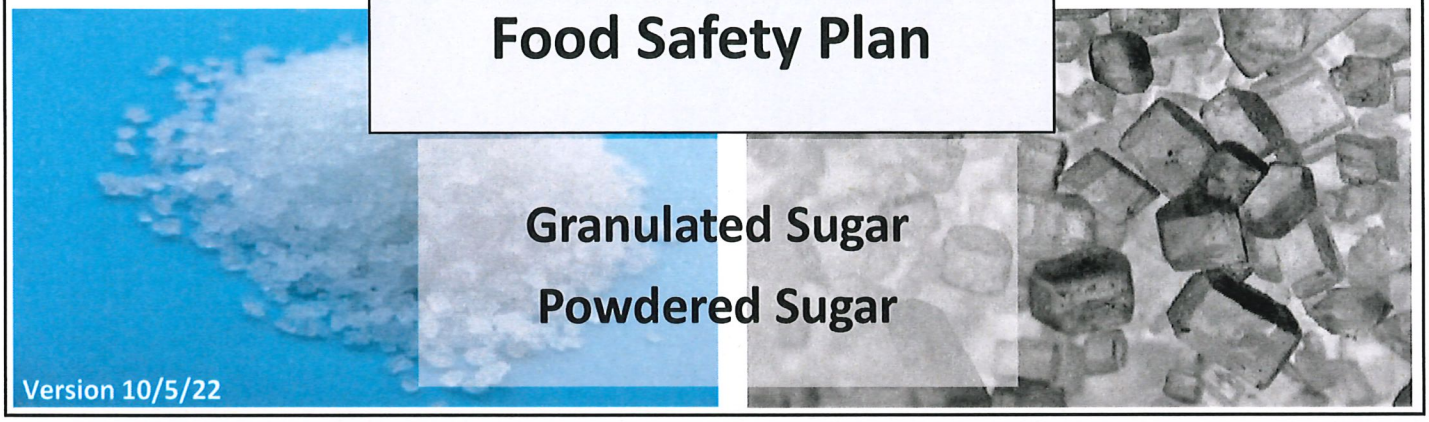
Amalgamated Sugar

NATIONAL SUGAR MARKETING

Nampa Facility
Food Safety Plan



Granulated Sugar
Powdered Sugar

Version 10/5/22

Plan Contents:

Plan Approval

Plant/Warehouse Manager: Date: 10/18/22

Local HACCP Coordinator: Date: 10/5/22

Facility Information

Facility Name:	Nampa Factory
Facility Address:	138 W. Karcher Road, Nampa, Idaho 83687
Phone:	208.466.3541
Plant/Facility Manager:	Jason Lowry
Local HACCP Coordinator:	Stefanie Constantinescu PCQI
Company HACCP Coordinator:	Kelly Malone PCQI
Number of Employees:	350 (500 campaign) **Temporary Employees:** Yes
Facility Description:	The Nampa factory was constructed in 1942. This facility produces granulated sugar which is conditioned and stored in 12 concrete silos. Stored sugar is screened and loaded or packaged into the following: • Bulk cars and bulk trucks • Industrial granulated—poly bags and totes • Industrial powder—paper bags and totes • Retail granulated—paper bags • Retail powder—poly bags • Used to produce liquid sucrose, invert, and coating syrup Packaged products are shipped by dry van trailers and box cars.

Food Safety

Products:	This site produces granulated sugar, powdered sugar, liquid sugar, medium invert sugar, coating syrup, and feed co-products.
Third Party Audit Standard:	Current SQF Edition **Certification Body:** CICS-Americas
Ingredients/Raw Materials:	Sugar Beets **Import Capability:** No Corn Starch (powdered)
Packaging:	Tote (Flexible Intermediate Bulk Container), Paper Bags, and Poly Bags

Prerequisite Programs :

1. Personnel Practices	2. Employee Training	3. Equipment Calibration
4. Integrated Pest Management	5. Premises & Equipment Maintenance	6. Cleaning & Sanitation
7. Monitoring Utilities: Air & Water	8. Physical Contaminant Control	9. Warehousing, Transport, and Delivery
10. Waste Management	11. Allergen Management	12. Chemical Control
13. Supplier Approval	14. Visitors	

Team

Stefanie Constantinescu	Food Safety and Quality Professional	Preventive Controls Qualified Individual
Jason Lowry	Plant Manager	In-house
Craig Ashcraft	Maintenance Manager	In-house
Tyrel Murphy	Chief Chemist	HACCP 1 Day Course
Bruce Rhodes	Warehouse Maintenance Supervisor	HACCP 1 Day Course
Maria Betancourt	Warehouse Supervisor	HACCP 3 Day Course
Luis Cepeda	Production Manager	In-house
Steve Willcuts	Engineering Manager	In-house
Kelly Malone	Food Safety Systems Specialist	Preventive Controls Qualified Individual

General Product Information

Product Name:	Granulated Sugar
Technical Name:	Sucrose
Product Description:	Sucrose is a nonreducing disaccharide composed of glucose and fructose bonded by an oxygen atom. It is derived from sugar beets or sugar cane and is used as a food and a sweetener.
Ingredients:	Crystalline sucrose
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener.
Intended Consumer:	Granulated sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups.
Shelf Life:	5 years, 70% RH, 90°F
Labeling Instructions:	None
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Silo storage, ambient. Packaged product is warehoused.
Distribution:	Granulated sugar is distributed in bulk or packaged form. Bulk sugar is transported by bulk rail or truck. Packaged sugar is distributed by trailer or boxcar.

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11}$
Water Activity (a_w):	0.22[1]
Moisture:	0.04% Max.
Sulfites:	2 to 5 ppm. Must be less than 10 ppm.
Microbiological:	Will not support the growth of vegetative pathogens.[2,3] Meets ISBT[4] and NFP[5] standards for use in carbonated beverages and canned foods.

Preventive Controls

Process Control:	CCP Metal Detection & CCP Magnet
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	None

[1] BC CDC: Water Activity of Sucrose and NaCl Solutions

[2] Microbial Risk Assessment: Pathogen Challenge Evaluations of Granulated and Liquid Sugar

[3] Fate of Bacterial Pathogens

[4] ISBT: Liquid Sucrose

[5] GMA Canners Standard

	Product Description	
	Document No.: PD-04	Rev.: 0

NATIONAL SUGAR MARKETING

General Product Information

Product Name:	Confectioner's Powdered Sugar
Technical Name:	Sucrose
Product Description:	Pulverized or ground granulated sugar with corn starch for anti-caking properties.
Ingredients:	Sweetener to be used as an ingredient or direct consumption.
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener.
Intended Consumer:	Powdered sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups.
Shelf Life:	2 years
Labeling Instructions:	None
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Packaged product is warehoused.
Distribution:	Powder sugar is distributed by trailer or boxcar.

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + C_{12}H_{48}O_{20}$
Water Activity (a_w):	0.31[1]
Moisture:	0.5% max.
Sulfites:	Results equivalent to granulated sugar, 2-5 ppm.
Microbiological:	Will not support the growth of vegetative pathogens.[2,3] Meets ISBT[4] and NFP[5] standards for use in carbonated beverages and canned foods.

Preventive Controls

Process Control:	CCP Metal Detection
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	None

[1] Internal Analysis

[2] Microbial Risk Assessment: Pathogen Challenge Evaluations of Granulated and Liquid Sugar

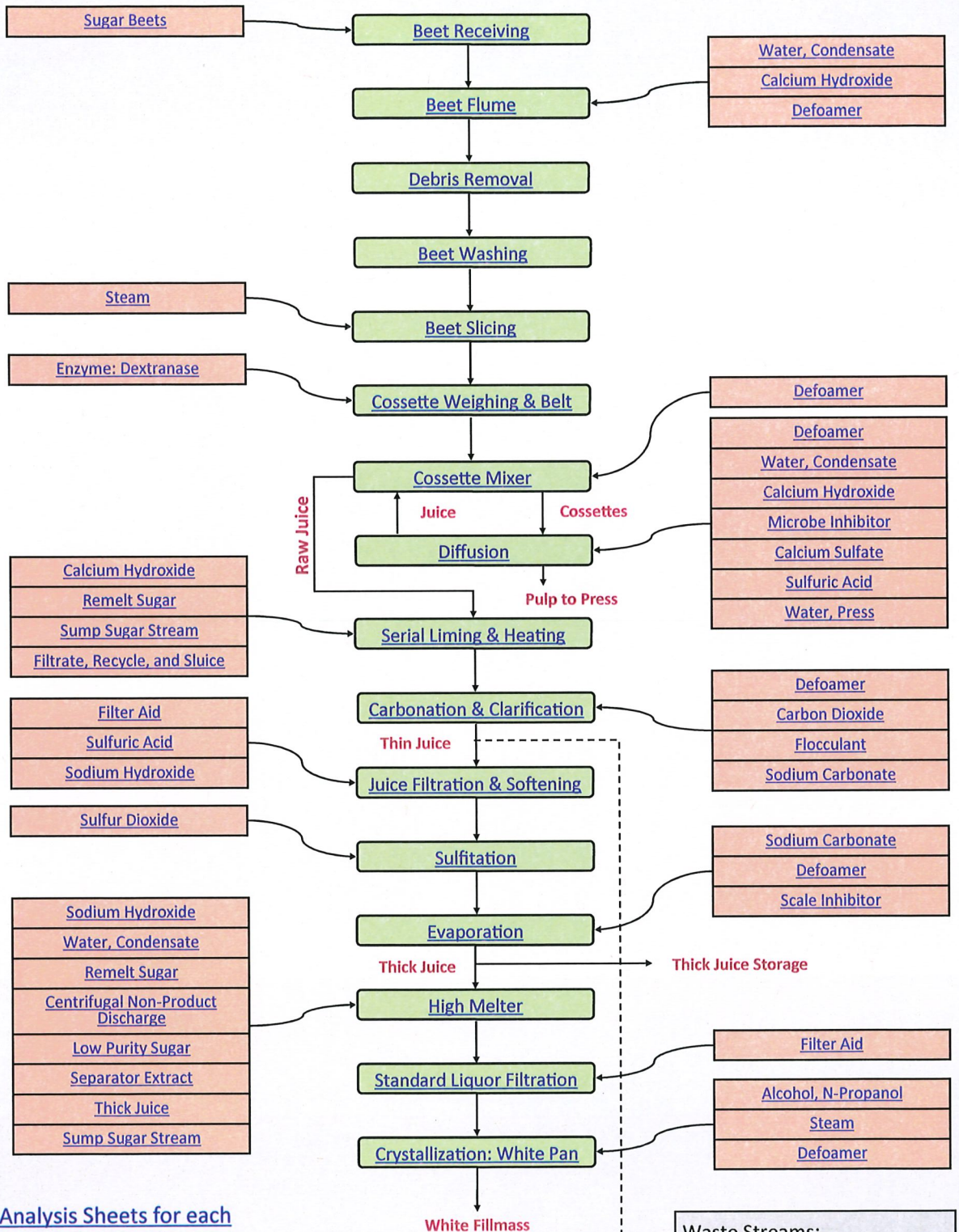
[3] Fate of Bacterial Pathogens

[4] ISBT: Liquid Sucrose

[5] GMA Canners Standard

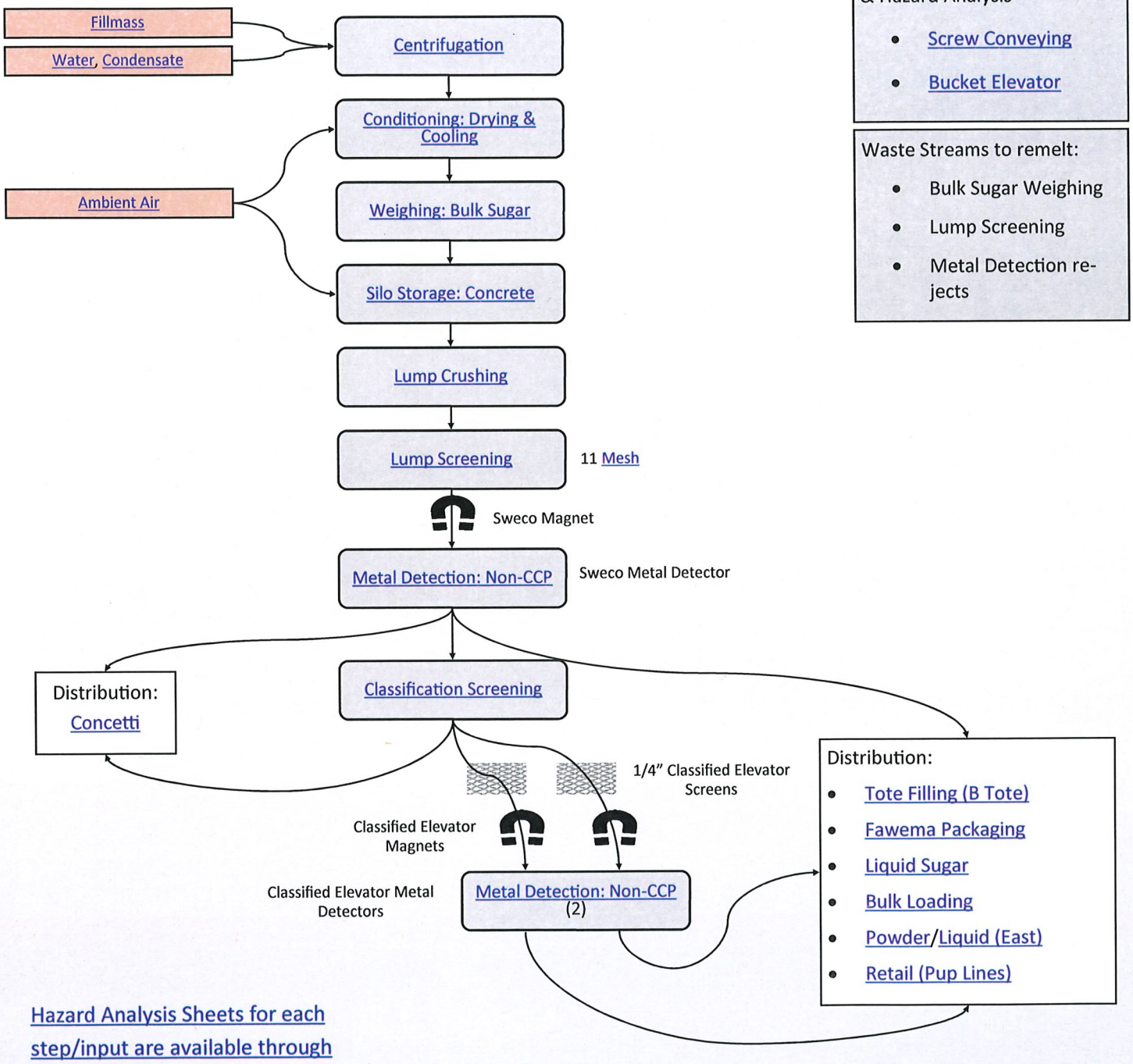
Process Flowchart: Beets to Fillmass

This flowchart outlines the factory mill, including slicing, extraction, purification, and crystallization. The separation in diagrams is based on product risk and resulting hygienic zoning. The factory process (outlined below) precludes any food safety hazards in prior to crystallization.



Hazard Analysis Sheets for each step/input are available through internal links or by customer request.

Process Flowchart: Granulated Sugar Distribution



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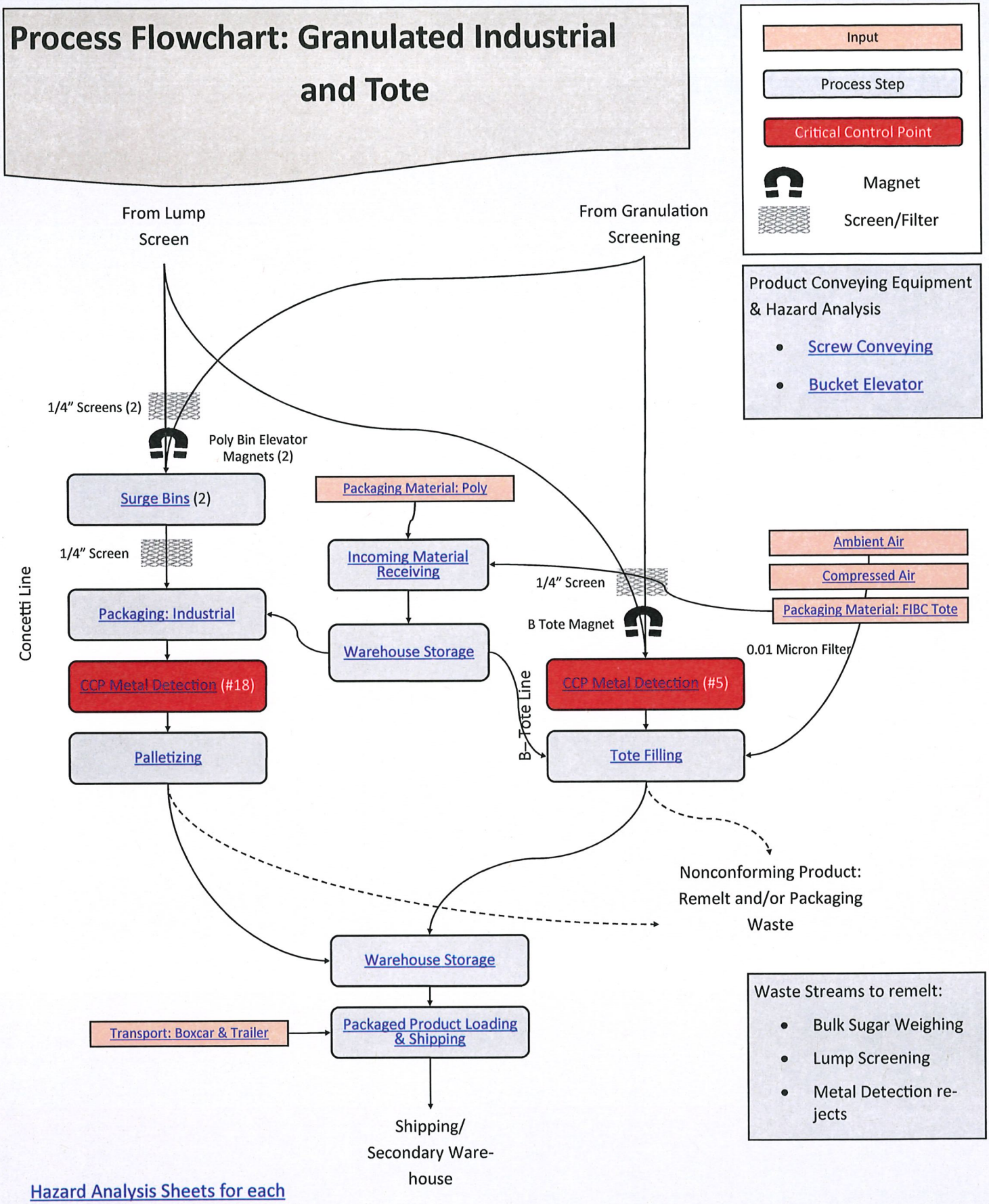
Process Flowchart: Granulated Industrial and Tote



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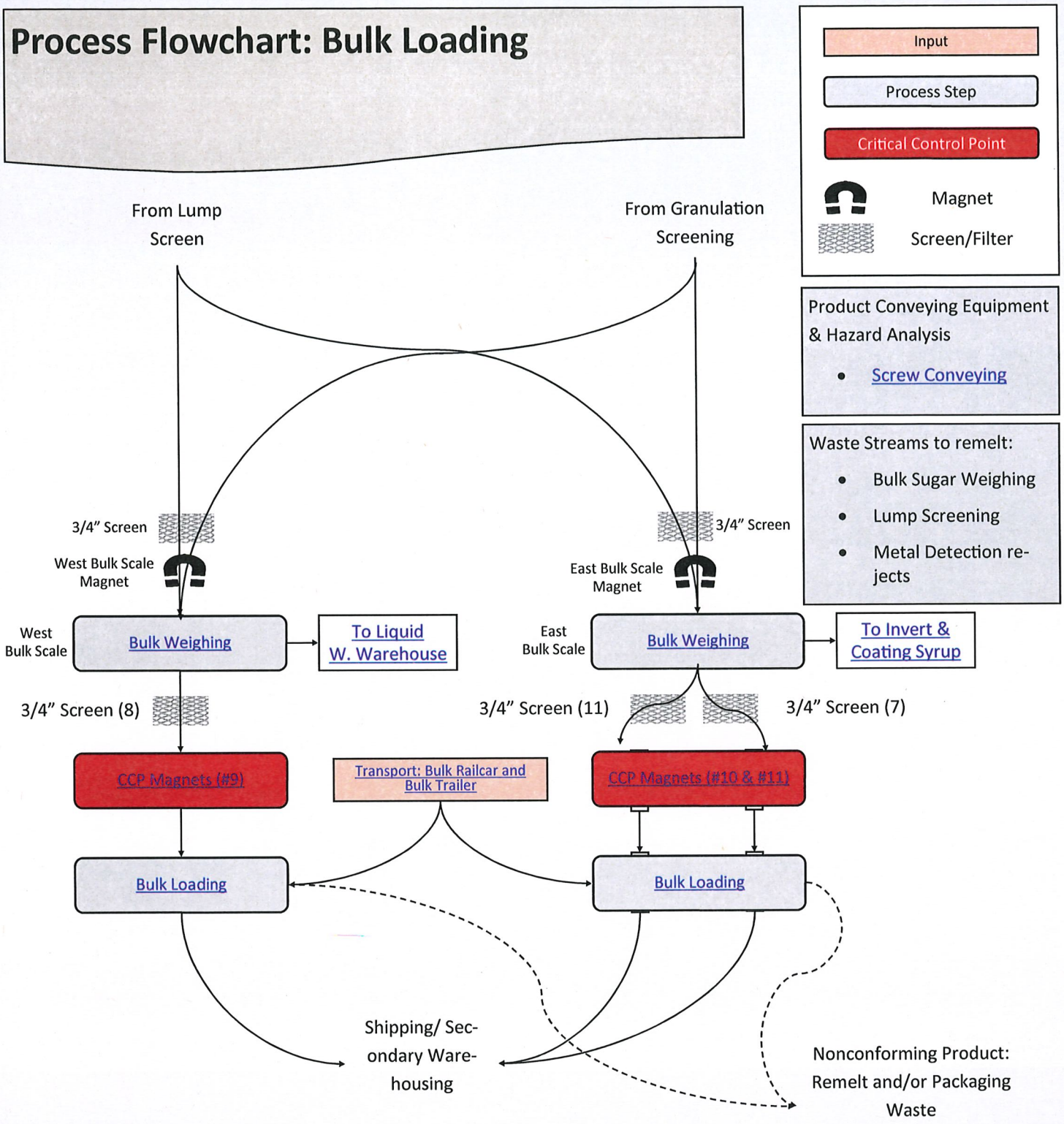
Process Flowchart: Bulk Loading



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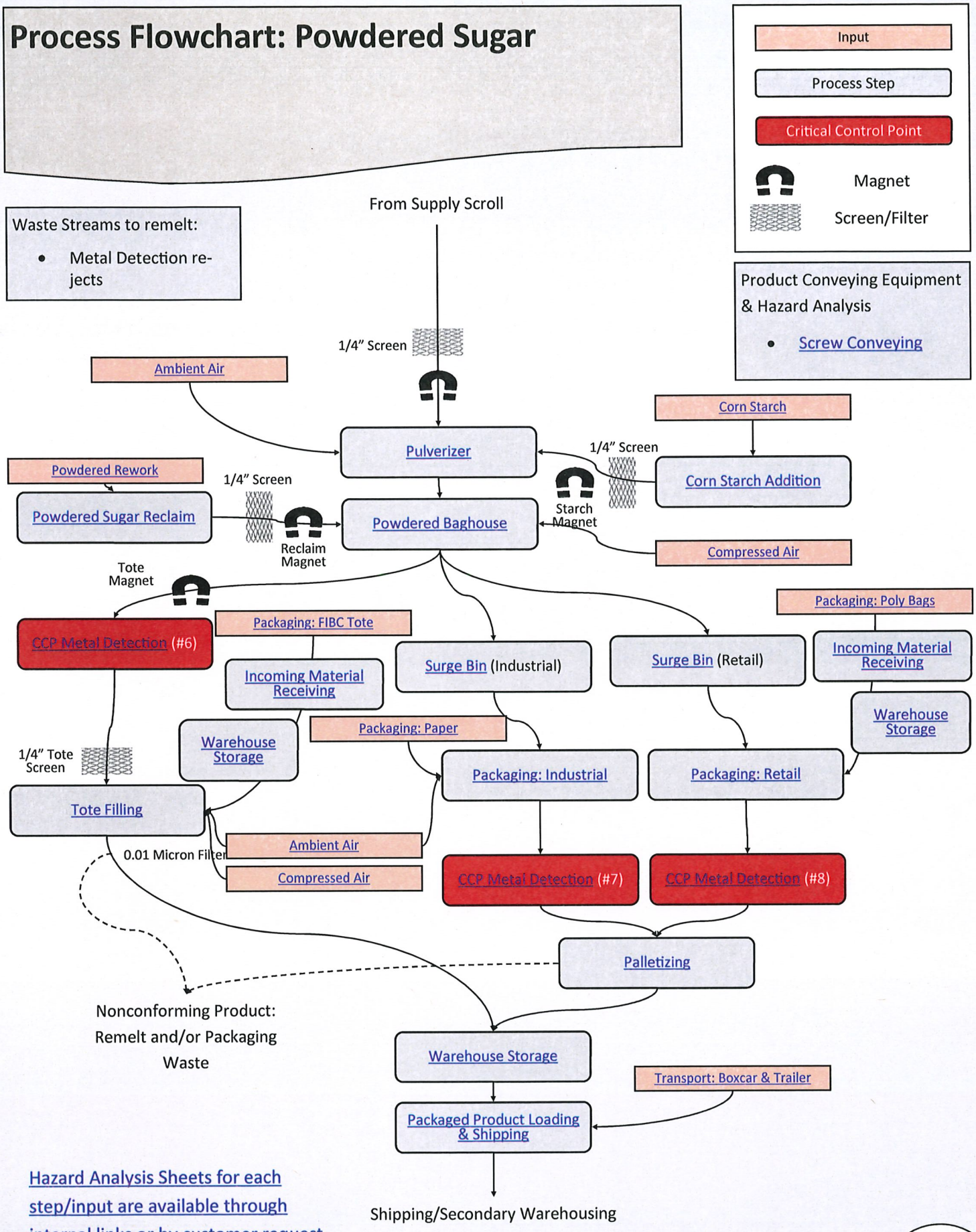
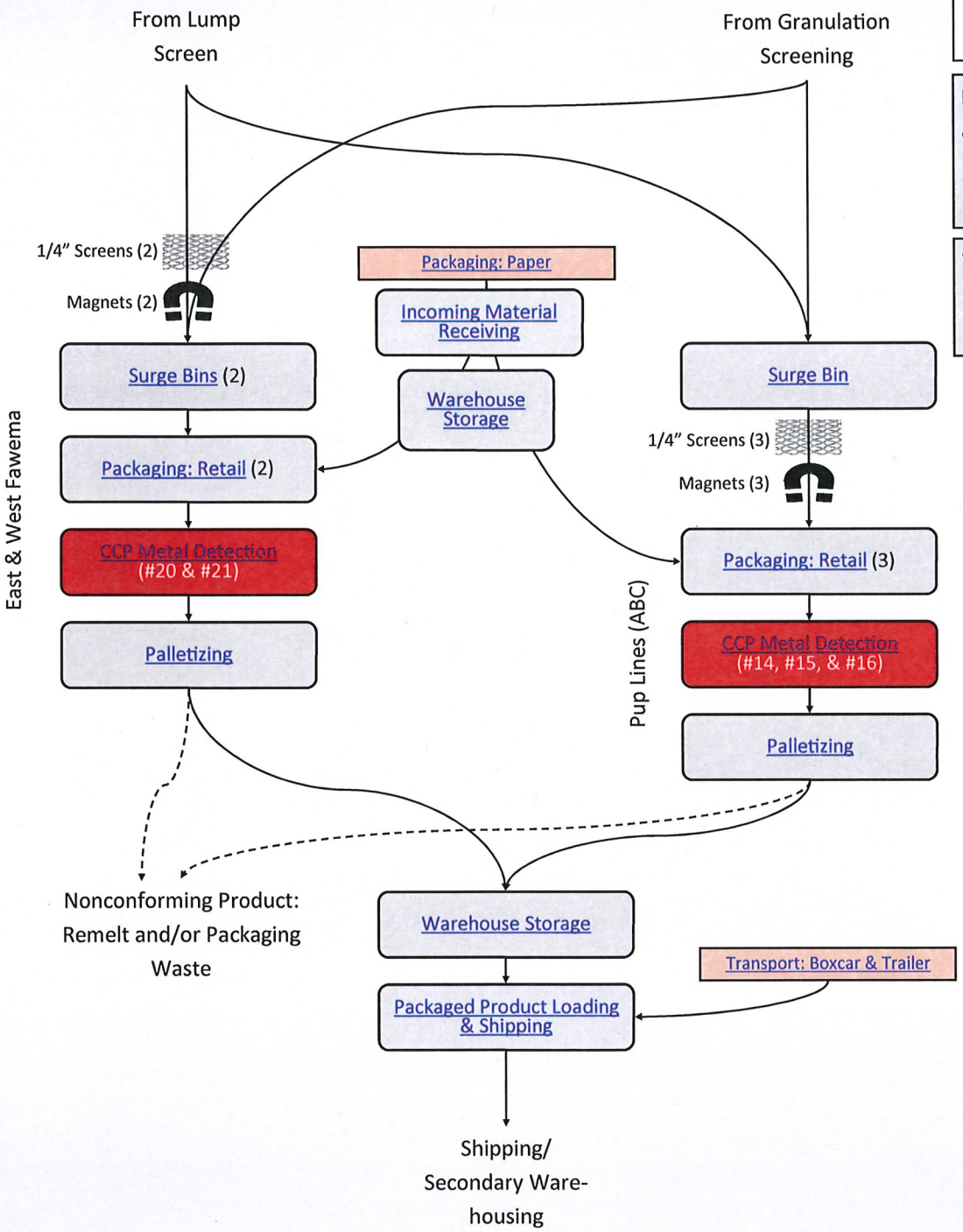
Process Flowchart: Powdered Sugar



Hazard Analysis Sheets for each step/input are available through internal links or by customer request.

Process Flowchart: Fawema and Pup Lines



Input

Process Step

Critical Control Point

Magnet

Screen/Filter

Product Conveying Equipment & Hazard Analysis

- Screw Conveying

Waste Streams to remelt:

- Metal Detection rejects

Hazard Analysis Sheets for each step/input are available through internal links or by customer request.

Process Preventive Control: Critical Control Point Summary

Process Control Step:		CCP Metal Detection
Hazard(s):		Metal
Parameters, values, or critical limits:		Functioning metal detector that can detect 1.5 Fe, 1.8 NF, 2.0 SS, and 2.0 Al mm spheres.
Monitoring:	**What:**	All product passes through an operating metal detector.
	How:	Monitor according to SOP 6.3-01 CCP Monitoring: Metal Detector.
	Frequency:	Packaged detectors checked at the beginning of a startup, a shutdown of two hours or longer, at the end of a production run (no following shift), and at least every 1.5 hour (industrial & retail packaging) or 2.5 hours (totes) of operation.
	Who:	Trained warehouse operator.
Corrective Action:		Operator notifies QA personnel. QA personnel complete corrective action according to SOP 6.3.-03 HACCP Deviation: Metal Detector.
Verification:	**Monitoring Activity:**	Supervisory personnel verify the monitoring activity through record review within 7 days of record generation. The review is indicated by a signature and date.
	Food Safety Plan:	The food safety plan is incorporated into annual internal audits. The plan, CCP selection, and CL determination are reviewed/assessed annually.
Validation:	**Critical Control Point:**	CCP selection is reevaluated annually in light of emerging technological and regulatory information. This review is documented on record 7.1-03 Validation.
	Critical Limits:	CL or parameter selection is reevaluated annually in light of emerging technological and regulatory information. This review is documented on record 7.1-03 Validation.
	Scientific & Technical Information:	Decisions for the hazard analysis, CCP selection, and CL selection have been based on scientific and technical information. This information is posted to the corporate intranet and may be accessed through this link.
Records:		Records retained per Record Retention policy.

Procedural documentation is available on the corporate intranet through direct links or through the quality assurance tab. This documentation will be made available to customers upon request.

Process Preventive Control: Critical Control Point Summary

Process Control Step:		CCP Magnet
Hazard(s):		Metal
Parameters, values, or critical limits:		No significant findings upon inspection. Significant findings (≥ 2.0mm) indicate potential contamination and activate deviation procedures.
Monitoring:	**What:**	All product passes through magnets, which are inspected for potential contaminants. Material is evaluated with the assistance of WHS-REC-117.
	How:	Monitor according to SOP 6.3-05 CCP Monitoring: Magnet.
	Frequency:	Bulk loading magnets are cleaned and tramp metal is evaluated after each bulk load.
	Who:	Trained warehouse operator.
Corrective Action:		Operator notifies QA personnel. QA personnel complete corrective action according to SOP 6.3-06 HACCP Deviation: Magnet.
Verification:	**Monitoring Activity:**	Supervisory personnel verify the monitoring activity through record review within 7 days of record generation. The review is indicated by a signature and date.
	Food Safety Plan:	The food safety plan is incorporated into annual internal audits. The plan, CCP selection, and CL determination are reviewed/assessed annually.
Validation:	**Critical Control Point:**	CCP selection is reevaluated annually in light of emerging technological and regulatory information. This review is documented on record 7.1-03 Validation.
	Critical Limits:	CL or parameter selection is reevaluated annually in light of emerging technological and regulatory information. This review is documented on record 7.1-03 Validation.
	Scientific & Technical Information:	Decisions for the hazard analysis, CCP selection, and CL selection have been based on scientific and technical information. This information is posted to the corporate intranet and may be accessed through this link.
Records:		Records retained per Record Retention Policy

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Amendments	
10/5/22	Removed Dave Hawk and replaced with Jason Lowry. Removed NSF and added CICS-Americas. Removed HR and Safety from HACCP Team.
5/17/21	Changed Maria Alvarez to Maria Betancourt. Added Waste Streams and incoming material and warehouse storage to packaging. Updated Logos.
5/13/21	Added Waste streams, secondary warehousing, Revised names. Added: Troy Morfin and Tyrel Murphy. Removed: Keith Brossard and Jeff Durning
4/21/2020	Added: Keith Brossard Removed: Kimberly Tkacs
06/20/19	Fixed Maria Alvarez's title to warehouse manager not assistant warehouse manager. Added: Luis Cepeda; Kelly Malone Removed: Tim Vandeventer; Jeremy Adamson Removed Corporate HACCP Coordinator.
02/01/2019	Added: Dave Hawk as plant manager. PCQI Training added for Stefanie Constantinescu. Removed: Eric Erickson from plant manager.
07/11/2018	Updated Version to 07/11/2018. Updated Certification body to NSF. Changed Local HACCP Coordinator from Lacey Messing to Stefanie Constantinescu, added in-house training. Changed SQF ed. to 8.0. Added Stefanie Constantinescu to team and removed Lacey Messing. Un-highlighted Martha Luna.
10/12/2017	Removed Jacci Gibbons and added Martha Luna to the HACCP Team as HR.
09/20/2017	Revised HACCP team by removing Josh Sourapas and adding Maria Alvarez.
05/24/2017	Removed the Environmental Monitoring prerequisite program. Documented a validation of change & a notification letter outlining rationale. Added Craig Ashcraft to replace Dave Hawk.
04/20/2017	Removed: Kelly Malone as the local HACCP coordinator and Mark Hyer as HACCP team member. Added: Lacey Messing as the local HACCP coordinator. Updated training portion and contact information. Also added Kimberly Tkacs to the HACCP team.
08/25/2016	Removed: the local organizational chart. Added: links to the Corporate Recall procedure.
08/09/2015	Added: Training for Bruce Rhodes, Dave Hawk, Deb Kvanli, Eric Erickson, Mark Hyer, Tim Vandeventer, and Kelly Malone Changed: Trent Holcomb with Deborah Kvanli as Chief Chemist. ver. 2:2015-2016
11/20/2015	Reviewed: HACCP plan with team members, signed approval page and verified flow diagram.
04/23/2015	Removed: Spot check on lot per week by the SQF Practitioner from the HACCP Master Plan to coordinate with Corporate Standard Operating Procedure. ver. 2:2014-2015

Amendments Continued	
10/29/14	Reviewed: HACCP plan changes with team members, Eric Erickson, Tim Vandeventer, Jacci Ellis-Gibbons, Trent Holcomb, Josh Sourapas, Steve Willcuts, and Kelly Malone.
10/21/2014	Removed: Standard operating procedures and records from Food Safety Plan. Changed: The Master Plan to include the new corporate procedures and records. ver. 1:2014-2015
09/30/2014	Changed: Organizational structure was changed in the company, so changed org chart to reflect the changes. ver. 5:2013-2014
06/05/2014	Added: Members of SQF Management Team to HACCP Team list. Changed: CCP 5 and CCP 6 from magnets to metal detectors. Changed: HACCP Master Plan CCP 5 and CCP 6 from magnets to metal detectors. Changed: SOP for Magnet sampling for totes removed and Metal Detector for the CCP 5 and CCP 6 change to metal detectors and HACCP documents. Changed: During HACCP verification audit and reviewing the flow diagram for powder, the screen was above the magnet on the flow chart instead of below the metal detector. ver. 4:2013-2014.
06/02/2014	Added: Screens to flow diagrams and hazard analysis. ver. 3:2013-2014.
10/23/2013	Changed: Updated WHS-SOP-006 to include load out screens and CCP 9, 10, and 11 ver. 2:2013-2014
08/13/2013	Mike Fowers and Kelly Malone walked the system for the New Granulated Retail Lines (Fawema) ver. 1:2013-2014

Training Log	
11/30/2018	Stefanie Constantinescu completed FSPCA Preventative Controls for Human Food course.
08/26/2016	Lacey Messing completed FSPCA Preventive Controls for Human Food course.
02/18/2016	Lacey Messing completed Two Day: Food HACCP Plan Development.
02/14/2016	Lacey Messing completed SQF Systems certification.
01/21/2016	Kelly Malone and Jeremy Adamson completed FSPCA Preventive Controls for Human Food course.
05/14/2015	Jeremy Adamson completed Three Day: Practical Food Safety and HACCP Workshop.
05/14/2015	Kelly Malone completed Three Day: Practical Food Safety and HACCP Workshop.