

**STANDARD OPERATING PROCEDURE
FOLEY PILOT PLANT**

TITLE: BIOMASS STORAGE 7A (Short term storage for single campaigns)

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APPROVALS:	Process Change Committee	DATE:
	HHSM	DATE:

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A. Scope

Approximately 7 dry tons of bagasse (9 dry tons of chipped wood) will be needed for initial campaigns in which we use the SScF process in two large fermenters. This material will be delivered by truck and stored on a concrete pad. Material will be moved around using a front end loader, and transferred to our biomass bin (2 h capacity) every 90 min. The cable conveyor will transport material to the presteamer as needed to maintain a constant level.

This material tends to self-heat due to microbial action during long term storage, although this is unlikely to be a problem during the short 5 day operation periods initially. If steaming spots develop, these need to be dispersed to allow air cooling.

Fire suppression equipment (sprinkler, large hose, and small hose should be available for emergency use if needed.

B. Safety and Training Requirements

Front end loader operation
Fluffing the bagasse to eliminate hot spots
Fire suppression system

C. Related Documents and SOPs

D. Preparation/Materials/Equipment

E. Detailed Procedure

F. Data Archival and Analysis

G. Tickets

-7	Biomass Storage	I
-8	Biomass Preparation	I
-9	Biomass Acid Soaking	I
-10	Screw Press Dewatering	I
-11	Biomass Pretreatment	I
-12	Enzyme Saccharification	I
-13	Transfer Saccharification to 140 L	I
-14	Parallel Control 2 L Fermentation	I

A. Scope

The scope should clearly define what process and what equipment is included in this procedure. For example: This procedure describes the methods to prepare, store, and thaw glycerol stock vials of bacterial strains for the production of ethanol.

B. Safety and Training Requirements

Refer to UF lab safety policies and describe the Personal Protective Equipment needed to carry out the procedure.

C. Related Documents and SOPs

List the related SOPs for other procedures such as equipment operation

List other documents such as the UF BioSafety Manual

D. Preparation/Materials/Equipment

List all raw materials, solutions, and equipment needed to carry out the procedure

E. Detailed Procedure

Here is where you give the detailed steps of the procedure

1. Each step is defined
 - a. Details or recipes given in table form with check box

F. Data Archival and Analysis

Give instructions on how the data is archived or recorded. Instruct staff to prepare reports or submit raw data (Tickets)

G. Tickets

These are generally medium recipes or batch data sheets