

NATIONAL SUGAR MARKETING

D&S Ingredient Transfer Station Food Safety Plan

Liquid Sugar
Medium Invert Sugar

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Corporate Recall Plan	NSM Website

Plan Approval

General Manager Date: 12/06/2023

(Local Coordinator): *Jesse Diaz*

Company HACCP Coordinator: *Lcd* Date: 12/06/2023

Facility Information

Facility Name:	D&S Ingredient Transfer
Facility Address:	5112 Alhambra Ave, Los Angeles, CA 90032
Phone:	323.224.8900 (office)
Plant/Facility Manager:	Jesse Diaz (General Manager)
Local HACCP Coordinator:	Jesse Diaz/Nolan Lord, PCQI
Company HACCP Coordinator (PCQI):	Jeremy Adamson, PCQI
Number of Employees:	10 (2 Full Time & 8 Temporary)
Temporary Employees:	Yes
Facility Description:	The facility has the capabilities to receive sugar via bulk rail, bulk trailer, or packaged products transported by dry van trailer. This facility does not possess warehousing capabilities and all sugar received is utilized for liquid sugar, medium invert production, or transfer to bulk trailer. Bulk product is stored in a single silo. The D&S Facility also operates a food-grade trailer washing station to wash trailers. Other products received at this facility are corn sweetener products and vegetable oils.

Food Safety

Products:	Liquid Sugar and Medium Invert Sugar	
Third Party Audit Standard:	SQF	Certification Body: CICS Americas
Import Capability:	This facility can source both domestic and foreign sugar for processing.	
Ingredients/Raw Materials:	Ingredient: Sugar (domestic or foreign)	
(NSM Website)	Ingredient: Water (Softened, Purified, and Filtered)	
	Raw Material: Sodium Hydroxide, Caustic (Invert or pH adjustment per customer request)	
	Raw Material: Acid, Hydrochloric (Invert Only)	
Packaging:	None	
	1. Employee Training	2. Personnel Practices
	3. Integrated Pest Management	
	4. Equipment Calibration: Food Safety	5. Facility & Equipment Maintenance
	6. Cleaning, Sanitation, and Waste Management	
Prerequisite Programs:	7. Water & Air Monitoring	8. Physical Contaminant Control
	9. Product Storage & Warehousing	
	10. Product Distribution	11. Allergen Management
	12. Chemical Control	
	13. Supplier Approval	14. Visitors

Team

Jesse Diaz	General Manager	HACCP Certified
Nolan Lord	Senior Quality Assurance Specialist	Preventive Controls Qualified Individual
Maira Cortez	Senior Customer Service Rep	HACCP Certified

General Product Information

Product Name:	Liquid Sugar
Technical Name:	Sucrose
Product Description:	Solution of sucrose in water
Ingredients:	Crystalline Sucrose, Water
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener
Intended Consumer:	Liquid sugar is distributed to food processors that provide products to the general public, including high risk groups
Shelf Life:	30 Days (with proper storage conditions)
Labeling Instructions:	No labeling requirements for consumer safety
FDA Classification:	GRAS 21 CFR 184.1854
Storage:	May be stored in liquid storage tanks
Distribution:	Distributed by liquid tanker

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + H_2O$
Water Activity (a_w):	0.86 ¹
Moisture:	32.5 to 33.5%
Sulfites:	Results equivalent to granulated sugar: 3-5 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:	None: Foreign material is of a size considered nonhazardous ⁶
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	Approved Supplier for Sugar Ingredient and Third-Party Audit Report

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

² [ICMSF 2005: Chapter 12 Sugar, Syrups, and Honey](#)

³ [Fate of Bacterial Pathogens](#)

⁴ [ISBT: Liquid Sucrose](#)

⁵ GMA Canners Standard

⁶ [FDA: Sec. 555.425 Foods, Adulteration Involving Hard or Sharp Foreign Objects](#)

General Product Information

Product Name:	Invert Sugar, Medium
Technical Name:	Liquid invert sugar solution
Product Description:	Solution of sucrose, fructose, and glucose in water
Ingredients:	Crystalline sucrose and water
Intended Use:	This product is used as an ingredient in many food products and functions as a sweetener
Intended Consumer:	Medium invert sugar is distributed to food processors that provide products to the general public, including high risk groups
Shelf Life:	90 Days
Labeling Instructions:	None
FDA Classification:	GRAS 21 CFR 184.1859
Storage:	May be stored in liquid storage tanks
Distribution:	Distributed by liquid tanker

Technical Information

Chemical Formula:	$C_{12}H_{22}O_{11} + C_{12}H_{24}O_{12} + H_2O$
Water Activity (a_w):	0.73
Moisture:	22.5 to 23.5%
Sulfites:	Results equivalent to granulated sugar: 3-5 ppm
Microbiological:	Will not support the growth of vegetative pathogens. ^{1,2} Meets ISBT ³ and NFP ⁴ standards for use in carbonated beverages and canned foods.

Preventive Controls

Process Control:	None: Foreign material is of a size considered nonhazardous. ⁶
Allergen Control:	None
Sanitation Control:	None
Supply-Chain Control:	Approved Supplier for Sugar Ingredient and Third-Party Audit Report

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

² [ICMSF 2005: Chapter 12 Sugar, Syrups, and Honey](#)

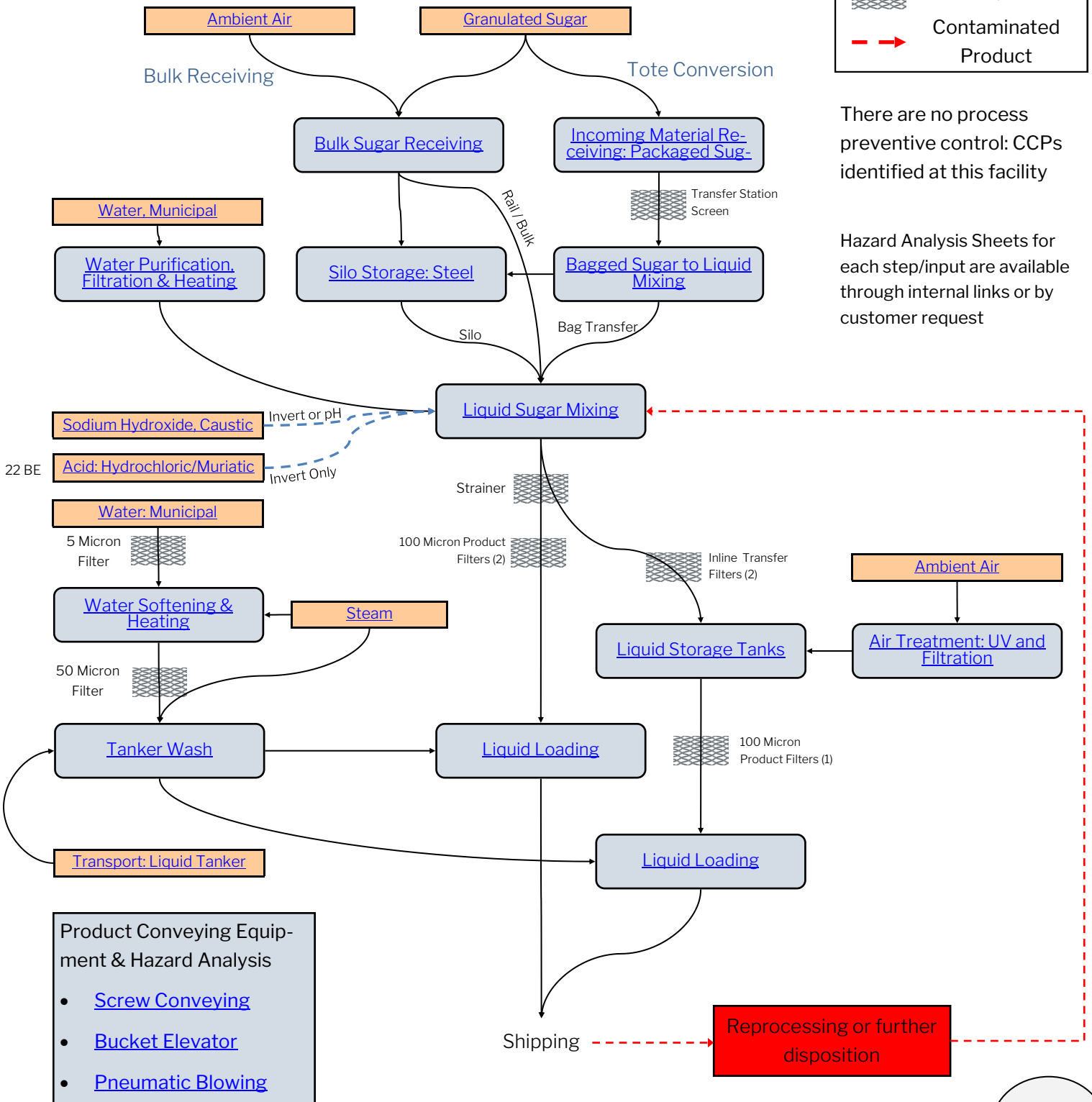
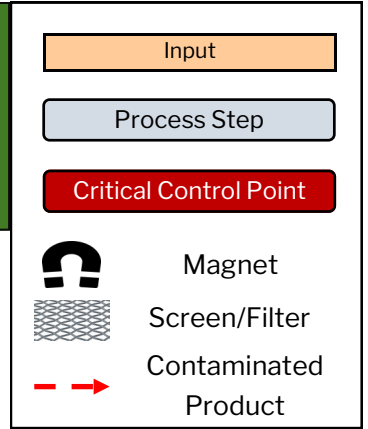
³ [Fate of Bacterial Pathogens](#)

⁴ [ISBT: Liquid Sucrose](#)

⁵ GMA Canners Standard

⁶ [FDA: Sec. 555.425 Foods, Adulteration Involving Hard or Sharp Foreign Objects](#)

Process Flowchart: Liquid Sugar & Medium Invert



There are no process preventive control: CCPs identified at this facility

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

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- Product Conveying Equipment & Hazard Analysis
- [Screw Conveying](#)
 - [Bucket Elevator](#)
 - [Pneumatic Blowing](#)

Supply-Chain Program

Hazards Requiring a Supply-Chain-Applied Control:	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.
Preventive Controls Applied by Supplier:	Approved suppliers continually monitor sugar by passing all product through metal detectors or magnets. These actions are documented in a supplier's records.
Verification Activities:	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.
Verification Procedures:	A copy of the audit is requested from the supplier annually or every three years if the supplier certifies to the FSSC 22000 standard. The Director of Quality Assurance reviews certification audits and approves suppliers based on the onsite audit and documentation requests. System assurances include a two-step verification procedure: first, Corporate office only sources product from approved suppliers and, second, receiving facilities are given access to an approved supplier register which is utilized as a product acceptance criterion. Both measures should ensure that receiving facilities only receive sugar products from approved suppliers. Full documentation can be provided within 24 hours of an official request.
Verification Records:	Supplier GFSI audit report
Receiving Facility Procedures:	Receiving facility only accepts product from approved suppliers as outlined on the Approved Supplier Register listed on the corporate intranet. Facilities hold and do not accept shipments from unapproved suppliers. If this occurs, facilities notify the Director of Quality Assurance for disposition.
Receiving Records:	Inspection and receipt records maintained locally.

Amendments

01/03/2023	Updated audit standard and auditing body
3/10/2022	Updated process flowchart: Removed Sodium Hydroxide concentration
08/20/2021	Raul Ramos replaced with Luis Gonzalez as Swing Shift Leader
8/11/2020	Added directional line in the event that a product would need to be reprocessed
07/07/2020	Added Nolan Lord to HACCP team and included Nolan's training. Added ICMSF reference to liquid sucrose and medium invert.

Formal Training Log

06/13/2019	Nolan Lord completed FSPCA Preventive Controls for Human Food course.
01/21/2016	Jeremy Adamson completed FSPCA Preventive Controls for Human Food course.
01/01/2014	Jesse Diaz and employees completed ADM Quality and Food Safety HACCP Certification.
12/02/2009	Jesse Diaz attended HACCP certification.