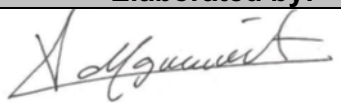
SÍ O SÍ ALIMENTOS S.A.P.I DE C.V.	Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México tel 443 3177106		
Name	**FREEZE DRIED FRUITS AND VEGETABLES**	**CODE**	**HAC-003-03**
		Issue Date	**August 30th, 2020**
		Review Date	**July 27th, 2021**
Responsable:	SQF quality and safety system, Responsible of Innocuity System		

Objective	The plant's food safety plans have been implemented in accordance with the twelve steps identified in the CODEX Alimentarius Commission HACCP guidelines and the corresponding regulatory requirements for establish, implement and maintain the necessary controls to ensure the safety of IQF Fruits and Vegetables.
Reach	Todas las etapas del proceso
Definitiosns	For the purposes of this document, the following definitions apply: CAC / RCP 1-1969 REV 5 2020 **Hazard analysis**: The process of gathering and evaluating information on the hazards identified in raw materials and other ingredients, the environment, the process or food and the conditions that originate them to decide whether they are significant hazards. **Good hygiene practices (GHP):** Basic measures and conditions applied at any stage of the food chain to provide safe and suitable food. **Allergen Cross Contact**: Inadvertent incorporation of an allergenic food or ingredient into another food that is not intended to contain that allergenic food [or ingredient**].** **Contamination**: Introduction or presence of a contaminant in food or in the food environment. **Contaminant:** Any biological, chemical, or physical agent, foreign matter, or other substances not intentionally added to food that may compromise the safety or suitability of the food. **Control:** When used as a noun: State in which the correct procedures are being observed and the established criteria are being met. When used as a verb: Adopt all necessary measures to ensure and maintain compliance with established criteria and procedures. **Disinfection or Sanitization:** Reduction by means of biological or chemical agents, or by physical methods, of the total viable microorganisms on surfaces, water or air to a level that does not compromise the safety or suitability of the food. **Deviation**: Non-compliance with a critical limit or the GHP procedure.

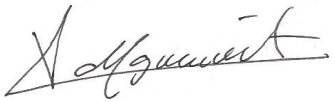
	Flow diagram: Systematic representation of the sequence of phases carried out in food production or processing**.** **Phase:** Any point, procedure, operation or stage in the food chain, including raw materials, from primary production to final consumption. Food hygiene: All conditions and measures necessary to ensure the safety and suitability of food in all phases of the food chain. **Food suitability**: Assurance that food is acceptable for human consumption in accordance with its intended use**.** **Food safety:** Assurance that food will not cause adverse effects on consumer health when prepared or consumed in accordance with its intended use. **Critical limit:** Criteria, observable or measurable, relative to a control measure in a CCP, that separates the acceptability or unacceptability of the food. **Cleaning:** Removal of dirt, food residues, dirt, grease or other objectionable matter. **Food Handler:** Any person who directly handles packaged or unpacked food, equipment and utensils used for food, or surfaces that come into contact with food and are therefore expected to meet food hygiene requirements. **Corrective action:** Any action taken when a deviation occurs, to reestablish control, segregate and determine the destination of the affected product, if any, and prevent or minimize the recurrence of the deviation. **Control measure:** Any measure or activity that can be applied to prevent or eliminate a hazard or to reduce it to an acceptable level. **Hazard:** Biological, chemical or physical agent present in food that can cause an adverse effect on health**.** **HACCP Plan:** Documentation or set of documents prepared in accordance with HACCP principles to ensure the control of significant hazards in the food business. **Pre-requisite program:** Programs that include good hygiene practices, good agricultural practices and good manufacturing practices, as well as other practices and procedures such as training and traceability, that establish the environmental and operating conditions that lay the foundation for the application of a HACCP system. **Critical Control Point (CCP):** Phase in which one or more control measures are applied for a significant hazard, in a HACCP system**.** **Food hygiene system:** Pre-requisite programs supplemented with control measures at CCPs, as appropriate, which, as a whole, ensure that food is safe and suitable for its intended use. **HACCP system:** The preparation of a HACCP plan and the application of the procedures in accordance with said plan. CXC 1-1969 7

	Control Measure Validation: Obtain evidence that a control measure or combination of control measures, if properly applied, can control the hazard to a certain result. **Verification:** Application of methods, procedures, testing and other evaluations, in addition to surveillance, to verify if a control measure works or has been working as intended**.** **Monitor:** The act of carrying out a planned sequence of observations or measurements of control parameters to assess whether a control measure is under control**.** **FOOD SAFETY MANAGEMENT SYSTEM.** A set of interrelated or interacting elements to establish policy and objectives and the achievement of said objectives, used to direct and control an organization with respect to food safety. **Pathogen**: that element or medium capable of producing some type of disease or damage in the body of an animal, a human being or a plant. • **Lyophilized (Freeze Dry):** process in which the product is frozen and subsequently introduced into a vacuum chamber to separate the water by sublimation**.** • **FP:** Finished Product • **RM:** Raw Material

Elaborated by:	Reviewd by:	Approved by:
		
Food Safety Team	**Food Innoquity Team Leader**	**Director of Operations**

1. TRAINING OF A HACCP TEAM

It helps to ensure that you have specific knowledge and competence to formulate an effective HACCP plan. We created a multidisciplinary team in which the members understand the basic principles of plant operations, as well as having a good understanding of HACCP concepts. See DOC-008-03 Description and job profile and the CVs of the team members to validate their competencies.

NAME	AREA	FUNCTION	PHONE	SIGNATURE
Gerónimo Villanueva Noguera	Director of Operations	Responsible for assigning the necessary resources for the correct implementation of the plan.	5514747104	
Margarita Ruano Chávez	Production and Purchasing Manager	Responsible for leading the hazard analysis and implementing HACCP. Substitute for SQF system.	4432278397	
Rafael Dueñas Vargas	Technology Manager	Responsible for monitoring the areas related to equipment implementation and Maintenance.	4434400710	
Sandra Castillo Cervantes	Quality Manager	**SQF INTERNSHIP. Responsible for the safety and quality system.**	4433902495	
Cleotilde Sotomayor Arroyo	Production and Quality Supervisor	Member Responsible for monitoring the system	4431042226	
Lizeth Antonio Durán	Production and Quality Supervisor	Member Responsible for monitoring the system	4433904150	

2. PRODUCT DESCRIPTION

a. Product specification

Name of the Product	FREEZE DRIED FRUITS AND VEGETABLES
Definition	It can be any IQF, fresh, or frozen fruit Specifications will be developed

Product name in English	Freeze Dried Fruits and Vegetables.
Specification	ESP-064-00 PEPPERS, GREEN BELL STRIPS FREEZE DRIED ESP-068-00 FREEZE DRIED RASPBERRY
Types	Orgánico o Convencional Normal or Fine
Product Code	

b. **Materias primas**

RAW MATERIAL	FEATURES	PROCESS	STORAGE CONDITIONS	SPECIFICATIONS
Fruits and Vegetables	Fruits and / or vegetables with IQF process.	IQF (Individual Quick Freezing) with this procedure guarantees, once we have thawed the product, that it retains all the texture, nutritional value and the same flavor as the freshly harvested product. Likewise, for its preservation, the use of this process guarantees that the products do not need any type of chemicals or preservatives and that, due to the sudden change in temperature, the presence of microorganisms is significantly reduced.	Refrigeration or freezing temperature <4 ° C for cooling	Specs
Fruits and Vegetables	Fresh	Natural product, fresh		
Primary packaging	Silver color bag MYLAR 48 Ga PET / ADH / 0.00035 "FOIL / Metallocene LLDPE By request of the client it can change Polyethylene Bag 6000	Printing, laminating, cutting, bagging.	Fresh Dry place.	ESP-050-01 PRIMARY PACKAGING 1 KG MYLAR ESP-051-01 PACKAGING PRIMARY 3 KG MYLAR ESP-052-01 PRIMARY PACKAGING 6 KG MYLAR ESP-053-01 PRIMARY PACKAGING 10 KG MYLAR. ESP-062-00 PRIMARY GASKET POLY 6000
Secundary Packaging	Corrugated carton box	Manufacture corrugated cardboard sheet and conversion of the sheet into boxes	Fresh Dry place.	ESP-020-02 CARDBOARD BOX.
Pallets	Standard size 1.2 m x 1 m	Assembled	Fresh Dry Place	ESP-014-02 WOOD PALLET
Stretch Film	5 ”Extended Core Film	Linear Low Density Polyethylene Multilayer Distribution for Stretch Film	Fresh Dry Place	ESP-015-02 STRETCH FILM

Labels	Self-adhesive paper label	Siliconized. Adhesive. Conditioned. complex formation.	Fresh Dry Place	NA

c. FINISHED PRODUCT

DEFINITION	FEATURES						SHELF LIFE	DISTRIBUTION METHOD	USE
	SENSORY	PHYSICOCHEMICAL	MICROBIOLOGICAL						
RASPBERRY	• • Smell-Typical of raspberry intense, sweet smell • • Taste-Typical of raspberry, with sweet and sour notes. • • Appearance-dehydrated raspberries, crisp. • • Color -Red pink typical of the fruit	Humidity% <5% Soluble Solids 40 ° - 60 ° Brix PH 3.0 - 4.5 Water activity (Aw) <0.400 Foreign Materials Absent	Total coliforms	<100 UFC/g	Petrifilm Plates 3M 35ºC/24HR o CCAYAC-M-004/8		12 months cool and dry environment	By air, land or sea	Ingredient for food and drink. Can be used dry and rehydrated -
			Enterobacteria	<10 UFC/g	Petrifilm Plates 3M 35ºC/24HR				
			Aerobic Mesophiles	50,000 UFC/g	Petrifilm Plates 3M 35ºC/48HR NOM-092-SSA1-1994				
			Escherichia Coli	2 URL/ <10 UFC/g Ó <3 NMP/g	Microsnap rapid determination hygiene 37°C/8HR o CCAYAC-M-004/8				
			Salmonella spp	Absent in 375g of sample	NOM-114-SSA1-1994				
			Listeria monocytogenes	Absent in 25g of sample	NOM-143-SSA1-1995				
			Staphylococcus aureus	<10 UFC/g	NOM-115-SSA1-1994				
			Mold	<5 000 UFC/g	NOM-111-SSA1-1994				
			Yeast	<5 000 UFC/g	NOM-111-SSA1-1994				
AVOCADO	• • Color-Characteristic green • Odor- Characteristic • Taste- Characteristic Hazelnut • Appearance- porous dust, • Grainy • Texture- dry grainy porous powder, mild hydrated to the palate and creamy.	Humidity% <5% PH 6.6- 7 Soluble Solids 20 ° - 30 ° Brix Water activity (Aw) <0.400 Foreign Materials Absent	Total coliforms	<100 UFC/g	Petrifilm Plates 3M 35ºC/24HR o CCAYAC-M-004/8		18 months cool and dry environment	By air, land or sea	Ingredient for food and drink. Can be used dry and rehydrated -
			Enterobacteria	<10 UFC/g	Petrifilm Plates 3M 35ºC/24HR				
			Aerobic Mesophiles	50,000 UFC/g	Petrifilm Plates 3M 35ºC/48HR NOM-092-SSA1-1994				
			Escherichia Coli	2 URL/ <10 UFC/g Ó <3 NMP/g	Microsnap rapid determination hygiene 37°C/8HR o CCAYAC-M-004/8				
			Salmonella spp	Absent in 375g of sample	NOM-114-SSA1-1994				
			Listeria monocytogenes	Absent in 25g of sample	NOM-143-SSA1-1995				
			Staphylococcus aureus	<10 UFC/g	NOM-115-SSA1-1994				
			Mold	<5 000 UFC/g	NOM-111-SSA1-1994				
			Yeast	<5 000 UFC/g	NOM-111-SSA1-1994				

<table>
<tr>
<td>RED BELL PEPPER</td>
<td>Typical smell of lyophilized red peppers.
Typical flavor of freeze-dried red peppers.
Appearance Bright red, typical of lyophilized green peppers.
Typical color of freeze-dried red peppers.</td>
<td>Humidity% <5%
Soluble Solids 50-70 ° Brix
PH 5.0 - 6.5
Water activity (Aw) <0.400
Foreign Materials Absent
Ferrous 1.0 mm
Non-ferrous 1.5 mm
Stainless steel 2.0 mm</td>
<td>
<table>
<tr><td>Total coliforms</td><td><250 UFC/g</td><td>Petrifilm Plate 3M 35ºC/24HR o CCAYAC-M-004/8</td></tr>
<tr><td>Enterobacteria</td><td><10 UFC/g</td><td>Petrifilm Plate 3M 35ºC/24HR</td></tr>
<tr><td>Aerobic Mesophiles</td><td>100,000 UFC/g</td><td>Petrifilm Plate 3M 35ºC/48HR NOM-092-SSA1-1994</td></tr>
<tr><td>Escherichia Coli</td><td>2 URL/ <10 UFC/g Ó <3 NMP/g</td><td>Microsnap rapid determina-tion hygiene 37°C/8HR o CCAYAC-M-004/8</td></tr>
<tr><td>Salmonella spp</td><td>Absent in 375g of sample</td><td>NOM-114-SSA1-1994</td></tr>
<tr><td>Listeria monocytogenes</td><td>Absent in 25g of sample</td><td>NOM-143-SSA1-1995</td></tr>
<tr><td>Staphylococcus aureus</td><td><10 UFC/g</td><td>NOM-115-SSA1-1994</td></tr>
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</td>
<td>12 months cool and dry environment</td>
<td>By air, land or sea</td>
<td>Food Ingredient</td>
</tr>
<tr>
<td>GREEN BELL PEPPER</td>
<td>• Typical smell of lyophilized Green bell pepper
• Typical flavor of lyophilized Green bell pepper
• Bright green appearance, typical of lyophilized green peppers.
• Typical color of lyophilized green peppers.</td>
<td>Humidity% <5%
Soluble Solids 50-70 ° Brix
PH 5.0 - 6.5
Water activity (Aw) <0.400
Foreign Materials Absent
Ferrous 1.0 mm
Non-ferrous 1.5 mm
Stainless steel 2.0 mm</td>
<td>
<table>
<tr><td>Total coliforms</td><td><250 UFC/g</td><td>Petrifilm Plate 3M 35ºC/24HR o CCAYAC-M-004/8</td></tr>
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</table>
</td>
<td>12 months cool and dry environment</td>
<td>By air, land or sea</td>
<td>Food Ingredient</td>
</tr>
</table>

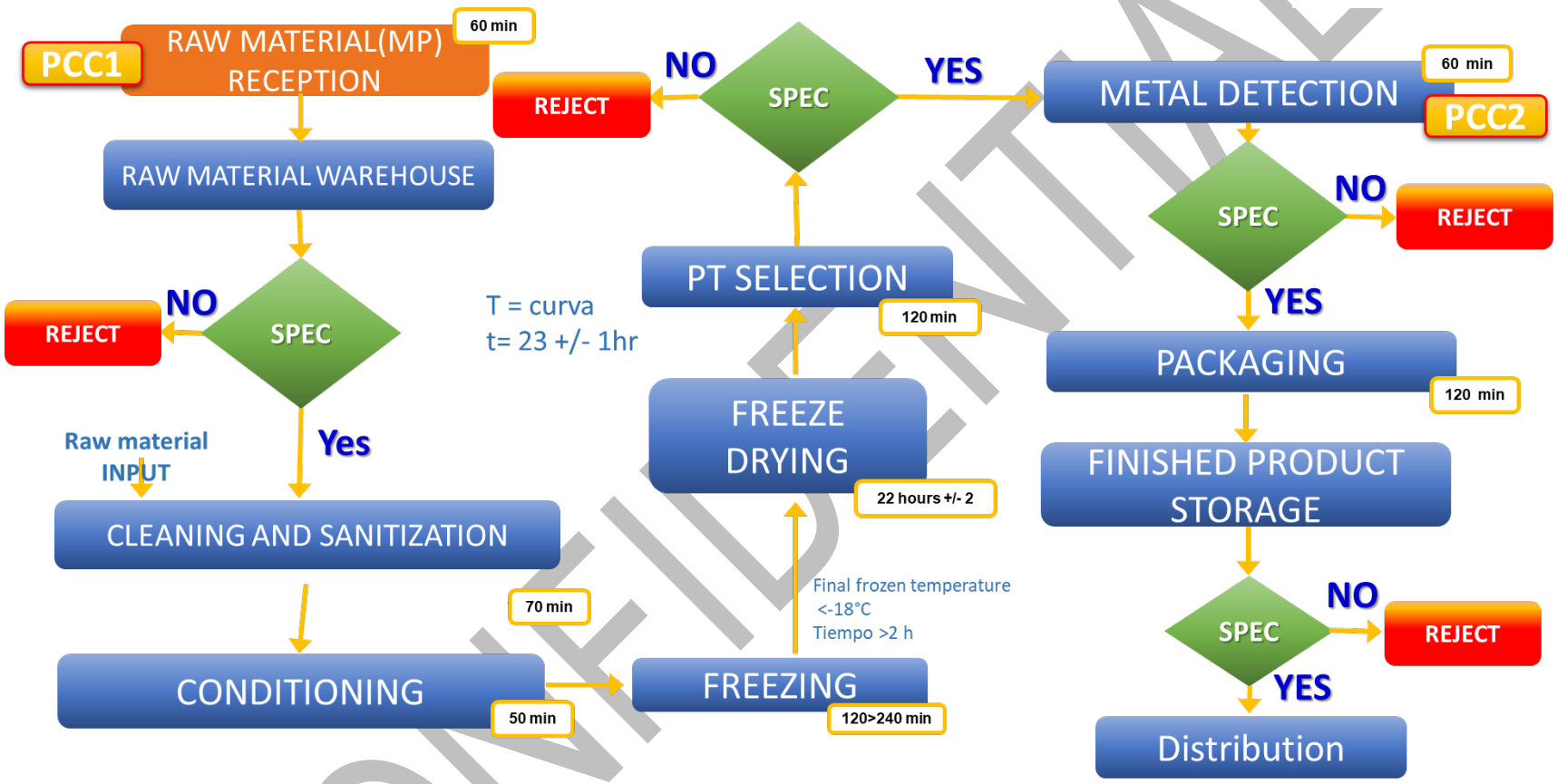
3. EXPECTED USE

It can be used dry or rehydrated

a) Food industry

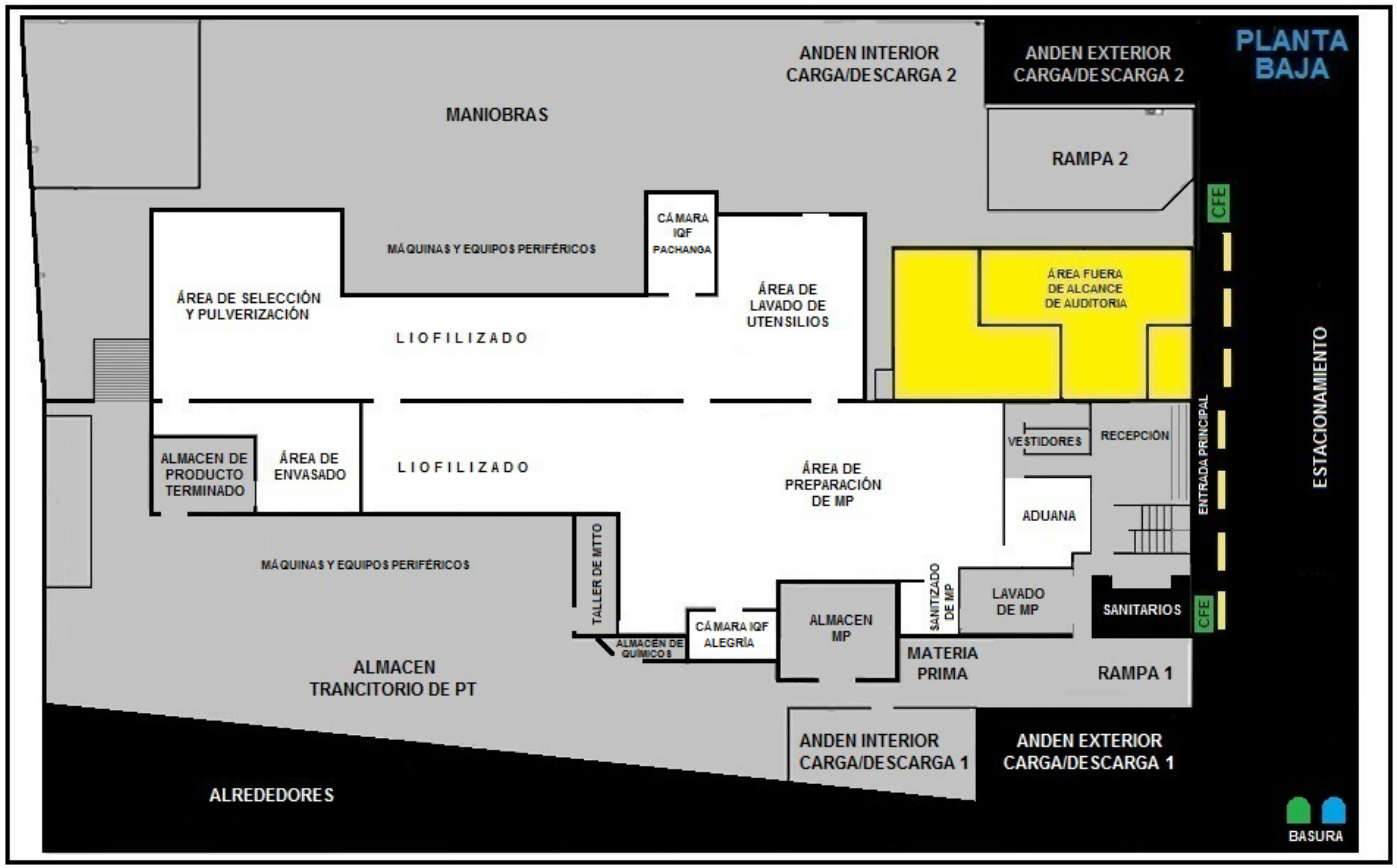
- As an ingredient to formulate a variety of end products: shake powders, shelf mixes, sandwiches, shakes, smothies, desserts.
- As an ingredient in recipes.
- Can also be used when refrigeration is not available: ready-to-use food in natural disasters and in distant locations such as oil rigs, military bases, and camping sites.

4. IQF LYOPHILIZED FRUIT AND VEGETABLE FLOW CHART

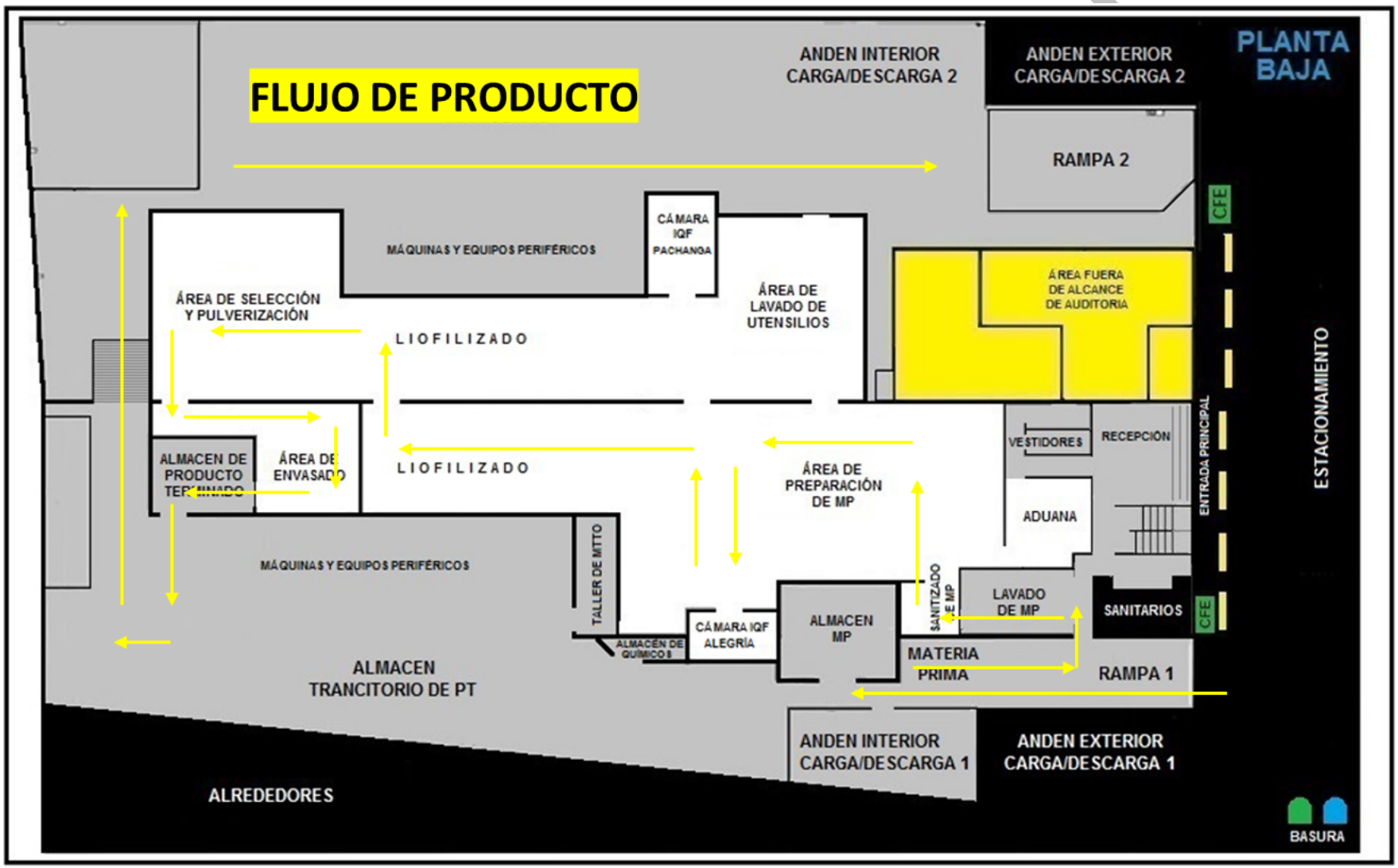


LAY OUT

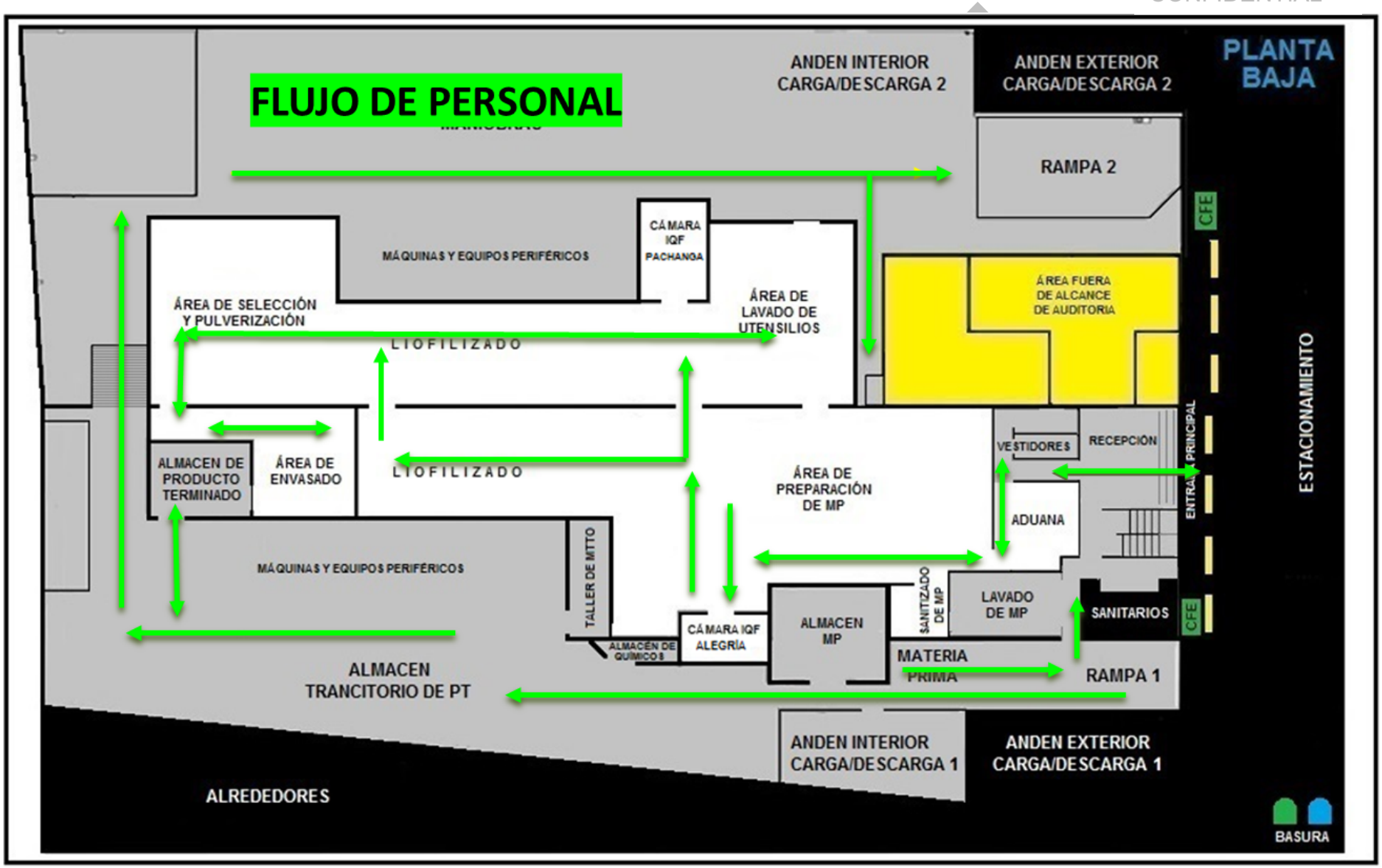
a. AREAS



b. PRODUCT FLOW

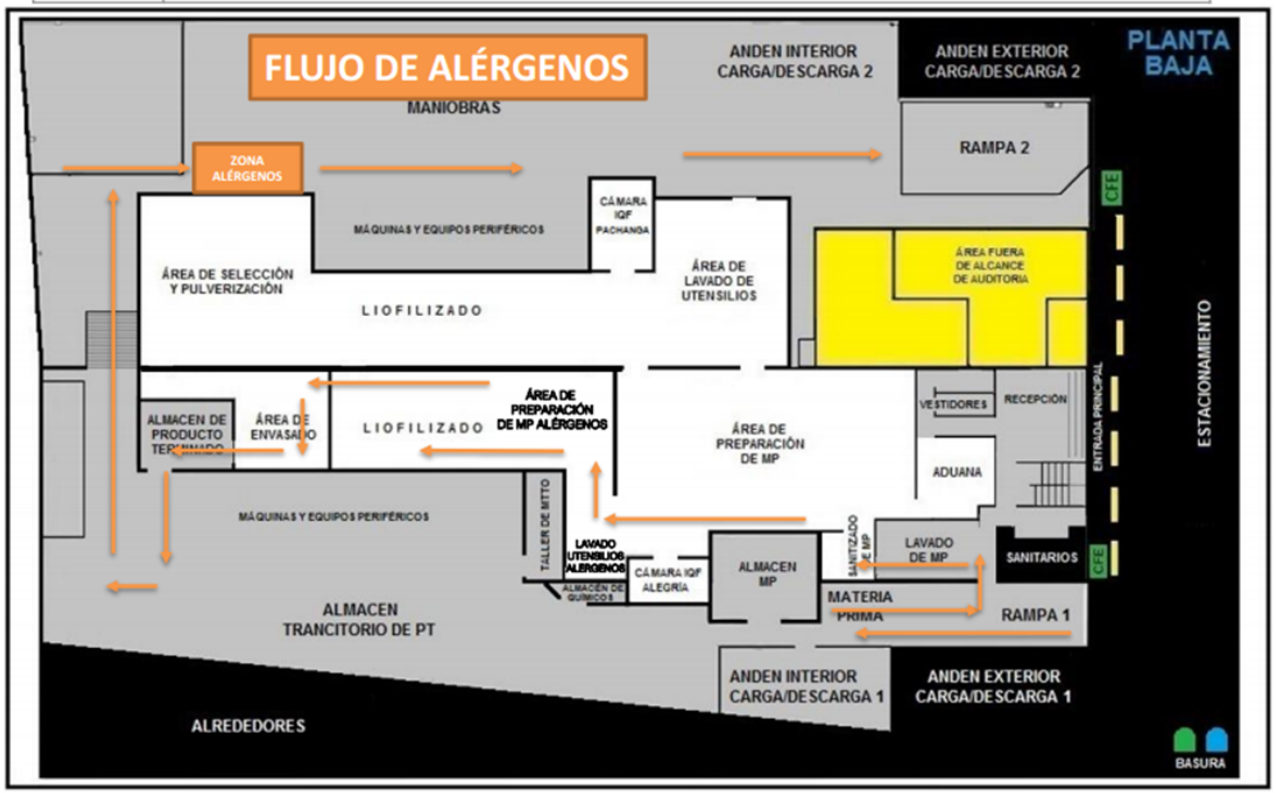


c. PERSONNEL FLOW

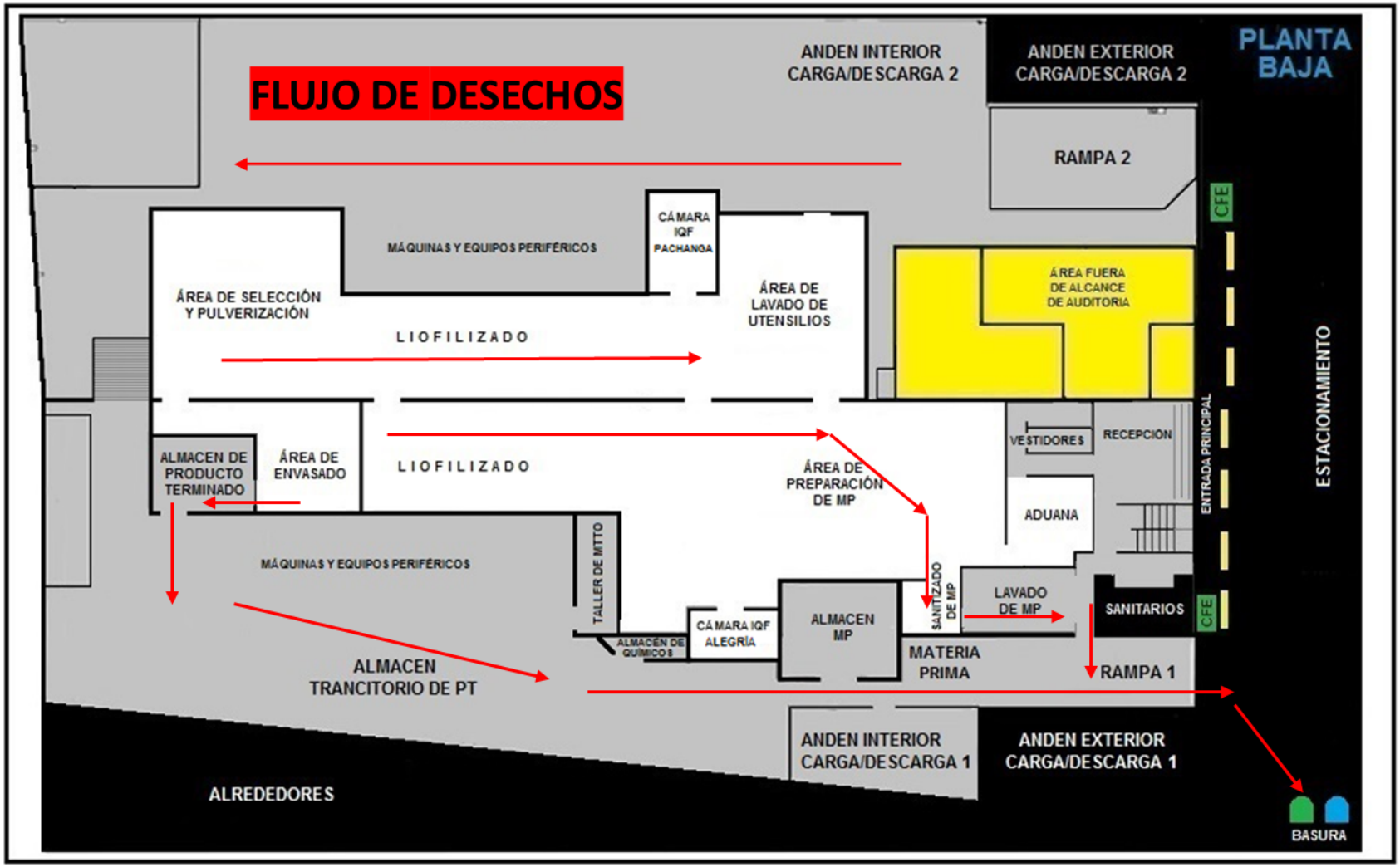


d. ALERGEN FLOW

SÍ O SÍ ALIMENTOS S.A.P.I DE C.V.		Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México	
Nombre:	FLUJO DE ALÉRGENOS	Código	LAY-006-02
		Fecha de emisión	29 de abril de 2021
		Fecha de revisión	20 de junio de 2021
Propósito:	Conocer el flujo de los productos alérgenos de las áreas de proceso con las áreas de transición y las básicas de buenas prácticas de manufactura. El flujo de alergenos es importante para minimizar la posibilidad de recontaminación con patógenos ambientales y contaminación de alérgenos.		
Qién:	Empleados y otros individuos que entren al área de proceso.		



e. WASTE FLOW



PRINCIPLE 1. CONDUCT A HAZARD ANALYSIS

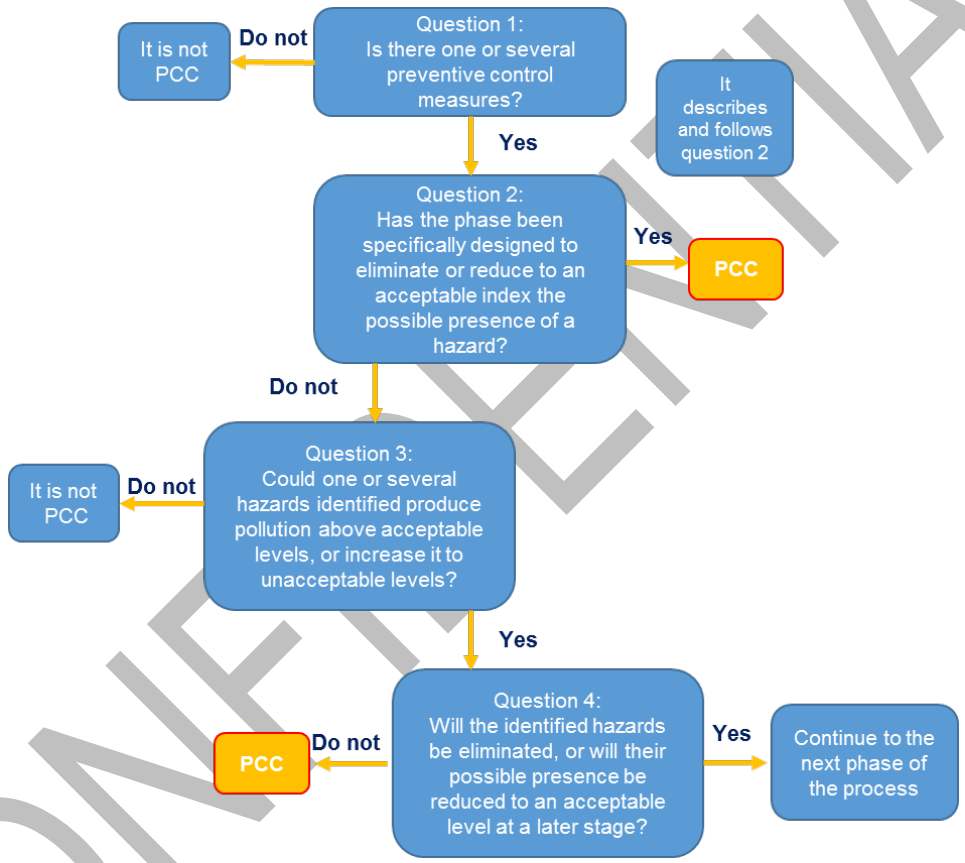
Identify hazards, description of process steps and preliminary risk analysis (PRA)

STAGE	DESCRIPTION	PHYSICAL	CHEMICAL	BIOLOGICAL	CONTROL MEASURES
RM RECEPTION	The raw material is received in transport with controlled temperature and. The pallets or the complete transport must include an identified security seal and related documentation. Raw material must be received at refrigeration or freezing temperatures. Transportation must include a fumigation certificate.	Dirt	NA	Presence of Pathogenic MOS Salmonella, E. coli, Listeria monocytogenes	There are validated suppliers PRO-012-03 SUPPLIER EVALUATION Each incoming lot is sampled against INTERNAL AND EXTERNAL SPECIFICATIONS. Control parameters are validated.
RM IQF WAREHOUSES	Place the boxes of raw material in the MP freezing chamber, identified with a letterhead containing the product name, internal identification lot and total product quantity	Thaw deterioration	NA	Thaw deterioration	Temperature taken by tuno REG-028-04 FREEZER TEMPERATURE RECORD
CLEANING AND SANITIZING OF RAW MATERIAL PACKAGING	Wash bags and buckets of raw material with running water and detergent	DIRT	NA	NA	Verification of removal of foreign matter
CONDITIONING	Open buckets, place the fruit on trays.	Physical contamination due to failure in BPM	Sanitizing Chemical Residual	Pathogen contamination from personnel handling	Product quantity per tray indicated in procedure
FREEZING	Reduce the temperature of the product until obtaining the conditions for sublimation	NA	Sanitizing Chemical Residual	Presence of Pathogenic MOS Salmonella, E. coli, Listeria monocytogenes	Temperature monitoring with IQF thermocouples
FREEZE DRYING	Dehydration process by sublimation	Thermocouple tubes	Sanitizing Chemical Residual	Airborne pathogen contamination	Monitoring of time, temperature curve, pressure.
FP SELECTION	Separate out of specification product	Foreign particles	NA	Contamination of pathogens in air from previous stage and / or Contamination of pathogens by Handling of personnel	Determination of humidity, sensory analysis.

METAL DETECTOR	Metal detection process	FERROUS Metals (Fe) NOT FERROUS (NOFe) STAINLESS STEEL	NA	NA	PRO-041-00 METAL DETECTOR PROCEDURE REG-069-01 METAL DETECTOR VERIFICATION
PACKAGING AND PACKAGING	Silver color bag MYLAR 48 Ga PET / ADH / 0.00035 "FOIL / Metallocene LLDPE, corrugated box packing, label placement in bag and box respectively.	Foreign particles	NA	Contamination of pathogens by manipulation of personnel	Quantity per bag, quantity per box and correct sealing, correct labeling.
LABELING	Product labeling is carried out at the end of packaging and sealing the primary packaging, subsequently the label is placed on the primary packaging and the secondary packaging of the packed product.	NA	NA	NA	LOT ASSIGNMENT AND LABELING PROCEDURE.
FP WAREHOUSING	Room temperature, cool and dry place	Physical contamination due to failure in BPM	NA	NA	NA
DISTRIBUTION	Clean fresh and dry transport cabin	Foreign particles	NA	Contamination of pathogens by manipulation of personnel	Visual Inspection.

Risk evaluation

Initially, all phases were analyzed using the decision tree based on CODEX, FAO. (1997) to establish whether, in the event of an eventual deviation in this stage of the process, the risk could be corrected later by means of the SOPs or the correct application of the GMP.



In addition, risk analysis was performedthrough the Modal Effects and Failure Analysis (AMEF) which was incorporated into the Hazard Analysis and Critical Control Points (HACCP) to establish one more proper evaluation and follow-up.

Se calculated and predicted, through the significance of risk, the importance of establishing preventive measures at the most vulnerable process stages.

The significance calculation was performed by obtaining the PRN. The critical control points were established at those stages that showed the highest values relative to the PRN (Priority Risk Number)

NPR= Severity x Occurrence x Detection

Severity or severity: Gravity means the magnitude of a hazard or the degree of consequences it can bring.

- Very high Severity or Mortal (10-9): contributes directly or indirectly to the death of the individual. Treatment failure is likely.
- Inconvenient major or Severe High (8-6): symptoms are life-threatening and require systematic treatment or hospitalization.
- Minor or Moderate inconvenience (5-3): symptoms are more pronounced, or of a more systemic nature than mild symptoms, but without danger of death. Some form of treatment is usually indicated.
- Minimum Effect or Insignificant (2-1): no adverse consequencesfor human health or within normal limits.

Occurrence or probability: it is the chance of an event happening

- Very High (10-9): the probability of exposure of susceptible people is safe or very high.
- High (8-6): exposure of susceptible people is likely.
- Moderate (5-3): the probability of exposure of susceptible people is low, but such exposure is possible.
- Low (2-1): the probability of exposure of susceptible people is very low.

DIRECTIONS FOR RISK ANALYSIS OF RESISTANCE TO ANTIMICRONS TRANSMITTED BY ALIMENTOSCAC/GL 77-2011

Detection: A value to classify the probability of detecting the fault

SOD is the non-arithmetic combination of Severity, Occurrence, and Detection.

SD is the non-arithmetic combination of Severity and Detection.

Table 1. Scale of severity, occurrence and probability of detection

Range	Severity (S)	Occurrence (O)	Detection (P)
10-9	Main effect / Very high severity	Very high probability of occurrence	Virtually impossible to detect
8-6	Major inconvenience	High probability of occurrence	Low detection capacity
5-3	Minor disadvantage	Moderate probability of occurrence	High detection capacity
2-1	Minimum effect / No effect	Low probability of occurrence	Very high detection capacity

STAGE RISKS	Physical		QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4	PCC
RAW MATERIAL RECEPTION	Dirt	At the reception the MP boxes can come with dirt residue	Yes	No	No	Na	No
RAW MATERIAL WAREHOUSE	Deterioration from thawing	If you do not have adequate temperature control and you get to defrost you can have the deterioration and it would generate a physical problem	Yes	No	No	Na	No
CLEANING OF RAW MATERIAL	Dirt	For improper washing of Raw Materials	Yes	No	No	Na	No
CONDITIONING	Physical contamination due to BPM failure	If there is a failure in good hygiene practices this contamination could occur	Yes	No	No	Na	No
FREEZE DRYING	Thermocouple Tubes	Thermocouple tubes are used to place the thermocouples so that they can be removed from the IQF, the tubes are less than 1 cm and there is a risk of losing them if not properly accounted for	Yes	No	No	Na	No
FP SELECTION	Foreign particles Physical contamination due to BPM failure	The selection is manual so it should be done in the right time and with the best hygienic practices to avoid any kind of contamination	Yes	No	No	Na	No
METAL DETECTOR	Metals	After spraying, correct metal detection must be carried out	Yes	No	No	Na	Yes
STORAGE AND PACKAGING	Foreign particles Physical contamination due to BPM failure	PT packaging and packaging is manual so it should be done in the right time and with the best hygienic practices to avoid any type of contamination	Yes	No	No	Na	No

STAGE RISKS	Chemical		QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4	PCC
RM PACKAGING SANITIZING	Sanitizing Chemical Residue	For improperly carrying out POES-016-02JUGS AND BUCKETS	Yes	No	No	Na	No
CONDITIONING	Sanitizing chemical residue	For improperly carrying out the POES-003-00 MESAS	Yes	No	No	Na	No
FREEZING	Sanitizing Chemical Residue Allergen	For improperly carrying out POES-009-02 IQF CHAMBER	Yes	No	No	Na	No
FREEZE DRYING	Sanitizing chemical residue	For improperly carrying out the POES-033-00 ALEGRIA LYOPHILIZED CHAMBER	Yes	No	No	Na	No

STAGE RISKS	Biological		QUESTION 1	QUESTION 2	QUESTION 3	QUESTION 4	PCC
RAW MATERIAL RECEPTION	Presence of pathogens, Salmonella, E. Coli Listeria Monocytogenes	If the starter product does not have the required microbiological standards and routine testing is not performed enters the plant and it is more difficult to detect or stop proliferation in a subsequent step.	Yes	Yes	Yes	No	Yes
RAW MATERIAL WAREHOUSE	Deterioration from thawing	If you do not have adequate temperature control and you get defrosting, you can have the deterioration would generate a microbiological problem.	Yes	No	No	Na	No
CONDITIONING	Contamination of pathogens by handling personnel	If there is a failure in good hygiene practices this contamination could occur	Yes	No	No	Na	No
FREEZING	Presence of pathogens, Salmonella, E. Coli Listeria Monocytogenes	For improperly carrying out POES-009-02 IQF CHAMBER					
FREEZE DRYING	Pollution of pathogens in the air	For improperly carrying out the POES-033-00 ALEGRIA LYOPHILIZED CHAMBER	Yes	No	No	Na	No
SELECTION FP	Contamination of pathogens in anterior stage air and/or Pathogen contamination by personnel handling	If there is a failure in good hygiene practices this contamination could occur	Yes	No	No	Na	No
PACKAGING	Contamination of pathogens by personnel handling	If there is a failure in good hygiene practices this contamination could occur	Yes	No	No	Na	No

PRINCIPLE 2: DETERMINE THE CRITICAL CONTROL POINTS (PCCs).

Decision Matrix for Critical Control Points Determination

Stage	Danger	Description	Severity	Occurrence	DETECCCION	NPR	SOD	SD	Result
RAW MATERIAL RECEPTION	Q	Dirt	8	1	2	16	812	82	PC
RAW MATERIAL RECEPTION	*B*	*Presence of pathogenic Mos Salmonella, E. Coli, Listeria Monocytogenes*	*10*	*4*	*4*	*160*	*1044*	*104*	***PCC 1***
RAW MATERIAL WAREHOUSE	F	Deterioration from thawing	5	4	1	20	541	51	PC

RAW MATERIAL WAREHOUSE	B	Deterioration from thawing	5	4	1	20	541	51	PC
CLEANING OF RM PACKAGING	F	Dirt	3	4	3	36	343	33	PC
SANITIZING OF RM PACKAGING	Q	Sanitizing chemical residue / Allergen	4	3	4	48	434	44	PC
CONDITIONING	B	Contamination of pathogens by handling personnel	8	3	2	48	832	82	PC
CONDITIONING	Q	Sanitizing chemical residue	4	3	4	48	434	44	PC
FREEZING	B	Presence of pathogenic OM Salmonella, E. coli, Listeria monocytogenes	8	5	1	40	851	81	PC
FREEZING	Q	Sanitizing chemical residue / Allergen	4	3	4	48	434	44	PC
FREEZE DRYING	F	Thermocouple Tubes	8	3	2	48	832	82	PC
FREEZE DRYING	B	Pollution of pathogens in the air	8	3	1	24	831	81	PC
FREEZE DRYING	Q	Sanitizing chemical residue	4	3	4	48	434	44	PC
SELECTION	F	Foreign particles	6	2	1	12	621	61	PC
SELECTION	B	Pollution of pathogens in the air	6	2	1	12	621	61	PC
SELECTION	B	Contamination of pathogens by personnel handling	10	1	2	20	1012	102	PC
METAL DETECTOR	F	Metal residue	10	3	2	90	1032	102	PCC 2
PACKAGING AND PACKAGING	F	Foreign material by poorly sealed bag	5	3	2	30	532	52	PC
PACKAGING AND PACKAGING	B	Contamination of pathogens by staff handling and poor bag sealing	8	3	2	48	832	82	PC

PRINCIPLE 3: ESTABLISHED CRITICAL LIMITS.

STAGE	CRITICAL LIMITS		REFERENCE
RAW MATERIAL RECEPTION	Total Coliforms Enterobacteria Aerobic Mesophiles Escherichia Coli Salmonella spp Listeria monocytogenes Staphylococcus aureus Molds Yeasts That it does not present any rupture in the buckets that present abnormalities such as leaks	<100 UFC/g <10 UFC/g 100,000 UFC/g 2 URL/ <10 UFC/g Ó <3 NMP/g Absent in 375g of sample Absent in 25g of sample <10 UFC/g <5 000 UFC/g <5 000 UFC/g	Vendor specification
IQF RM WAREHOUSE	Approximate temperature -15°C		REG-028-04 FREEZER TEMPERATURE REGISTER

	The storage temperature is suitable between -7 °C a -18 °C	
RM CONTAINER CLEANING	No Foreign matter	LIS-003-03 MASTER LISTING OF CHEMICALS
RM CONTAINER SANINTIZING	Contact time according to chemical rotation program	LIS-003-03 MASTER LISTING OF CHEMICALS
CONDITIONING	NA	PRO-034-01 PREPARATION OF FREEZE-DRIED FRUITS
FREEZING	T <-18 ° C internal product from 120 to 240 min	PRO-034-01 PREPARATION OF FREEZE-DRIED FRUITS
FREEZE DRYING	Time 23 ± 2 hours	PRO-034-01 PREPARATION OF FREEZE-DRIED FRUITS
RAW MATERIAL SELECTION	Sensory appearance, consistency, flavor, color, characteristic odor. Humidity <3% NO FOREIGN MATTER	PRO-034-01 PREPARATION OF FREEZE-DRIED FRUITS PRO-027-03 FOREIGN BODY DETECTION
METAL DETECTOR	FERROUS SENSITIVITY (Fe) / NON FERROUS SENSITIVITY (NOFe) / STAINLESS STEEL SENSITIVITY (SS) 1. mm / 1.5 mm / 2.0 mm	PRO-041-00 METAL DETECTOR PROCEDURE REG-069-01 METAL DETECTOR VERIFICATION VAL-007-00 METAL DETECTOR VALIDATION
PACKAGING	According Client's specification	PRO-034-00 MAKING OF FREEZE DRIED FRUIT PRO-007-01 MAKING OF FREEZE DRIED MANGO COCONUT NOM-147-SSA1-1996 CODEX ALIMENTARIUS.
FP STORAGE	NO aplica	PRO-011-02 WAREHOUSES AND FINISHED PRODUCT OUTPUT REG-014-01 PT INVENTORY
DISTRIBUTION	NA	REG-019-04 DEPARTURE OF FINISHED PRODUCT

ESTABLISH A SYSTEM TO MONITOR CONTROL OF THE CCP.

PCC 1	RAW MATERIAL RECEPTION
TYPE OF DANGER	Biological
What?	Presence of salmonella pathogen MOS, E. coli, Listeria monocytogenes
How?	Check that the provider is validated Request quality certificate from supplier for each incoming MP batch Sampling each batch of matter performs the inspection of all incoming packages as mentioned in the PRO-008-00 ACCEPTANCE OR REJECTION OF PRIME MATERIAL AND PACKAGING MATERIAL Registration REG-004-01 ARRIVAL OF PRIME MATERIAL or REG-005-01 ARRIVAL OF PACKAGE MATERIAL is completed.
•WHEN?	At each batch receipt of raw materials
•WHO?	Production and quality supervisor Purchasing Manager
CRITICAL LIMITS	Total Coliforms <100 UFC/g o <3 NMP/g NOM-218-SSA1-2011 Salmonella spp Absent in 25g Escherichia coli <3NMP/g Molds <100UFC/g Yeasts < 100UFC/g Aerobic < 100,000 UFC/g NOM-218-SSA1-2011 Listeria Monocytogenes Absent in 25g Enterobacterias <10 UFC/g Do not present any rupture the seal of the bag does not present abnormalities as leaks.
Validation	Internally analyze microbiology of all incoming batches Total Coliformes <10 CFU/g or <3 NMP/g, Aerobio Mesophiles <5 000 CFU/g, Enterobacteria <10 UFC/g Quality management, in each reception of MP, physical analyses, microbiological chemicals are verified, sampling is performed, each that comes raw material to the plant.
DOCUMENTATION SYSTEM	Reg-004-01 raw material arrival

PCC 2	METAL DETECTOR
TYPE OF DANGER	Physical
¿WHAT?	Metal Detection FERROUS, NON-FERROUS, STAINLESS STEEL
¿HOW?	The purpose of the procedure is that the personnel who operate the metal detector understand how its operation is and guarantee the prevention of contaminants by foreign bodies (metallic contaminants) such as Ferrous (Fe), Non-Ferrous (No Fe), and Stainless Steel (H.H). This is to ensure the safety and quality of the finished product before shipment.
• ¿WHEN?	Every batch
• ¿WHO?	Production supervisor performs Quality supervisor verifies Valid Quality Manager
CRITICAL LIMITS	FERROUS SENSITIVITY (Fe) 1 mm NON-FERROUS SENSITIVITY (NOFe) 1.5 mm SENSITIVITY STAINLESS STEEL (SS) 2.0 mm
VERIFICATION	Analyze all batches to ensure they meet critical limits, a record of batch verification is kept, as well as an equipment validation document. REG-069-01 METAL DETECTOR VERIFICATION
DOCUMENTATION SYSTEM	PRO-041-00 METAL DETECTOR PROCEDURE REG-069-01 METAL DETECTOR VERIFICATION VAL-007-00 METAL DETECTOR VALIDATION

PRINCIPLE 5: Establish corrective measures to be taken when surveillance indicates that a given CCP is not controlled.

In case of deviation of the Critical Control points, the safety team must be notified immediately in addition to taking one or of the pertinent actions mentioned.

1. Identify and eliminate the cause of the deviation.
2. Stop production until the problem is corrected.
3. Change the batch of product if it is available.
4. Follow up on MAN-007-02 HANDLING OF NON-CONFORMING PRODUCT.
5. Destroy the product that has been made under this condition.
6. Follow up on PRO-024-02 CORRECTIVE AND PREVENTIVE MEASURES.

PRINCIPLE 6: Establish verification procedures to confirm that the HACCP System is working effectively.

There is a system of MAN -006-01 INTERNAL AUDITS in which the methods of conducting the Internal Audits of the Yes or Yes Food Safety and Quality Management System are specified.

There is a PRG-004-04 INTERNAL AUDIT PROGRAM which allows the verification of the effectiveness of the HACCP system.
Internal audits are carried out at least once a year.
Internal audits include the review of prerequisite programs such as:

- Good hygienic practices
- Equipment calibration
- Chemical control
- Maintenance
- Critical limits
- Management commitment
- Control of documents and records
- Specifications and product development
- HACCP food safety system
- Verification of the SQF System
- Identification, monitoring, withdrawal and recall of products
- Food defense and fraud
- Allergen management
- Training
- Good manufacturing practices
- Approved Provider Program
- Dispatch of products

- Environmental control
- Corrective and preventive measures
- Pest control

All the necessary information is recorded in REG-004-05 ARRIVAL OF RAW MATERIAL. The 100% CCP review is made by production supervision, production management and quality management to ensure that the established criteria are met.
The plan is validated on the day through a monthly tour, the correct implementation of the system is visually validated following the process flow diagram, as well as the verification of the correct filling of the necessary records, this tour will be carried out by the Quality supervisor.
Internal and external microbiological analyzes are carried out for the finished product to validate the control of the CCP, there is no incidence of pathogens in the last year.

PRINCIPLES 7: Establish a documentation system on all the appropriate procedures and records for these principles and their application.

- DOC-008-03 DESCRIPTION AND PROFILE OF POSTS.
- PRG-001-03 TRAINING PROGRAMS.
- ESP-055-01 LEMON SLICES IQF.
- ESP-039-01 SLICED STRAWBERRY.
- ESP-034-00 LYOPHILIZED LEMON.
- ESP-040-01 LYOPHILIZED STRAWBERRY.
- PRO-034-01 PREPARATION OF FREEZE-DRIED FRUITS.
- ESP-050-01 PRIMARY PACKAGING 1 KG MYLAR.
- ESP-051-01 PRIMARY PACKAGING 3 KG MYLAR.
- ESP-052-01 PRIMARY PACKAGING 6 KG MYLAR.
- ESP-053-01 PRIMARY PACKAGING 10 KG MYLAR.
- ESP-020-02 CARDBOARD BOX.
- ESP-054-00 CARDBOARD BOX 24 x20x12.
- ESP-014-02 WOODEN FLOOR.
- ESP-015-02 ELASTIC FILM.
- MAN-001-03 GOOD HYGIENIC PRACTICES.
- PRO-008-02 PREVENTIVE CONTROLS SUPPLY CHAIN.
- PRO-010-02 ACCEPTANCE OR REJECTION OF FINISHED PRODUCT.
- PRO-012-03 SUPPLIER EVALUATION.

- MAN-007-02 NON-CONFORMING PRODUCT HANDLING.
- PRO-027-03 FOREIGN BODY DETECTION.
- PRG-004-04 INTERNAL AUDIT PROGRAM.
- MAN -006-01 INTERNAL AUDITS.
- MAN-008-03 ALLERGEN CONTROL.

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- FAO. Food quality and safety systems. Training manual on food hygiene and on the Hazard Analysis and Critical Control Points (HACCP) system. Rome: Food and Agriculture Organization of the United Nations and the Ministry of Health and Consumption of Spain; 2002.
- FAO. (1997). HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP) SYSTEM AND GUIDELINES FOR ITS APPLICATION. 2019, from Food and Agriculture Organization of the United Nations Website: http://www.fao.org/3/y1579s/y1579s03.htm
- National Advisory Committee on Microbiological Criteria for Foods (NACMCF)

APPENDIX

A. PRO-017-01 PRODUCTION OF FREEZE DRIED

PREPARACIÓN MP	
LOTE	
expiración	
SEMANA DE	
LOTE	
FECHA INCIAL	
FECHA FINAL	
LIOFILIZADOR	

		01:30		PREPARACION MP						SEMANA			2045	VERIFICACIÓN DE PESO				
CICLO	PERSONAL	FECHA INCIAL	HORA INICIAL	HORA FINAL PROPUESTA	HORA FINAL REAL	TIEMPO TOTAL	LOTE DE MP	LOTE DE MP PROVEEDOR	CANTIDAD DE BANDEJAS	KG POR BANDEJA	KG TOTALES	MERMA MP	OBSERVACIONES	PESO 1	PESO 2	PESO 3	PESO 4	PESO 5
1				01:30		00:00					0							
1				01:30		00:00					0							
1				01:30		00:00					0							
4				01:30		00:00					0							
5				01:30		00:00					0							
6				01:30		00:00					0							
				01:30		00:00					0							
									0		0	0						

LIOFILIZADO	
LOTE	
SEMANA	
LOTE	
FECHA INCIAL	
FECHA FINAL	
LIOFILIZADOR	

LIOFILIZADO

CICLO	PERSONAL	FECHA INCIAL	FECHA FINAL	TIEMPO DE LIOFILIZADO	HORA INICIAL	HORA FINAL PROPUEST	HORA FINAL REAL	PRESIÓN DE INICIO 1	PRESIÓN DE INICIO 2	TIEMPO TRANSCURRIDO (MIN)	T °C INICIO MINIMA					T °C FINAL MAXIMA					OBSERVACIONES
											T °C 1	T °C 2	T °C 3	T °C 4	T °C 5	T °C 1	T °C 2	T °C 3	T °C 4	T °C 5	
				20:00		20:00															
				20:00		20:00															
				20:00		20:00															
				20:00		20:00															
				20:00		20:00															
				20:00		20:00															

SEMANA	
LOTE	
FECHA INCIAL	
FECHA FINAL	
LIOFILIZADOR	

MPACADO

CICLO	PERSONAL	FECHA INCIAL	FECHA FINAL	HORA INICIAL	HORA FINAL	TIEMPO TOTAL	BOLSAS	Kg por bolsa	Resto	Kg totales	Kg totales ENVASADOS	ERROR TOTAL	HUMEDO	ERROR HUMEDO	OXIDADO	ERROR OXIDADO	BORONA	ERROR BORONA	TOTA ESPERADO	OBSERVACIONES
1						00:00					0	#¡DIV/0!		#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	
2						00:00			0		0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	
3						00:00			0			#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	
4						00:00			0			#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!		#¡DIV/0!	0	
5						00:00					0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!		#¡DIV/0!	0	
6						00:00					0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!		#¡DIV/0!	0	
										0	0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	#¡DIV/0!	0	

A. REG-004-04 ARRIVAL OF RAW MATERIAL

SÍ O SÍ ALIMENTOS S.A.P.I DE C.V.		Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México		
	Nombre	Recepción de Materia Prima	Código	REG-004-05
			Fecha de emisión	21 de julio de 2013
Peligro		Peligro de Cadena de suministro. Patógenos vegetativos como Salmonella, Escherichia coli, Listeria monocytogenes. Control de Alérgenos.	Fecha de revisión	8 de febrero de 2021
Parámetros, valores o límites críticos:		Temperatura de transporte de las Materias Primas se debe de mantener en-36°C a -18°C (-32.8 a -0.4°F) (si aplica). Las Materias Primas entrantes deben tener COA de proveedor aprobado.		
Quién, cómo, frecuencia		Inspección y llegada de Materia Prima la realiza Supervisor de Calidad, la liberación (análisis microbiológicos, sensorial y Fisicoqímicos) de la Materia Prima se realiza por parte del área de control de calidad.		
Acción correctiva		Si durante la recepción de la Materia Prima se observa que no cumple con las especificaciones no se recibe producto. El producto se pone en cuarentena hasta que el departamento de control de calidad determine si se libera o se rechaza. Se determinará causa principal, capacitar nuevamente (cuando aplique), evaluación del proveedor o corregir según corresponda.		

PUNTO CRÍTICO DE CONTOL

MATERIA PRIMA	
ORDEN DE COMPRA	
PROVEEDOR DISTRIBUIDOR (quien emite factura)	
PROVEEDOR MANUFACTURA	
COMPRADOR	
MEDIO DE TRANSPORTE	
NÚMERO DE SELLO DE SEGURIDAD	
FECHA ENTRADA	
HORA DE ENTRADA	
TIPO (ORGANICO O CONVENCIONAL)	
# CERTIFICADO NOP FECHA DE VENCIMIENTO	
CERTIFICADO KOSHER FECHA DE VENCIMIENTO	
TEMPERATURA PCQ	
CONTROL DE ALERGENOS (NOMBRE DE ALÉRGENO)	
LOTE de MATERIA PRIMA PROVEEDOR	
LOTE de MATERIA PRIMA SIOSI	
CANTIDAD (Kg)	
CANTIDAD	
FECHA DE MANUFACTURA	
FECHA DE EXPIRACIÓN	
TAMAÑO DE MUESTRA	
REVISIÓN DE CUERPOS EXTRAÑOS	

INSPECCION PRIMARIA	SI	NO		MICROBIOLOGICOS y FISICOQUIMICOS	
Transporte limpio			PCC	Enterobacterias/Salmonella	
Envase Primario limpio			PCC	Coliformes totales /E Coli	
Envase primario exento de humedad			PCQ	Mesofilos aerobios	
Envase primario exento de daño			PCQ	% Humedad	
Condiciones aceptables generales de la unidad, sin olores, sin daños				% Grasa	
Unidad libre de fauna nociva				Producto protegido por bolsa	
Unidad libre de material ajeno				Verificación de certificado de análisis de proveedor.	
Estado de las tarimas de recepción bueno					

SENSORIALES	PCQ	VALOR
Color		
Sabor		
Olor		
Textura		
Apariencia		
TABLA DE PONDERACIÓN DE ATRIBUTOS SENSORIALES		TOTAL

OBSERVACIONES

LIBERADO		RECHAZADO	

RESPONSABLE DE CONTROL DE CALIDAD: _____ RESPONSABLE DE PRODUCCION: _____

VERIFICADO (Responsable sistema de inocuidad y PCQI): _____

B. REG-005-02 ARRIVAL OF PACKAGING MATERIAL

SÍO SÍ ALIMENTOS S.A.P.I DE C.V.		Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México		
	Nombre	**Llegada de Material de Empaque**	Código	REG-005-03
			Fecha de emisión	21 de julio de 2013
Peligro		Peligro de Cadena de suministro. Patogenos vegetativos como Salmonella, Escherichia coli, Listeria monocytogenes.	Fecha de revisión	08 de febrero de 2021
Parámetros, valores o límites críticos:		Los Materiales de empaque primarios se reciben conforme a las especificaciones se realiza análisis mirobiológicos y análisis visual que las especificaciones del empaque cumpla con las requeridas. Los empaques secundarios se reciben a granel se realiza inspección visual.		
Quién, cómo, frecuencia		Inspección y llegada de Materia de Empaque la realiza Supervisor de Calidad, la liberación (análisis microbiológicos y visual) de la Materia de Empaque se realiza por parte del área de control de calidad.		
Acción correctiva		Si durante la recepción de la Materia Prima se observa que no cumple con las especificaciones no se recibe producto. El producto se pone en cuarentena hasta que el departamento de control de calidad determine si se libera o se rechaza. Se determinará causa principal, capacitar nuevamente (cuando aplique), evaluación del proveedor o corregir según corresponda.		

MATERIAL	
COMPRADOR	
PROVEEDOR	
MEDIO DE TRANSPORTE	
FECHA ENTRADA	
HORA DE ENTRADA	
LOTE DE PROVEEDOR	
LOTE SIOSI/ PALLIUM	
CANTIDAD	
TAMAÑO DE MUESTRA	

INSPECCION PRIMARIA	SI	NO	ANALISIS	
Transporte limpio				
Envase Primario limpio				
Envase primario exento de humedad				
Envase primario exento de daño				
Condiciones aceptables generales de la unidad, sin olores, sin daños				
Unidad libre de fauna nociva				
Unidad libre de material ajeno				
Estado de las tarimas de recepción bueno				

CARACTERISTICAS Y OBSERVACIONES	

LIBERADO		**RECHAZADO**	

RESPONSABLE DE CONTROL DE CALIDAD: RESPONSABLE DE PRODUCCION:

VERIFICADO POR RESPONSABLE DE SISTEMA DE INOCUIDAD (PCQI):_____

C. REG-006-02 GOOD MANUFACTURING PRACTICES PER SHIFT

SÍOSÍ	SÍ O SÍ ALIMENTOS S.A.P.I DE C.V.	Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich. México	
	Nombre	Registro de Buenas Prácticas de Manufactura de Personal	Código: REG-006-05
			Fecha de emisión: 21/07/2013
Propósito:	Llevar el registro de la verificación de las buenas prácticas de manufactura del personal de operación (miembros del equipo de saneamiento) importante mantener registros de las buenas prácticas del personal para eliminar alérgenos potenciales (cuando aplique) y reducir la contaminación cruzada por microorganismos patogenos ambientales que pueden afectar la inocuidad del producto.		Fecha de revisión: 21/07/2021
Frecuencia:	Al inicio de las operaciones (**Pre-Operatorias**) de producción.		
Quién:	La verificación la realiza Supervisor de calidad, en la cual realizan una inspección de las áreas, equipos, utensilios y personal de operación. La validación la realiza Gerente de Calidad. Responsable del Sistema de Inocuidad (PCQI)		

SEMANA **AÑO 2021**

PERSONAL	VIERNES 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	SÁBADO 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	DOMINGO 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Baño diario																																													
Limpieza general																																													
Sin perfume, joyas, adornos, broches para el cabello, pasadores, pinzas, aretes, anillos, pulseras, relojes, collares.																																													
Sin maquillaje																																													
Uñas cortas, limpias y libres de pintura y esmalte.																																													
Sin barba ni cabello facial																																													
Patillas limpias y recortadas																																													
Sano, Sin heridas, cortadas, erupciones, llagas																																													
Uniforme limpio y completo (pantalón y camisola)																																													
Botas limpias																																													
Uso de cofia y cubrebocas adecuadamente																																													
Lavado de manos																																													
Uso de tapete sanitizante																																													
Limpieza de cámaras de congelado																																													
Limpieza de carros de liofilizado																																													
Limpieza de mesas																																													
Limpieza de basculas																																													
Limpieza de utensilios																																													
Limpieza de tarjas																																													
Limpieza de molino																																													

CORRECCIONES Y OBSERVACIONES VIERNES	
CORRECCIONES Y OBSERVACIONES SABADO	
CORRECCIONES Y OBSERVACIONES DOMINGO	

NOMBRE PERSONAL 1		NOMBRE PERSONAL 6		NOMBRE PERSONAL 11	
NOMBRE PERSONAL 2		NOMBRE PERSONAL 7		NOMBRE PERSONAL 12	
NOMBRE PERSONAL 3		NOMBRE PERSONAL 8		NOMBRE PERSONAL 13	
NOMBRE PERSONAL 4		NOMBRE PERSONAL 9		NOMBRE PERSONAL 14	
NOMBRE PERSONAL 5		NOMBRE PERSONAL 10		NOMBRE PERSONAL 15	
FIRMA RESPONSABLE DE VERIFICACIÓN					
FIRMA RESPONSABLE DE VERIFICACIÓN (PCQI)					

D. REG-018-01 RELEASE OF FINISHED PRODUCT

SÍO SÍ ALIMENTOS S.A.P.I DE C.V.		Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México	
Nombre	**Liberación de Producto Terminado**	Código	REG-018-03
		Fecha de emisión	21 de julio de 2013
Peligro	Peligro de Operación. Patogenos vegetativos como Salmonella, Escherichia coli, Listeria monocytogenes. Control de Alérgenos	Fecha de revisión	8 de febrero de 2021
Parámetros, valores o límites críticos:	Se realiza análisis microbiologicos para Salmonella (ausente en 375 g de muestra), E.coli (<3 NMP/g) y L. monocytogenes (ausente en 25 g de muestra).		
Quién, cómo, frecuencia	La liberación se lleva acabo por parte del área de control de calidad (supervisor de control de calidad y/o Gerente de control de calidad) mediante de análisis microbiológicos, sensoriales y fisicoquímicos cada lote de producción.		
Acción correctiva	Si el Producto Terminado no cumple con especificaciones de calidad se evalúa si puede entrar a reproceso, si no cumple con especificaciones microbiologicas el producto pasa a **Producto Rechazado** para su destrucción. Se determinará causa principal, capacitar nuevamente (cuando aplique) o corregir según corresponda.		

PRODUCTO TERMINADO	
LOTE	
FECHA DE INICIO DE ANALISIS	
FECHA FINAL DE ANALISIS	
FECHA ANALISIS TERCERO AUTORIZADO	
CANTIDAD DE LOTE (Kg)	
CONTROL DE ALEGENOS (Alérgenos declarados)	

MICROBIOLÓGICOS	ESPECIFICACIÓN	RESULTADO ANÁLISIS INTERNO	RESULTADO ANÁLISIS EXTERNO
Escherichia coli	< 3 NMP/g		
Salmonella	AUSENTE EN 375g DE MUESTRA		
Staphylococcus aureus	<10 UFC/g		
Listeria monocytogenes	AUSENTE EN 25g DE MUESTRA		
Mesófilos Aerobios	5000 UFC		
Enterobacterias	<10 UFC		
Coliformes totales	<10 UFC		

FISICOQUÍMICOS	ESPECIFICACIÓN	RESULTADO
Humedad %		
pH		
Solidos Solubles		
AW		

SENSORIALES	ESPECIFICACIÓN	RESULTADO
Sabor		
Olor		
Color		
Textura		
Apariencia		

Observaciones	

LIBERADO		RECHAZADO	

RESPONSABLE DE CONTROL DE CALIDAD:_____ RESPONSABLE DE PRODUCCION:

VERIFICADO (Responsable sistema de inocuidad y PCQI):_____

E. REG-034-00 RELEASE OF WAREHOUSE

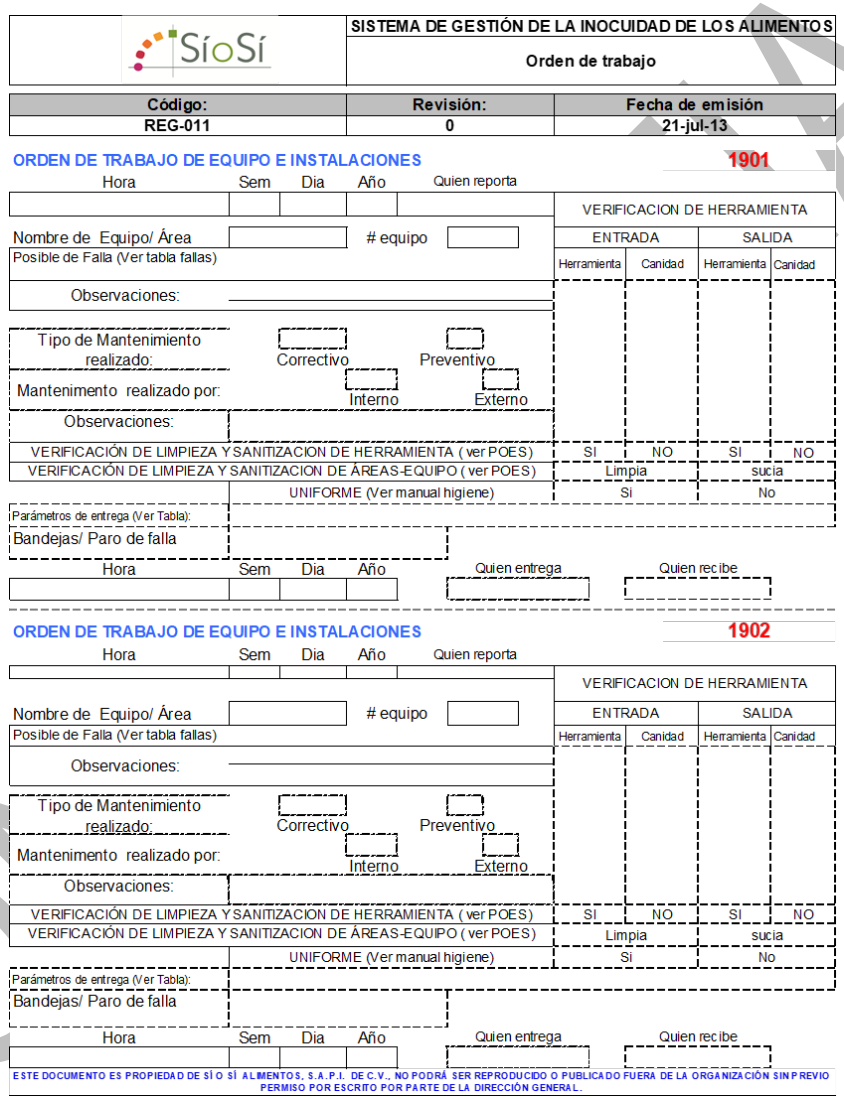
SíoSí	SISTEMA DE GESTIÓN DE LA INOCUIDAD DE LOS ALIMENTOS
	Registro de Salida de almacen

Código:	Revisión:	Fecha de emisión:	Disposición
REG-034	0	21-jul-13	

FOLIO

FECHA	SEMANA	CODIGO	PRODUCTO	NOMBRE Y FIRMA	CANTIDAD

F. REG-011-00 WORK ORDER



SíoSí	SISTEMA DE GESTIÓN DE LA INOCUIDAD DE LOS ALIMENTOS Orden de trabajo	
Código:	**Revisión:**	**Fecha de emisión**
REG-011	0	21-jul-13

ORDEN DE TRABAJO DE EQUIPO E INSTALACIONES **1901**

Hora | Sem | Dia | Año | Quien reporta

Nombre de Equipo/ Área | # equipo

Posible de Falla (Ver tabla fallas)

Observaciones:

Tipo de Mantenimiento realizado: Correctivo Preventivo

Mantenimento realizado por: Interno Externo

Observaciones:

VERIFICACION DE HERRAMIENTA

	ENTRADA		SALIDA	
	Herramienta	Canidad	Herramienta	Canidad

VERIFICACIÓN DE LIMPIEZA Y SANITIZACION DE HERRAMIENTA (ver POES)	SI	NO	SI	NO
VERIFICACIÓN DE LIMPIEZA Y SANITIZACION DE ÁREAS-EQUIPO (ver POES)	Limpia		sucia	
UNIFORME (Ver manual higiene)	Si		No	

Parámetros de entrega (Ver Tabla):

Bandejas/ Paro de falla

Hora | Sem | Dia | Año | Quien entrega | Quien recibe

ORDEN DE TRABAJO DE EQUIPO E INSTALACIONES **1902**

Hora | Sem | Dia | Año | Quien reporta

Nombre de Equipo/ Área | # equipo

Posible de Falla (Ver tabla fallas)

Observaciones:

Tipo de Mantenimiento realizado: Correctivo Preventivo

Mantenimento realizado por: Interno Externo

Observaciones:

VERIFICACION DE HERRAMIENTA

	ENTRADA		SALIDA	
	Herramienta	Canidad	Herramienta	Canidad

VERIFICACIÓN DE LIMPIEZA Y SANITIZACION DE HERRAMIENTA (ver POES)	SI	NO	SI	NO
VERIFICACIÓN DE LIMPIEZA Y SANITIZACION DE ÁREAS-EQUIPO (ver POES)	Limpia		sucia	
UNIFORME (Ver manual higiene)	Si		No	

Parámetros de entrega (Ver Tabla):

Bandejas/ Paro de falla

Hora | Sem | Dia | Año | Quien entrega | Quien recibe

G. EG-028-04 TEMPERATURE RECORD FOR FREEZER

SÍO SÍ	SÍ O SÍ ALIMENTOS S.A.P.I DE C.V.		Av. Francisco I. Madero Oriente #6500 int. 206 Col. Ciudad industrial. Morelia Mich, México					
	Nombre	Registro de temperaturas de cámara de congelación de Materia Prima			Código	REG-028-04		
					Fecha de emisión	30 de noviembre de 2016		
Peligro		Peligro de almacenamiento. Patogenos vegetarivos como Salmonella, Escherichia coli, Listeria monocytogenes.			Fecha de revisión	8 de febrero de 2021		
Parámetros, valores o límites críticos:		Temperatura de almacenamiento de las Materias Primas se debe de mantener en a bajo de -18°C (-0.4°F)						
Quién, cómo, frecuencia		El monitoreo lo realiza el personal de operación y la verificación del monitoreo lo realiza el Supervisor de Calidad y/o Producción, la cual se toma la lectura cada 3 hr durante el turno, tomamndo la lectura del pirómetro que marca la temperatura del termopar que se encuentra dentro de la cámara de cogelado de MP.						
Acción correctiva		Si se observa que la temperatura de la cámara no esta dentro del parámetro se avisa al área de mantenimiento para revisar funcionamiento, el producto es evaluado por el departamento de calidad se retiene el producto hasta el último chequeo satisfactorio, se descarta o libera. Se determinará causa principal, capacitar nuevamente o corregir según corresponda.						
		SEMANA						
		00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00
DÍA	FECHA	°C	°C	°C	°C	°C	°C	°C	°C
DOMINGO									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
LUNES									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
MARTES									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
MIÉRCOLES									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
JUEVES									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
VIERNES									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									
SÁBADO									
PERSONAL DE MONITOREO (OPERADOR)									
FIRMA VERIFICACIÓN (SUPERVISOR)									

D E S C O D E S C O N E C T A D O . LA CÁM ARA DE CONGELA DO NO ESTA EN USO POR FA LTA DE PRODUCTO O SE ESTA REALIZANDO ACTIVIDAD DE LAVA DO CUANDO SEA EL CASO. S/PRODUCTO; LA CÁM ARA DE CONGELA DO NO CONTINE PRODUCTO EN PROCESO DE CONGELA DO. / FUERA DE SERVICIO O EN M ANTENIM IENTO. -D - LA CÁM ARA SE ENCUENTRA EN DESCONGELA DO AUTOM ÁTICO.

RESPONSABLE DE CONTROL DE CALIDAD:_____ **RESPONSABLE DE PRODUCCION:**_____

Change control

REVISION	AFECTED AREAS	CHANGE DESCRIPTION	ISSUE DATE
00	ALL	First issue of PLAN HACCP OF FREEZE DRIED IQF FRUITS AND VEGETABLES	August 30th, 2020
02	LAYOUT	SE AGREGAN LAY OUT DE ALERGENOS Y DESECHOS	April 27th, 2020
03	SEVERAL	Review according to CODEX ALIMENTARIUS GENERAL PRINCIPLES OF FOOD HYGIENE CXV1.1969 R 2020 Incorporation of metal detection procedure, verifications and validations Incorporation of PCC2 metal detector	July 27th, 2021

Distribution list

COPY NUMBER	CODE	VERSION	NOMBRE	ÁREA	FIRMA
01	HAC-003	03	Sandra Castillo Cervantes	Quality Manager