

**Nyssa Facility
Food Safety Plan**

FSP-08-Nyssa



Granulated Sugar



Brown Sugar

Plan Contents:

Facility & Food Safety & Quality Information	2
Product Description: Granulated Sugar	3
Product Description: Brown Sugar	4
Flow Diagram– Granulated Sugar	5
Flow Diagram– Brown Sugar	6
Process Preventive Control: Critical Control Point Summary	7
Supply-Chain Program	8
Amendments	9-10
Training	11

Plan Approval

Plant/Warehouse Manager:



Date: 05/05/2023

Local HACCP Coordinator:



Date: 05/05/2023

Facility Information

Facility Name:	Nyssa Facility
Facility Address:	105 East Main St., Nyssa, OR 97913
Phone:	541.372.2277
Warehouse Manager:	Destiny Reeves
Local HACCP Coordinator:	Lacey Messing PCQI
Number of Employees:	50
Temporary Employees:	Yes
Facility Description:	The Nyssa Facility only receives granulated sugar from Amalgamated beet sugar factories. This facility can receive bulk and packaged sugar. Product is stored in silos or warehoused and may be shipped directly or processed into brown sugar products. Packaged products (brown or granulated) may be shipped by dry van trailer or boxcar. Bulk products are loaded and shipped via bulk truck or bulk rail.

Food Safety

Products:	Bulk Granulated Sugar, Granulated Sugar Totes, Light Brown Sugar, Dark Brown Sugar		
Third Party Audit Standard:	BRCGS current issue		
Certification Body:	SGS		
Import Capability:	This facility only sources sugar from domestic facilities. Cane molasses is purchased from US importers.		
Ingredients/Raw Materials:	Ingredient: Cane Molasses (Dark Brown Sugar Only) (Refer to approved supplier approval) Ingredient: Coating Syrup (Light Brown Sugar) (Refer to approved supplier approval) Raw Material/ Ingredient: Sugar, Granulated (Refer to approved supplier approval)		
Packaging:	Brown Sugar: Poly Bags (25 and 50 lbs.) & Rollstock (2 lbs.) (Refer to approved supplier approval) Granulated Sugar: Bulk Containers (truck & rail) & Totes (Refer to approved supplier approval)		
Prerequisite Programs :	1. Employee Training	2. Personnel Practices	3. Integrated Pest Management
	4. Equipment Calibration	5. Facility & Equipment Maintenance	6. Cleaning & Sanitation
	7. Water & Air Programs	8. Physical Contaminant Prevention & Control	9. Product Storage & Warehousing
	10. Sanitary Transportation	11. Allergens & Sensitizing Agents	12. Chemical Control & Approval
	13. Supplier Approval	14. Visitors	

Team

Destiny Reeves	Warehouse Manager	One-Day HACCP Training
Lacey Messing	Food Safety & Quality Professional— Team Leader	Preventive Controls Qualified Individual
Bill Hardin	Asst. Warehouse Supervisor	One-Day HACCP Training
Jorge Moreno	Warehouse Foreman	In-house HACCP Training
Kelly Chipman	Warehouse Maintenance Lead	In-house HACCP Training
Kelly Malone	Quality Assurance Manager	Preventive Controls Qualified Individual



Product Description

**NATIONAL
SUGAR**
MARKETING

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:	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:	Defined by Product Data Sheet
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.

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
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	Approved Supplier for Sugar Ingredient and Third-Party Audit Report

¹ [Water Activity Values of Select Food Ingredients and Products](#)

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

³ [Fate of Bacterial Pathogens and Indicator Organisms in Liquid Sweeteners](#)

⁴ ISBT

⁵ GMA Canner's Standard
Nyssa Facility



Product Description

**NATIONAL
SUGAR**
MARKETING

General Product Information

Product Name:	Brown Sugar (Light and Dark)
Technical Name:	Sucrose
Product Description:	Classified granulated sugar enrobed in invert sugar (coating syrup) or cane molasses.
Ingredients:	Sucrose, invert sugar, and cane molasses
Intended Use:	Sweetener
Intended Consumer:	Brown sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups.
Shelf Life:	18 months
Labeling Instructions:	None
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	Packaged product is warehoused.
Distribution:	Brown sugar is distributed in packaged form by boxcar or trailer.

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + C_{12}H_{24}O_{12}$ (Light) or $C_{12}H_{22}O_{11} + C_6H_{12}NNaO_3S$ (Dark)
Water Activity (a_w):	0.59 (Light) - 0.65 (Dark) ¹
Moisture:	Less than 3%
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
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	Approved Supplier for Sugar Ingredient and Third-Party Audit Report

¹ Internal Analysis 2016

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

³ [Fate of Bacterial Pathogens and Indicator Organisms in Liquid Sweeteners](#)

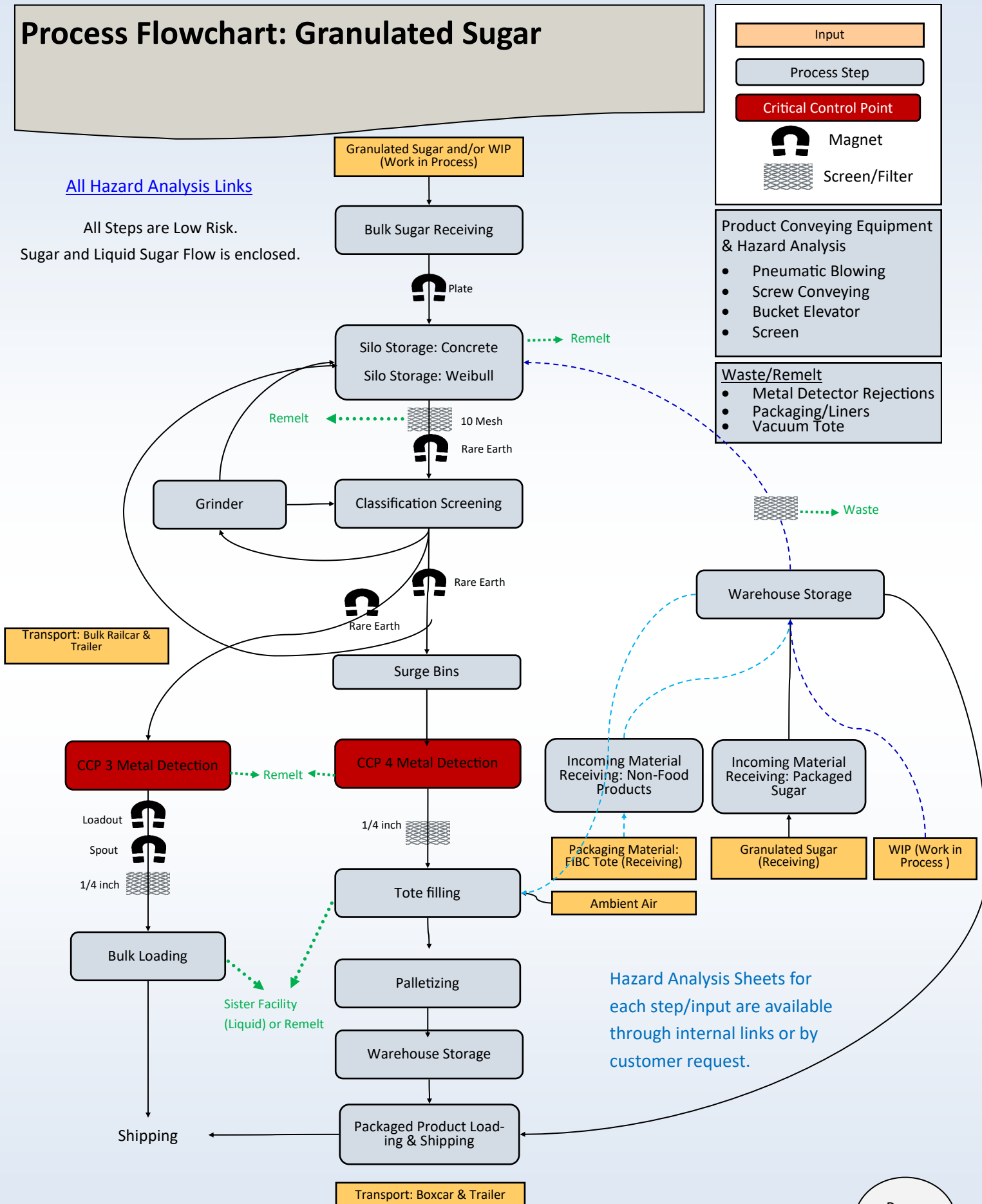
⁴ ISBT: Liquid Sucrose

⁵ GMA Canners Standard

Process Flowchart: Granulated Sugar

All Hazard Analysis Links

All Steps are Low Risk.
Sugar and Liquid Sugar Flow is enclosed.



Input

Process Step

Critical Control Point

Magnet

Screen/Filter

Product Conveying Equipment & Hazard Analysis

- Pneumatic Blowing
- Screw Conveying
- Bucket Elevator
- Screen

Waste/Remelt

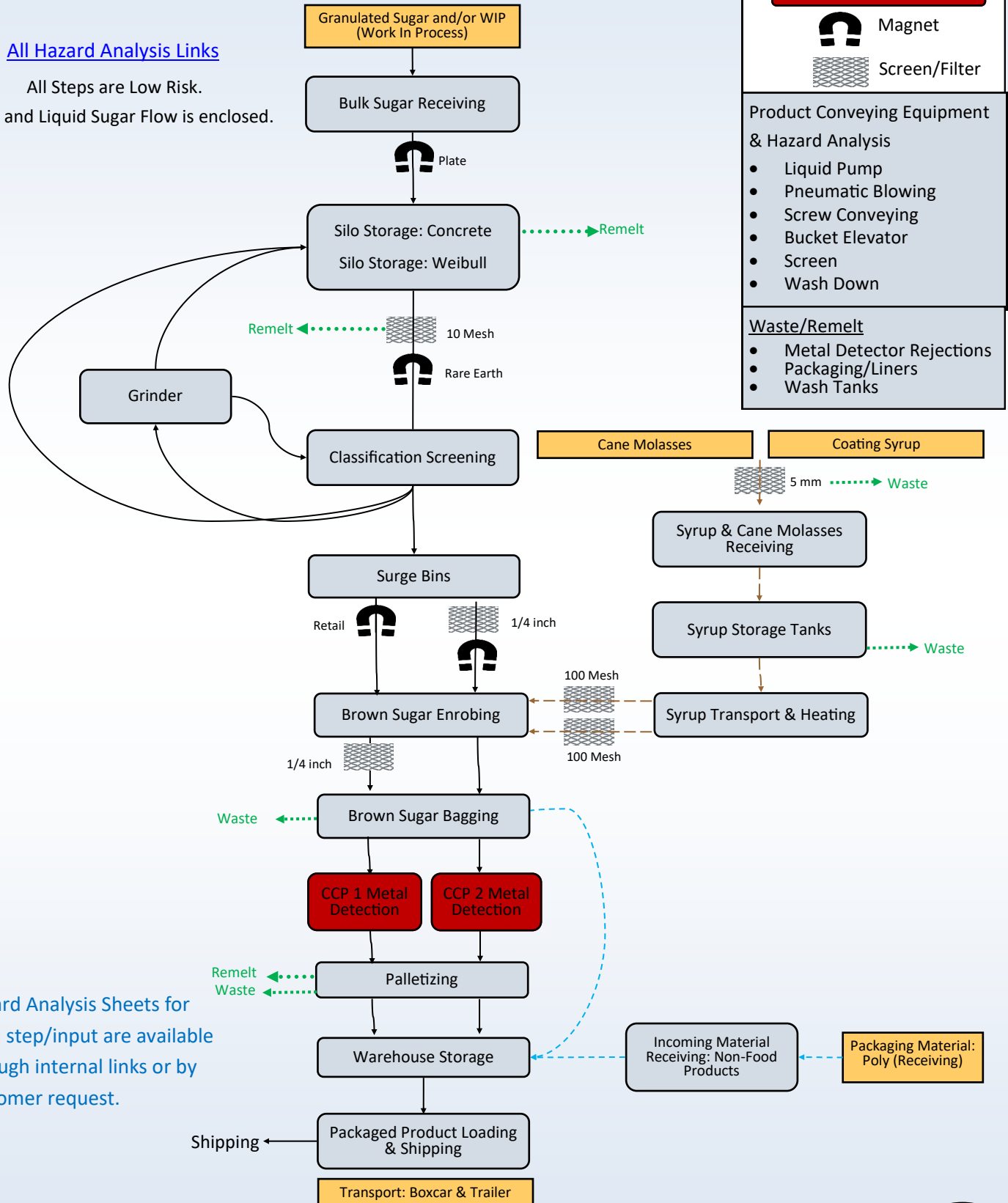
- Metal Detector Rejections
- Packaging/Liners
- Vacuum Tote

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

Process Flowchart: Brown Sugar

All Hazard Analysis Links

All Steps are Low Risk.
Sugar and Liquid Sugar Flow is enclosed.



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

	Input
	Process Step
	Critical Control Point
	Magnet
	Screen/Filter
Product Conveying Equipment & Hazard Analysis	
<ul style="list-style-type: none"> • Liquid Pump • Pneumatic Blowing • Screw Conveying • Bucket Elevator • Screen • Wash Down 	
Waste/Remelt	
<ul style="list-style-type: none"> • Metal Detector Rejections • Packaging/Liners • Wash Tanks 	

Process Preventive Control: Critical Control Point (CCP) Summary

Process Control Step:	CCP Metal Detection (Packaged & Bulk Metal Detectors)	
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. Industrial Detector: 1.8 Fe, 2.0 NF, 2.5 SS, and 2.0 Al.	
Monitoring:	What:	All product passes through an operating metal detector.
	How:	Monitor according to SOP 6.3-01 CCP Monitoring: Metal Detector .
	Frequency:	Conduct the inspection at the beginning of a startup, a shutdown of two hours or longer, at the end of a production run (no shift following), and at least every 2.5 hours of operation. Bulk detectors are tested prior to startup if exceeded 24 hours and will be tested after each vessel.
	Who:	Trained warehouse operator.
Corrective Action:	Operator notifies supervisory personnel. Supervisory personnel complete corrective action according to SOP 6.3.4-03 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 quarterly internal audits. The plan, CCP selection, and critical limit (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 Validation .
	Critical Limits:	CL or parameter selection is reevaluated annually in light of emerging technological and regulatory information. This review is documented on record 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 available upon request.
Records:	Monitoring Activity: 6.3-01.0 Critical Control Point: Packaged Product Metal Detector or 6.3-01.1 Critical Control Point: Bulk Loading Metal Detector . Records are retained per Retention policy. Records will be available for shelf life plus one year.	

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.

Supply-Chain Program

<p>Hazards Requiring a Supply-Chain-Applied Control:</p>	<p>Hazard analysis determined that incoming bulk and packaged sugar requires a supply-chain-applied control for metal contamination. In the absence of a supplier-applied control, there could be the potential for hazardous metal contamination based on sugar processing equipment and facilities. Some of this product might be warehoused and distributed directly to the customer without further processing.</p>
<p>Preventive Controls Applied by Supplier:</p>	<p>Approved suppliers continually monitor sugar by passing all product through metal detectors or magnets. These actions are documented in a supplier's records.</p>
<p>Verification Activities:</p>	<p>Based on supplier performance and the low risk associated with material, a 2nd or 3rd party audit by a qualified auditor is used to verify supplier's control of metal hazard. Preference is given to GFSI certification.</p>
<p>Verification Procedures:</p>	<p>The Quality Assurance Team will verify that suppliers have the appropriate documentation on an annual basis. These verification activities include: an onsite audit(s) performed by a third-party audit and report provided based on their certification standard. Verify the facility's controls for metal detection and removal. A qualified individual (QI) will conduct onsite audits, third-party auditors or company affiliated PCQI's. Must retain FDA-required records and have access within 24 hours of request from regulatory inspectors. Lastly, supplier must inform the facility of any changes to the product composition or if it includes any allergens. Refer to the Food Safety & Quality Assurance Manual, Supplier Approval Policy.</p>
<p>Verification Records:</p>	<p>Supplier audit report made available– Beet Sugar.</p>
<p>Receiving Facility Procedures:</p>	<p>Receiving facility only accepts product from approved suppliers as outlined on the Approved Supplier Register. Facilities hold and do not accept shipments from unapproved suppliers. If this occurs, it is only permitted during emergency situations provided facilities notify quality assurance and obtain and review, third-party audits. If not, temporary approval may be granted through a second-party audit from a company-affiliated PCQI.</p>
<p>Receiving Records:</p>	<p>Inspection and receipt records maintained locally.</p>

Amendments	
05/05/2023	Removed the Metal Detector from the flow (Non CCP). Added on the flow "All Steps are low risk. Sugar and Liquid Sugar Flow is enclosed.
11/29/2022	Updated Destiny Reeves on In House HACCP Training to One-Day HACCP Training and added Team Leader to Lacey Messing. Removed One-Day training to In-House Training for Jorge Moreno. Added in refer to supplier approval for supplier name. Added in low risk to the flow diagrams. Separated the flow diagrams as one into two flows– Granulated Sugar and Brown Sugar. Added in specification on product description.
06/03/2022	Updated the verification procedures and receiving facility procedures on the supply chain program to match the supplier approval policy. Changed BRC standard to BRCGS.
03/09/2022	Removed James Naher and added Kelly Chipman.
01/04/2022	Removed Diego Castellanoz as Warehouse Manager and added in Destiny Reeves. Removed 5 year shelf life for Granulated Sugar, added "Defined by Product Data Sheet".
09/17/2021	Added in the control document number FSP-08-Nyssa on cover page. Added color for failed CCP and remelt on the flow diagram. Removed waste from Hummer screen to remelt.
05/18/2021	Added in "Receiving" to Packaging Material: Poly and FIBC Tote and Granulated Sugar. Added waste to Metal Detectors 3 & 4, Syrup Storage Tanks and Hummer Screen "10 Mesh".
11/02/2020	Added food grade lubricants to the legend on the flow diagram per BRC Audit 2020 Corrective Action. Added waste to the retail line flow diagram.
09/08/2020	Removed all hyperlinks for hazard analysis on the flowchart. Added one link to "All Hazard Analysis Links". Added alternate routes for failed CCP product.
08/14/2020	Removed hyperlinks for the individual hazard analysis and added one hyperlink to all hazard analysis. Updated CCP summary to show if exceeded 24 hours of running and using the metal detector that it would need to be tested prior to starting the metal detector.
03/20/2020	Updated Supply Chain links to the NSM website for the Approved Supplier list and beet sugar reports. Removed NSM Jeremy Adamson as the Corporate HACCP Coordinator.
10/21/2019	Updated flow diagram with screen sizes and front page plan contents.
08/13/2019	Moved the Tote Machine magnet before the surge bin rather than after. Confirmed on 8/8/19. Updated training register to add Kelly Malone and removed John Sigurdson and Jeremy Adamson. Updated page 2 with the Prerequisite Programs.
06/18/2019	Added granulated sugar to ingredient/raw material on page 2.
05/07/2019	Removed Jeremy Adamson as the HACCP Coordinator. Added Kelly Malone to team. Changed from SQF to BRC and NSF to SGS.
11/28/2018	Added the comment on Intended Consumer "sugar is sold as retail or distributed to food processors that provide products to the general public, including high risk groups".
07/12/2018	Updated the version date, Cover page dates and signatures, updated HACCP training for Bill Hardin and Jorge Moreno, Certification Body change from SGS to NSF, SQF Certification from Level 3 to SQF ed. 8.0, added a line from grinder back to the silos if not back to system, added a line from Bulk Railcar/trailer to the system before the magnet to CCP 3.

Amendments

9/12/2017	Removed Greg Perdue and John Harder, Diego Castellanoz is the Warehouse Manager and added James Naher for Warehouse Maintenance Lead. Updated the zip code from 97914 to 97913. Updated CQP's to QCP's on pages 3, 5, 9,10, 11. Removed rare earth magnet before QCP 2. Removed end of shift, and at least every 2.5 hours while operating for frequency for Summary.
05/24/2017	Updated plan by removing John Sigurdson from the local HACCP team and adding Lacey Messing as local coordinator. Training log was amended to reflect Lacey's training. Diego Castellanoz was moved to plant/facility manager to replace Greg Perdue. Removed the Environmental Monitoring prerequisite program. Documented a validation of change & a notification letter outlining rationale.
11/01/2016	The tote line equipment installation is complete. The line has been inspected and equipment has been closed and secured. Written operational procedures are being developed, and will be included in the plan once they have been finalized. Records of production are also being finalized, and will be included in the plan once they have been finalized. Seven totes of remelt sugar have been run through the system to scour the equipment before being used to produce totes for customers.
9/15/2016	Updated the Food Safety Plan to contain the Food Quality Plan. Updated the plan to reflect the new tote filling station at the facility. Verified and validated new equipment proposed for installation at the Nyssa facility for Food Quality and Safety.
08/01/2016	Added John Harder as Food Safety Team member, and removed Gilbert Brown from Food Safety Plan as he retired from the company.
05/04/2016	Added Supply-Chain-Applied controls for domestic sugar. Modified plan formatting and uploaded hazard analyses to the intranet. Removed local Org chart.
04/23/2015	The corporate SOPs were modified. Quality assurance will now verify documentation during internal audits rather than verifying on lot per week.
09/08/2014	Corporate standardization of SOPs. SOPs and blank record copies have been moved from the HACCP plan to the corporate intranet. Updated the SQF-related ORG chart due to reorganization efforts. Bill Hardin added to the HACCP team.

Training Log

05/30/2018	Bill Hardin, Destiny Reeves and Jorge Moreno completed one day HACCP training.
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 completed FSPCA Preventive Controls for Human Food course.
05/14/2015	Kelly Malone completed Three Day: Practical Food Safety and HACCP Workshop.
11/06/2014	Bill Hardin and Jorge Moreno completed Three Day: Practical Food Safety and HACCP Workshop.
07/20/2011	Kelly Malone completed training on Internal Auditing.
06/15/2011	Kelly Malone completed SQF Training