



Greens Grinding Operations

Standard Operating Procedure

**WASTE
REDUCTION
& DISPOSAL
DIVISION**

Greens Processing: Diamond Z Grinder/ Excavator/ Wheel Loader

Proper adherence to the following guidance will ensure that the processing of greens material in preparation for mulch and compost production is completed in a safe, efficient and regulatory compliant manner. It will also ensure that the products generated at the “Greenery” meet the highest standards for quality before being made available to the public.

Mulch production

Grinder Responsibilities:

1. Complete Checkout sheet; record equipment hours (EMS Document Control No. WRAD-F-GP-01).
2. Startup machine (see *E6000 Startup Procedure*).
3. Set up RPM’s and conveyor – Tub speed applicable for material to be ground.
4. Every 2 hours check hammers and tips for any FOD damage that can occur while grinding.
5. Shutdown machine (see *E6000 Lockout Procedure*).
6. ***Note** ending hours.

Note a– Always allow for a five-minute cool down period prior to engine shut-off.

7. Record and report any damage or machinery malfunction and to Operations Supervisor.

Excavator Responsibilities:

1. Complete Checkout sheet; record equipment hours (EMS Document Control No. WRAD-F-GP-01).
2. Startup machine.
3. Feed material to Grinder.
4. Separate any contaminants in the Green waste
5. Shutdown machine. ***Note** – Always allow machine a five minute cool down period prior to engine shut-off.
6. Record ending hours.
7. Note and report any damage or machinery malfunction to Operations Supervisor.

Wheel Loader Responsibilities:

1. Complete Checkout sheet, record equipment hours (EMS Document Control No. WRAD-F-GP-01).
2. Startup machine.
3. Integrate the City packer material and the public material.
4. Keep stockpiled material close to excavator for efficient grinding operations.
5. Stockpile processed material to a staging area, maintaining a smooth working surface for windrow production.
6. At end of working day, cleanup around the circumference of the E6000 area.

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7. Shutdown machine. ***Note** – Always allow for a five-minute cool down period prior to engine shut-off.

Compost Production

In addition to the above procedures for mulch production, the following steps must be included when processing green material for compost:

1. Inspect gypsum load for contamination from paint, metal, etc. prior to start of material crushing process. Remove any contaminated material before proceeding.
2. Lay out gypsum, with the wheel loader, approximately six inches deep by six feet wide by length of windrow.
3. Utilizing a “cleaned” (use air compressor) dozer from the trash area, track over the laid out material to crush sheets prior to mixing them with the greens material.
4. Apply water from the water truck with enough frequency to mitigate any dust issues. Use discharge amounts similar to dust control procedures used on road ways.
5. Pre-mix greens material and gypsum at a ratio of 5 parts “buckets” greens to one part “bucket” gypsum prior to processing through the tub grinder.

Note: *Periodically inspect the phase II belt rollers for gypsum build-up. Clean off with rebar hooks. Gypsum dust, when not managed properly, can become an airborne inhalation hazard as well as a violation of our APCD operating permit.*

6. Build compost windrows per windrow building procedure.

Consequence of Non-Compliance to Instruction:

- Slower grinder operation
- Higher operational cost and fuel consumption
- Higher concentration of airborne particulates
- Violations and/or fines from Regulatory Agency

Benefit of Compliance to Instruction:

- Greater efficiency in processing material
- Reduction in operating and fuel costs
- Airborne particulates kept to a minimum

Environmental Management System (EMS) – ISO 14001

Process Map #: GP-1.0

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