STANDARD OPERATING PROCEDURE
FOLEY PILOT PLANT

TITLE: Biomass Storage

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

CONTENTS

A. Scope

This procedure describes the methods to store biomass once it is received at the Pilot Plant.

B. Safety and Training Requirements

No protective equipment is necessary.

C. Related Documents and SOPs

1. KERN moisture balance operation manual
2. Dry weight by moisture balance SOP
3. Denver Instruments balance operation manual
4. Label marker manual
5. Biomass log book

D. Preparation/Materials/Equipment

1. Rubbermaid Roughneck 25 gal storage bin
2. Shovel
3. 1 gal Ziplock bag
4. Sharpie marker
5. KERN moisture balance
6. Denver Instruments balance
7. 3 L container
8. -20°C freezer
9. DYMO LetraTag label marker

E. Detailed Procedure

1. Distribute the biomass into the Rubbermaid bins.
2. Measure bulk density (at least 10 times) using a 3 L container and a Denver Instruments balance
    a. Tare the balance with the 3 L container.
    b. Fill the container to the 3 L mark with the biomass and record the weight.
    c. Divide the weight by 3 to obtain the bulk density.
    d. Record the bulk density in the biomass log.
3. Label the bins with the date it was received and the batch number.
4. Fill a 1 gal Ziplock bag to be stored as a sample and label the bag the same way as the bins using a Sharpie marker.
    a. Measure dry weight using moisture balances (at least 3 times).
    b. Record the dry weights in the Biomass Log.
5. Store the sample bag in the -20°C freezer.
6. Store the biomass in the cold room at 6°C (±2°C) until needed.

F. Data Archival and Analysis

Record the dry weights and the bulk density in the Biomass Log and add to the Biomass Log Book.

G. Tickets

Biomass Log

Batch Number _____

Date Received _____

	% Dry Weight	Bulk Density	Notes:
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
			Average