

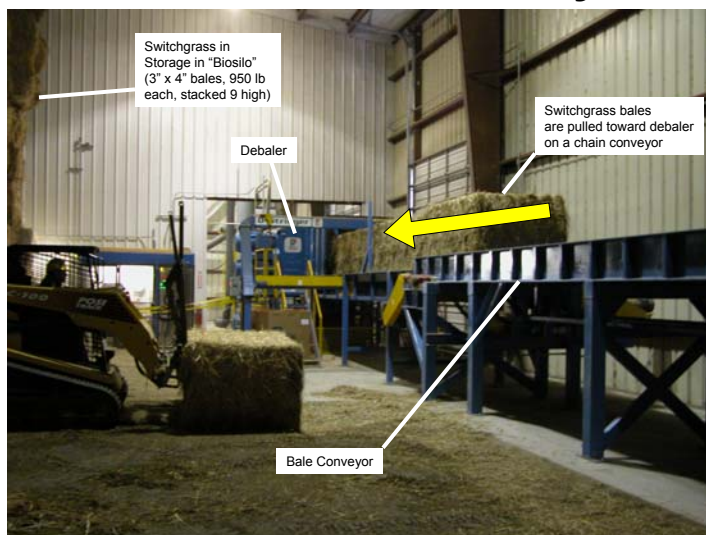
## APPENDIX G

# Photos of Biomass Storage, Processing Systems, and Facilities at OGS





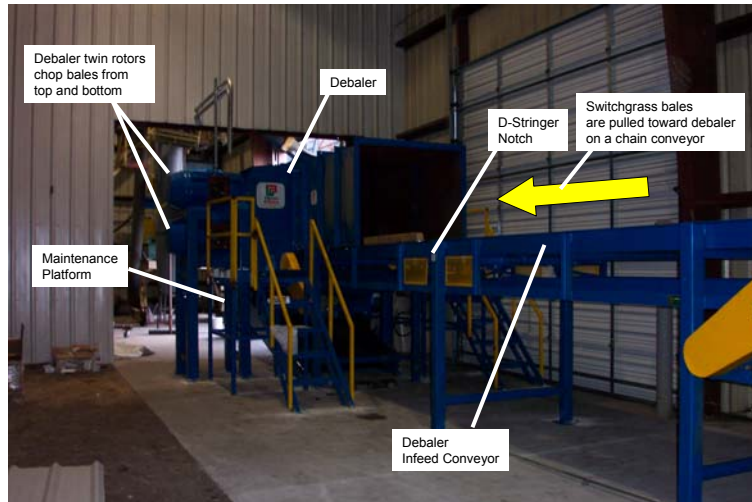
## Bale Infeed Conveyor



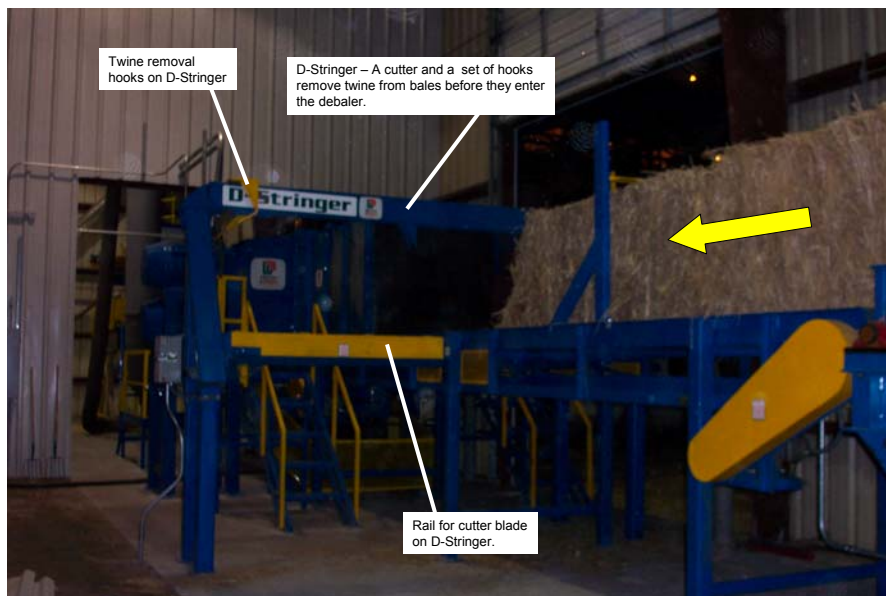
Fork truck, bale conveyor and debaler

## Loading 900 - 1000 lb. Bale





Debaler (prior to D-Stringer installation).



Bales on bale conveyor approaching D-Stringer and Debaler.



Twine removal hooks on the D-Stringer.



Cutter blade on the D-Stringer.

## D-Stringer



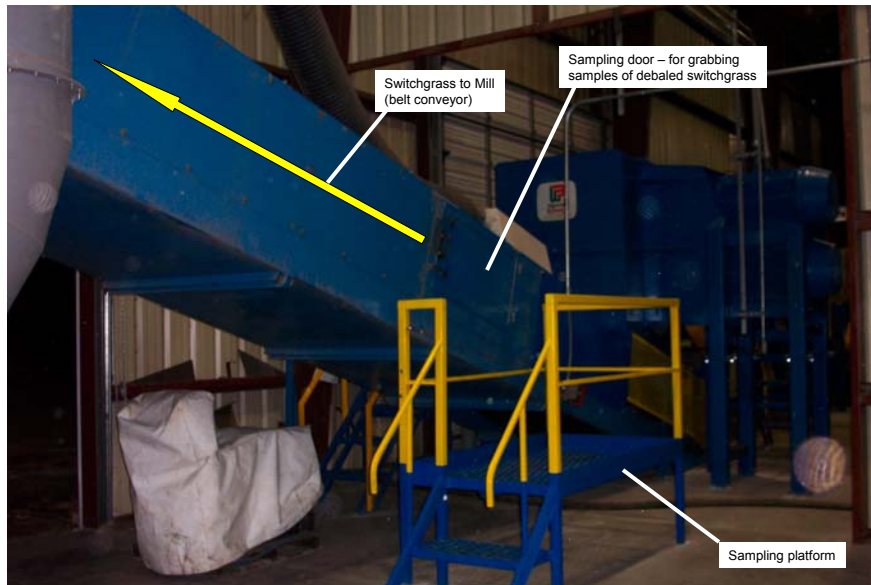
## 400 Hp De-baler (Hammer-mill)



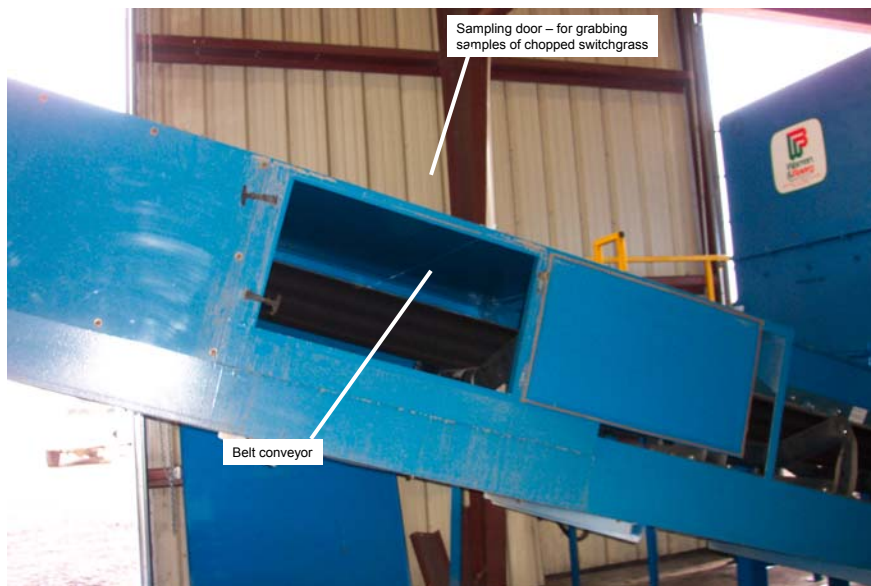
## Debaler and Take-away Conveyor



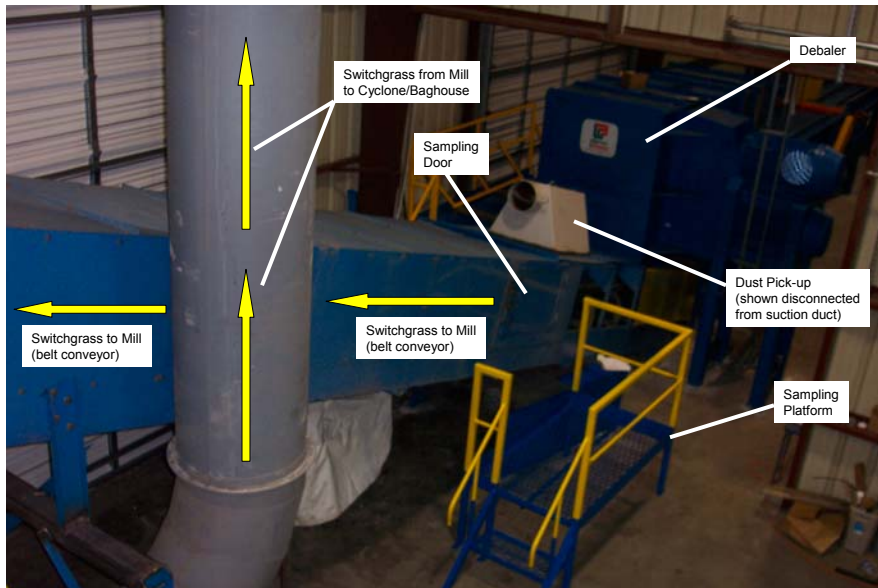
## Take-away Conveyor & Sampling Platform



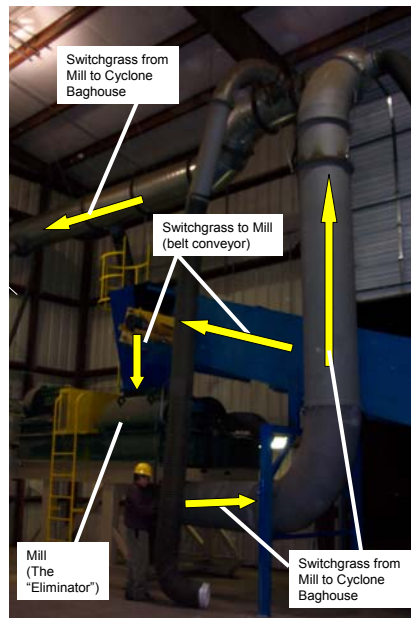
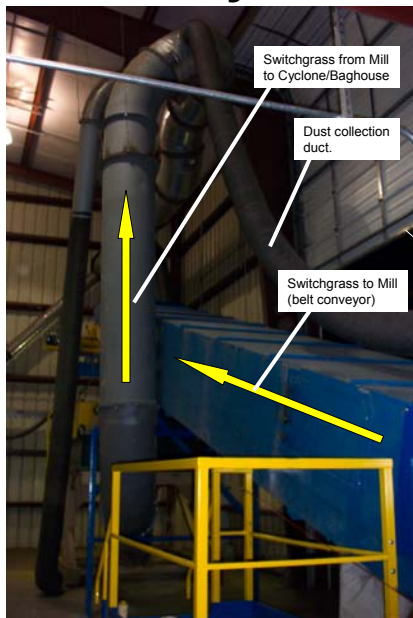
## Sampling Door on Take-away Conveyor



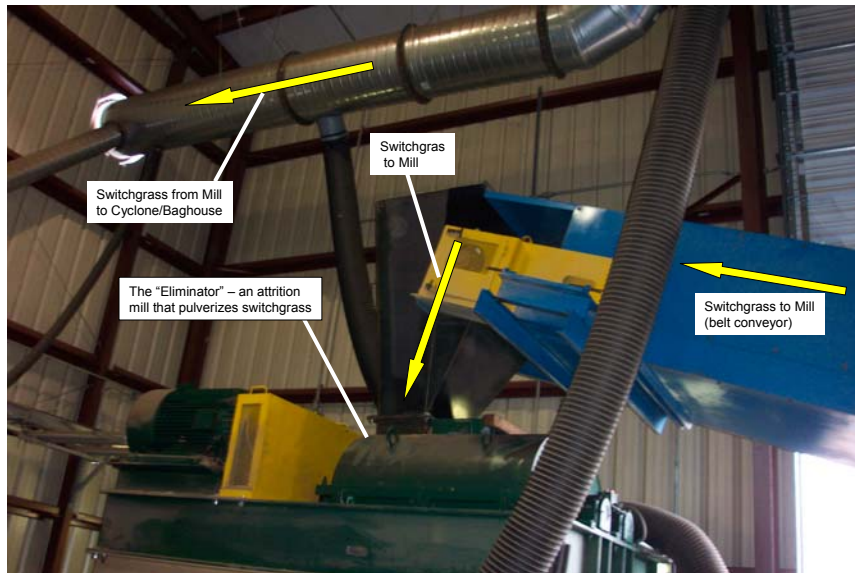
## Debaler and Take-away Conveyor



## Conveyor In-feed to “Eliminator”



## Conveyor In-feed to “Eliminator”



## Debaled Switchgrass Flowing into “Eliminator” Infeed Chute





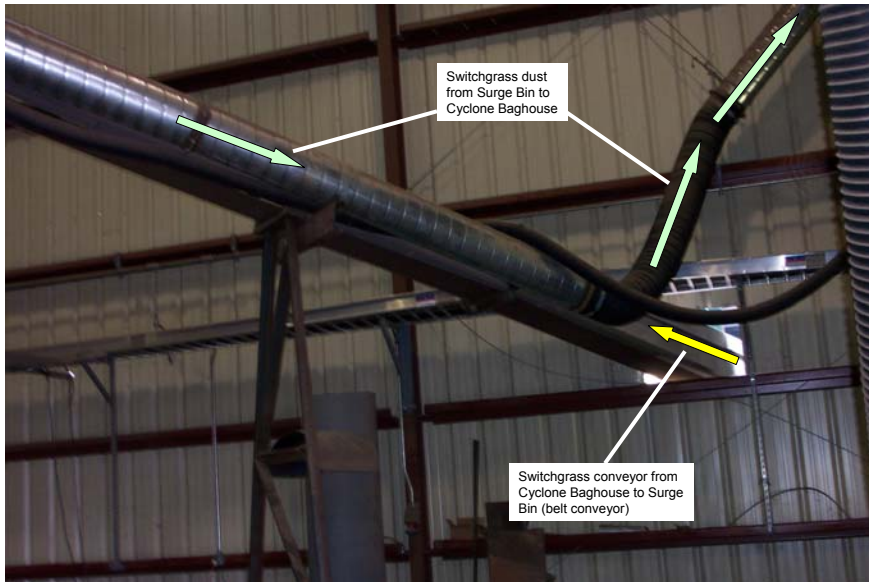
Cyclone Baghouse that conveys ground switchgrass from the "Eliminator" onto the Surge Bin Feed Conveyor and removes and filters dust from the processing area.

## Baghouse Discharge

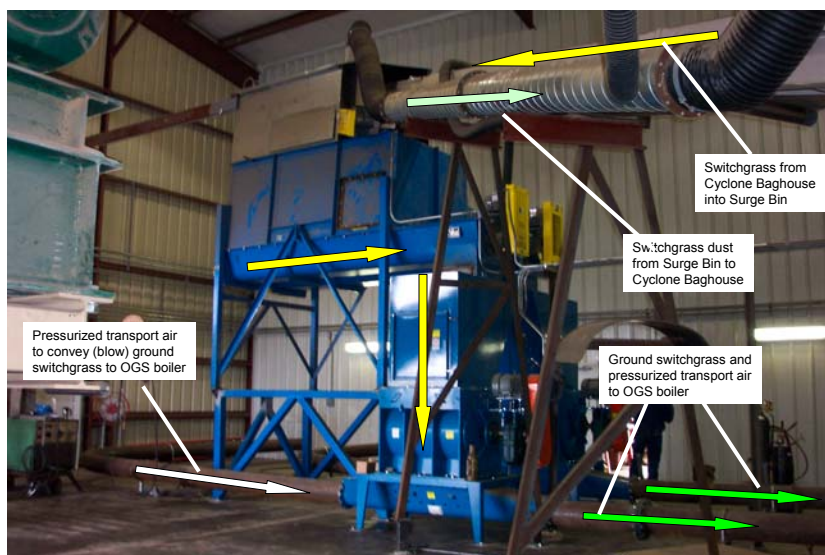


Ground switchgrass flowing out of Cyclone Baghouse onto Surge Bin Feed Conveyor.

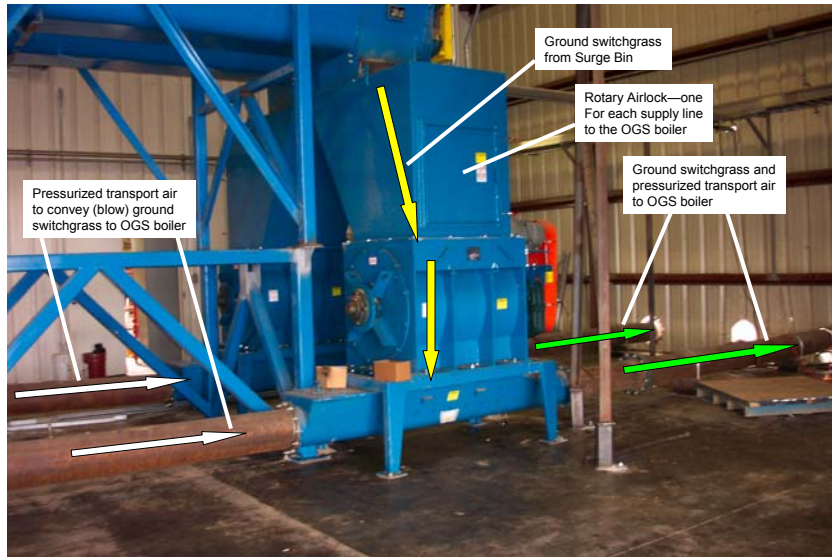
## Surge Bin Feed Conveyor & Dust Collection Duct



## Surge Bin, Airlocks, Transport Pipes



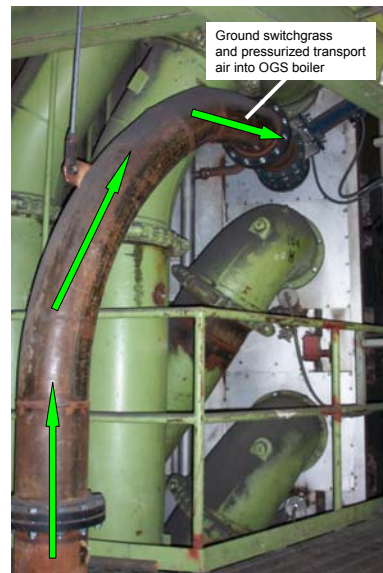
## Airlocks & Transport Pipes



## Transport Pipes Exiting “Biosilo”



## Switchgrass Transport Pipes Entering Boiler House and Boiler



## Switchgrass System Control Room



## APPENDIX H

### Photos of Data Acquisition Equipment, Sample Collection, and Test Samples for Interim Test Burn

## Bale Counting & Flow to Boiler



D-Stringer (bottom right) counts bales and displays running total on operator panel in "Biosilo" control room (bottom right). Ultrasonic ON/OFF sensor on biomass supply pipe (bottom left).

## Other Measurements at Biosilo



Weighing bale (top left) on digital scale (bottom left). Infrared moisture balance, scales, and sampling supplies (top right). Electric meter at "Biosilo" (bottom right).

## Emissions Monitoring (GE Mostardi Platt)

*Emissions Probe  
In Outlet Duct*



*GE's Mobile  
Emissions Lab*



*GE's Emissions  
Vans at Stack*



## Emissions Equipment at OGS

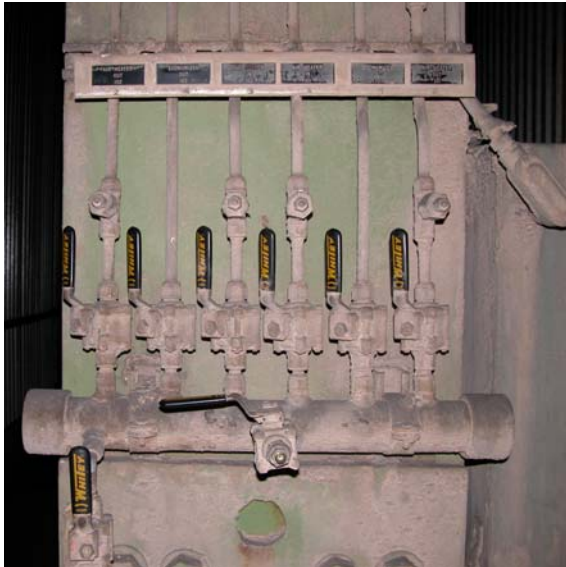
*CEMS Probes In Outlet Duct*



*Portable Emissions Monitor*



## Valved Emissions Sampling Header for Portable Combustion Analyzer



*Using a portable combustion analyzer, this header allows flue gas sampling from the Economizer Outlets, Air Heater Inlets, and Air Heater Outlets on both sides of the OGS Boiler.*

## Other Sampling



*Bottom Ash Liquids  
Economizer Ash  
Fly Ash Auto Sampler*



*Bottom Ash  
Bulk Fly Ash*



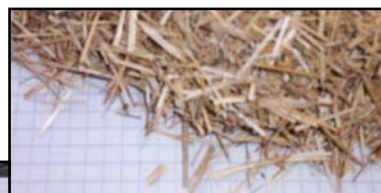
## Automated Flyash Sampler



## Debaled and Ground Switchgrass



*Debaled Switchgrass*



*Ground Switchgrass*

## Ash & Coal Samples

*As-received Coal*



*Economizer Ash*



*Bottom Ash*



*Fly Ash*