Heat Dried Biosolids
Manufacturer:	Louisville and Jefferson County Metropolitan Sewer District 4522 Algonquin Parkway Louisville, KY 40211
Telephone Number:	(502) 540-6774
Distributor	Louisville and Jefferson County Metropolitan Sewer District 4522 Algonquin Parkway Louisville, KY 40211
Telephone Number:	Phone: (502) 540-6774
Emergency Contact:	Chemtrec (800) 424-9300
Recommended Use:	Bulk Agriculture
Restrictions on Use:	Class A Biosolids have no restrictions for land application.

Section 2. Hazards Identification

Emergency Overview May form explosive dust-air mixtures.

Section 3. Composition/Information on Ingredients

Name	CAS Number	% of Weight	Exposure Limits: TLV/PEL
Solids from activated sewage biosolids		93-96	Total Dust 15mg/m³ (PEL)/10mg/ m³ (TLV)
Water	7732-18-5	Balance*	Respirable Dust 5mg/m³ (PEL and TLV)

Section 4. First Aid Measures

Eye Contact	Immediately flush eyes thoroughly with water, remove any contact lenses, and continue to flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact	In keeping with good hygienic practices, wash exposed areas thoroughly with soap and water.
Inhalation	If breathing difficulty should occur, remove to fresh air. If symptoms of illness continue, seek medical attention.
Ingestion	If ingestion occurs, seek medical attention.

Section 5. Fire and Explosion Data

Flammability	Does not sustain combustion when exposed to 1000° C flame as verified by SW-846 Method 1030 analysis. Bulk wetted material may generate heat upon storage causing a potential for fire.
Flash Point	Minimum Ignition Energy; 100-300mJ Minimum Ignition Temperature; 540º - 560ºC Minimum Explosive Concentration; 40 - 50 G/m³
NFPA Rating	Health - 1 Fire - 1 Reactivity - 0
Explosive Limits in Air	LEL: ND UEL: ND
Unusual Fire and Explosion Hazards	Do not breathe fumes. At high temperatures, this type of biosolid can give off undefined fumes fine. Dust dispersion in air may form an explosive mixture. Do not spray with water. Bulk wetted material may generate heat upon storage causing a potential for fire.
Fire Fighting Media and Instructions	Firefighters should wear normal fire protection gear. Prevent runoff from entering drains, sewers, or any body of water. Becomes slippery when wet. Do not breathe fumes.

Section 6. Accidental Release Measures

Accidental Spill	Sweep, vacuum or shovel material into labeled containers. If possible, reuse product. Ensure that disposal is in compliance with local, state, or federal regulations
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Section 7. Handling and Storage

Handling	Avoid breathing dust. Wash hands after handling.
Storage	Keep dry. Store in a cool, dry area out of reach of children and animals. Bulk wetted material may generate heat upon storage. For storage recommendations, refer to the EPA's Guide to Field Storage of Biosolids. This document can be found on the EPA's website at http:\\www.epa.gov\owm\mtb\biosolids\fsguide\index.htm

Section 8. Exposure Control/Personal Protection

Ventilation Requirements	None required under normal use conditions. For occupational situations, use sufficient ventilation to keep dust levels below their Threshold Limit Values (See Section #2).
Eye Protection	Wear eye goggle/safety glasses if product may be expected to come in contact with eyes.
Skin Protection	Skin protection is suggested for outdoor applications and emergency response.
Respiratory Protection	Self-contained breathing apparatus (SCBA) should be used by emergency responders to avoid breathing dust and fumes during a fire situation. In normal conditions, half face or full face respirators with HEPA cartridges is suggested when dust levels exceed the Threshold Limit Values.
Other Protection	Wear appropriate safety equipment for any hazards encountered. Product by itself presents no specific hazards
Work/Hygienic Practices	Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

Section 9. Physical and Chemical Properties

Description	Pellets, Biosolids
Appearance	Dark free flowing granules
Odor	Earthy
рН	Slightly acidic
Boiling Point	Not Available
Specific Gravity	30-55 lbs./ft ³

Section 10. Stability and Reactivity Data

Chemical Stability	The product is stable.
Conditions of Instability	Keep away from heat, sparks, open flame, moisture and high humidity.
Incompatibility with Various Substances	Strong acids, alkalis, and oxidizing agents.
Hazardous Decomposition Products	Expected to emit the same types of toxic smoke as would be released during combustion of other organic materials.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Eye Contact	May cause eye irritation.
Skin Contact	ND
Inhalation	May cause nasal and throat irritation.
Ingestion	Ingestion is unlikely through the normal anticipated use of this product.
Carcinogenicity	Not listed as carcinogenic by OSHA , NTP, or IARC.

US EPA 40 CFR Part 503 (Biosolids Rule)

Under the Clean Water Act, the U.S. Environmental Protection Agency (EPA) has conducted extensive screening to determine likely pollutants in sewage sludge, a/k/a biosolids. EPA's National Survey of Biosolids analyzed for a total of 412 pollutants, including every organic, pesticide, dibensofuran, dioxin and PCB analyte for which EPA had gas chromatography and mass spectrometry (GC/MS) standards. 64 Fed. Reg. at 72047-48 (discusses the history of Part 503 information gathering on the fate and concentrations of pollutants in biosolids). See, www.epa.gov/fedrgstr.

Where the *available scientific information* indicated there was no risk of harm even at the highest pollutant concentration level found in the Biosolids Survey, the pollutants were dropped from further risk assessment. Most of the 412 pollutants are simply not present in biosolids at levels of concern. The National Standards for Biosolids Use, 40 CFR Part 503, establish limits for nine common metals and pathogenic organisms (which heat drying kills) at the no observable adverse effect level and a level of protection of 1 case in 10,000 for cancer risk. The 1993 technical support documents on biosolids risk assessment are available at EPA's website: www.epa/gov/OST/pc/municipal.html, and the National Biosolids Partnership also links the scientific risk assessments, www.biosolids.policy.net.

Louisville Green is well below the Part 503 national standards. Where EPA lacked sufficient *available scientific* data to establish a standard, the pollutants, totally 31, were subjected to a Comprehensive Hazard Identification Study. This screening analysis included dose-response evaluation, exposure assessment and risk characterization. The US EPA concluded, in a December 23, 1999, notice published at 64 Federal Register 72048, that only 3 pollutant compounds left on its list, analytically measured as 29 dioxin-like congeners, might pose an increase risk for a hypothetical highly exposed (through the food chain, primarily daily fats, meat fats and fish that have bioaccumulated the congeners) rural breast feeding mother and child. EPA has proposed a national standard and a final standard is expected after EPA completes its comprehensive Dioxin Reassessment, see, http://cfpub.epa.gov/ncea/index.cfm.

Section 12. Ecological Information

Exotoxicity	Not available. Keep out of any body of water.
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Section 13. Disposal Considerations

Waste Disposal	Sweep, vacuum or shovel material into labeled container. If possible, reuse product. Material is a soil amendment and should be used as such. Keep out of any body of
	water. Ensure compliance with local, state or federal regulations. Bulk wetted material may generate heat during storage.

Section 14. Transport Information

Proper Shipping Name	Biosolid
DOT Identification Number	NA
Hazard Class	NA
SEC 302	Not Listed
SEC 304	Not Listed
SEC 313	Not Listed
CERCLA	Not Listed
CAA	Not Listed
TSCA	Not Listed

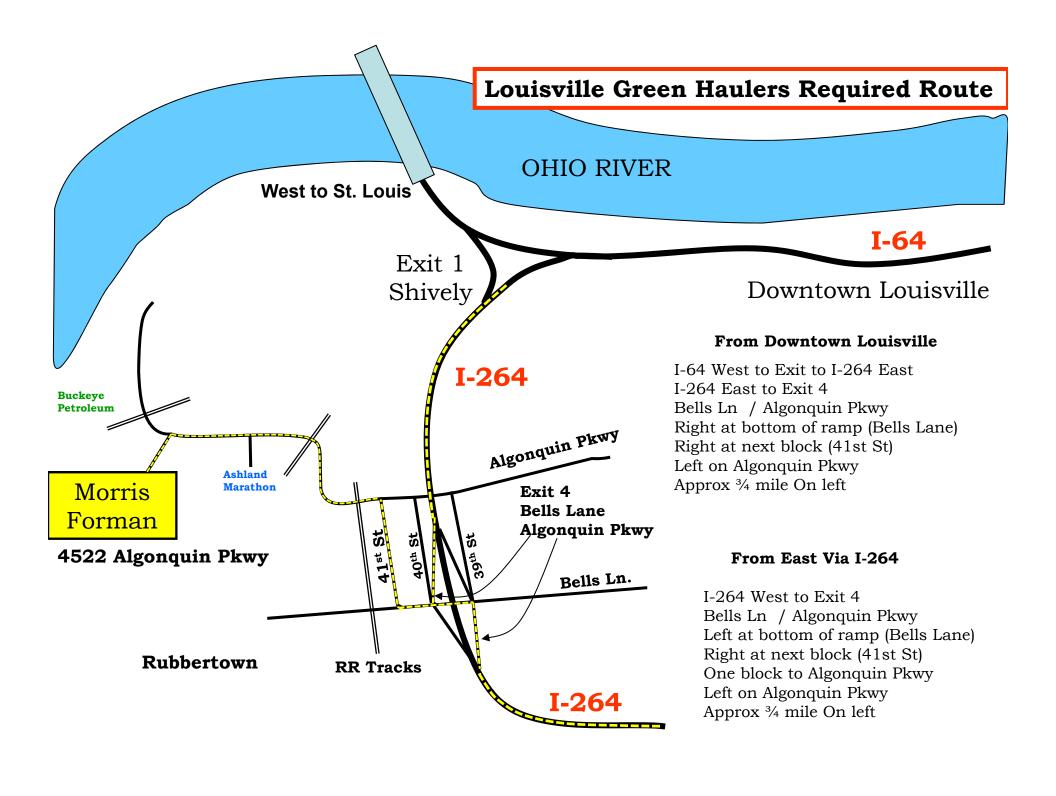
Section 15. Regulatory Information

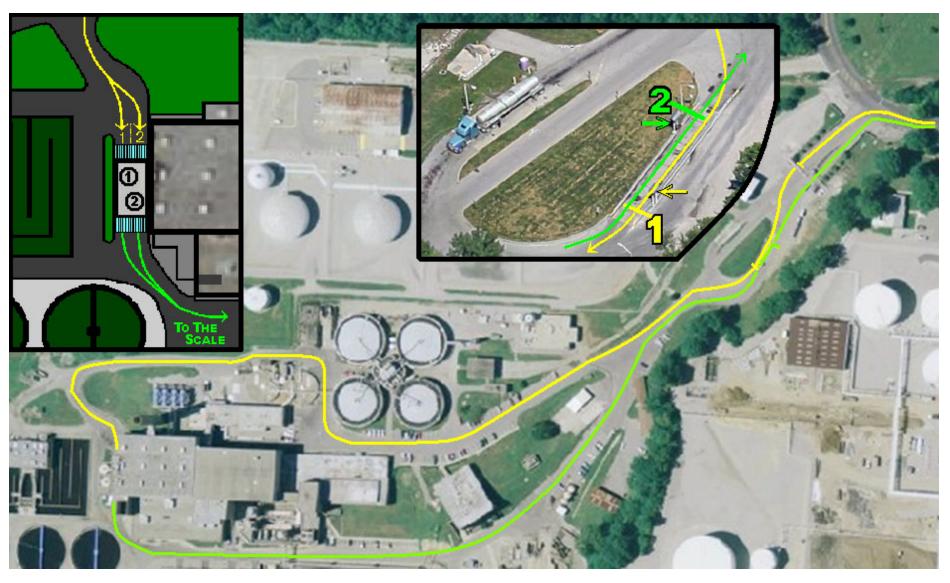
Federal and State Regulations	Yes	Fire
	No	Sudden Release of Pressure
	No	Reactivity SARA Title III Information
	No	Immediate Health
	No	Delayed Health

Section 16. Other Information

Disclaimer: The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, MSD makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for its particular purpose. Accordingly, Metropolitan Sewer District will not be responsible for damages of any kind resulting from improper use of or reliance upon such information. No representations, or warranties, either expressed or implied or merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to the information set forth herein or to the product to which the information refers.

MSDS Creation Date	1/15/2004	Created by: Nannette Hooker, Loss Control Administrator
Updated:	12-18-2012	By Jared Bishop, Loss Control Administrator
Updated:	5-4-17	MSD Safety Dept.
Updated:	3-9-18	MSD Safety
Updated:	5-13-2022	MSD Safety Department - Anthony Combs





Route to the Silo Route from the Silo

1 - Scale Entry Terminal

2 - Scale Exit Terminal