

**STANDARD OPERATING PROCEDURE  
FOLEY PILOT PLANT**

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**TITLE: BIOMASS STORAGE 7B (Longer Term storage for multiple campaigns or continuous)**

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**APPROVALS:** Process Change Committee **DATE:**  
HHSM **DATE:**

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**CONTENTS**

**A. Scope**

Approximately 10 dry tons of bagasse (14 dry tons of chipped wood) will be needed for standard campaigns in which we use the SScF process in all three large fermenters. Alternatively, approximately 3 – 5 tons will needed per day for continuous operation (second year and later).

The larger volume will require an additional concrete pad and Buckeye designated site. This material will be delivered by truck or rail, and stored on a concrete pad. Material will be moved around using a front end loader, and transferred to our short term storage pad near the biorefinery, prior to be transferred to the biomass bin (2 h capacity).

This material tends to self-heat due to microbial action during long term storage. 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**

- A. Related Documents and SOPs**
- B. Preparation/Materials/Equipment**
- C. Detailed Procedure**
- D. Data Archival and Analysis**
- E. 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