1. Surveillance Audit Report

Unannounced audit

FSSC 22000

Version 4.1
January 2018

ADM Co.- Southport

DQS CFS GmbH

August-Schanz-Straße 21
60433 Frankfurt am Main
www.dqs-cfs.com

July 2019

Audit recommendation
In reference to FSSC 22000 the audit team recommends to DQS CFS GmbH:
☐ Issuance of the certificate
☐ Issuance of the certificate as soon as implementation of corrective actions has been demonstrated. Corrective actions have been accepted.
☐ Maintenance of the certificate
☒ Maintenance of the certificate as soon as implementation of corrective actions has been demonstrated. Corrective actions have been accepted.

Corrective actions
Corrective actions of the **current audit** have been demonstrated and have been accepted by the auditor:
☐ Yes
☐ No
☐ NA (no corrective actions necessary)
The implementation of corrective actions of the **previous audit** has been demonstrated and has been verified by the auditor
☒ Yes
☐ No
☐ NA (no corrective actions on previous audit)

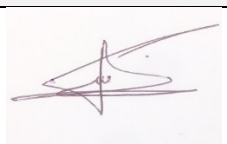
Use of FSSC 222000 Logo (Mark)
The use of the FSSC 22000 logo complies with the terms and rules for the use of the logo of FSSC in the version that is currently valid:
☐ Yes
☐ No
☒ Not applicable (No Useage)

Audit team members

Given name	Surname	Role	ISO TS 22003 scope (s)
Patrick	Frost	Lead Auditor	All

The technical assessment is based on the audit findings and conclusions and any other relevant information.

Technical Assessor

Given name	Surname	Date	Signature
Navid	Falaki	10/8/2019	

Audit program and plan		
Audit program	*mark according Type of Audit* *see Annex I – Inspection plan for audit program*	*The actual audit is:* ☐ **Initial Certification** (Stage 2) ☐ **Surveillance announced** audit ☒ **Surveillance unannounced** audit ☐ **Re-certification** audit ☐ **Upgrade** audit *(from existing ISO 22000 certification to FSSC 22000)* ☐ **Transfer** audit (from another CB)
Certificate expiry date	*Insert certificate expiry date*	2021-12-05
Deviation from audit program	*Describe issues impacting the audit program and their reasons*	☒ No deviations from audit program ☐ The following deviations from the audit program were noticed:
Audit plan	See Annex I – Schedule	☒ Annex I – Schedule will be uploaded with the audit documents
Deviation from audit plan	*Describe issues impacting the audit plan and their reasons*	☒ No deviations from audit plan ☐ Deviations necessary, but minimum total audit time allocated on site ☐ 50% of audit time allocated in production and storage area ☐ The following deviations from the audit plan were applied: Total audit time was reduced to 3 mandays from 3.5. Using manday calculator: (1.5 basic + 1.0 added HACCP + 1 FSSC + 1 FTE) X 2/3 = 3.0 mandays. Time was sufficient due to enclosed process, auditor familiarity, and similarity of processes.

Audit details							
Customer relation code	*Insert Customer Relation Code (AZ)*	10011358					
CB name and office location	*Insert Certification Body*	DQS CFS GmbH					
Audit language	*Insert mutually agreed language used during the audit*	English					
Audit Team							
Lead Auditor	*given and surname of the Lead auditor*	Patrick Frost					
Co- Auditor	*given and surname of the CO auditor(s)*						
Technical Expert	*given and surname of the technical expert(s)*						
Audit objective	*Confirm any special attention areas*	☒ All areas are in conformance with the requirements according to FSSC 22000 Version [illegible]					
		☐ Only partly:					
Audit criteria	*Assessed policies, procedures and requirements:*	ISO 22000:2005, ISO 22002-1:2009, FSSC 22000 V.4 add'l req					
Audit dates and times	*Start date, (DD,MM,YYYY), incl. time (HH:MM)*	Start date:	Start time:				
		2019-07-30	08:00				
	Finished date, (DD,MM,YYYY), incl. time (HH:MM)	Finished date:	Finished time:				
		2019-07-31	16:30				
Audit duration	*Details of Audit duration (mandays) (please refer to approved justification):*	2.5 mandays					
Audit time reduction	*Details of Audit time reduction (please refer to approved justification)*	☒ No reduction					
		☐ Audit time reduction: Total audit time was reduced to 3 mandays from 3.5. Using manday calculator: (1.5 basic + 1.0 added HACCP + 1 FSSC + 1 FTE) X 2/3 = 3.0 mandays. Time was sufficient due to enclosed process, auditor familiarity, and similarity of processes.					
Additional audit time for off-site activities	*Details of additional audit time for off-site activities:*	☒ No off-site activities					
		☐ add. time for off-site activities:					

On-site audit time calculation

Insert audit time calculation for complete cycle *100% = initial* *66% = Re-certification* *33% = Surveillance*		D	H	MS	FTE	FSSC addition	Total
	100%						
	66%						
	33%	1				1	2

Other standards	*Mention the other standards that are audited **together** with FSSC 22000.*	**Standard**	**Audit type**	**MD**

	Also show audit type and man-days allocated to these standards.			
Number of HACCP studies	*Insert number of HACCP studies*	3		
Number of employees (FTEs)	*Insert number employees*	67		
Number of shifts	*Insert number of shifts*	4		
Employees per shift (FTE)	*Insert number of employees per shift*	15		
Off-site activities *(Third party off-site services hired by auditee, such as storage, transportation, production of semi- finished products, etc.)*				
Registered legal name	*Insert legal name of third-party off-site service(s) (if applicable)*	N/A		
Trading name(s)	*Insert trading name of third-party off-site service(s) (if applicable)*			
Scope	*Insert scope of third-party off-site service(s) (if applicable)*			
Location	*Add location of service(s) (if applicable)*			

Audit details previous audit			
Audit type	*mark according Type of previous Audit*	The previous audit was: ☐ **Initial Certification** (Stage 1) ☐ **Initial Certification** (Stage 2) ☐ **Surveillance announced** audit ☐ **Surveillance unannounced** audit ☒ **Re-certification** audit ☐ **Upgrade** audit *(from existing ISO 22000 certification to FSSC 22000)* ☐ **Transfer** audit (from another CB)	
Audit date	*Date of previous Audit (DD/MM/YYYY)*	From:	To:
		31/10/2018	02/11/2018
CB conducting audit	*conduction Certification Body from previous Audit*	☒ DQS CFS GmbH	
		☐ other CB:	

Organization profile		
Description of the certified organisation:		
Registration	*Registered legal name:*	ADM Co.
	Chamber of Commerce	Southport
	Governmental registration number	XXXXXXX5996
Location	*Street & Street no.*	1730 East Moore St. SE
	Postcode	28461
	City	Southport
	Country	USA
Contact person	*Name*	Scott Phillips
	function	QA Superintendent
	email	Scott.phillips@adm.com
	phone	910-457-7565
General description of audited organisation	*Give information to :* *-Ownership of the company* *-History* *-age of company* *-age of site* *-If applicable links to other sites* *-Turnover (if available)* *-Product(s)* *-customer types* *-production volume* *-type of specialist equipment or processes on site* *-head office audited* *-exclusion of scope* *-Witness audit*	**The Archer Daniels Midland, Southport Plant is part of the Archer Daniels Midland Company, a publically held corporation with headquarters in Decatur, Illinois. The company began in 1902, when George A. Archer and John W. Daniels began a linseed crushing business. In 1923, Archer-Daniels Linseed Company acquired Midland Linseed Products Company, and the Archer-Daniels-Midland Company was formed. The Southport Plant was originally built by Pfizer, Incorporated in 1975 to manufacture Citric Acid, Sodium Citrate, and Potassium Citrate. Archer Daniels Midland purchased the plant and business in 1990 from Pfizer and has continued to produce the same products at the location since that time. Citric Acid, Sodium Citrate, and Potassium Citrate are used by Food, Feed, and Pharmaceutical Companies. The Southport Plant property is approximately 2428114 m2 and the plant site occupies 404686 m2. (The site's estimated annual turnover is confidential). The products are marketed worldwide.** **The Southport plant has 147 employees running two shifts 7am to 7pm and 7pm to 7am for 365 days per year. Of this number, approximately 67 are dedicated to the food grade process. 37 cover the primary shift.** **The site had a major reorganization in June 2019 resulting in reduced salaried headcount and reassignment of responsibilities. There is a new Plant Manager and QA Superintendent as well as other supervisory position changes.** **Fermentation and feed portions of the site are excluded from the audit.** **This audit was not witnessed.**

Seasonal activities	All activities covered by the scope shall be audited	N/A

Head Office profile		
Description of the Head Office *(were appropriate)*:		
Registration	*Registered legal name:*	ADM Co.
	Chamber of Commerce	Decatur
	Governmental registration number	Confidential
Location	*Street & Street no.*	4666 Faries Parkway
	Postcode	62526
	City	Decatur
	Country	USA
Contact person	*Name*	Dave Watson
	function	Divisional Quality Manager
	email	Dave.watson@adm.com
	phone	217-451-7439
Number of sites	*-Multiple site is possible for food chain categories: A, E, FI and G -Exception for Categories C, H, I,K: - Head office controlling certain function pertinent to certification (20% audit time reduction may be applicable) - Organizations with off-site activities (a maximum of five*	N/A

Audit Scope		
Food category	*Indicate applicable Prerequisite Program(s)* According PRP's: *- Farming (AI,AII): ISO / TS 22002-3:2011* *- Food Manufacturing (CI, CII, CIII, CIV): ISO / TS 22002-1:2009*	☐ **AI** Farming of Animals for Meat/ Milk/ Egg/ Honey ☐ **AII** Farming of Fish and Seafood ☐ **CI** Processing of perishable Animal Products *(i.e. Fish and Seafood, Meat, Eggs, Dairy and Fish products)* ☐ **CII** Processing of perishable Plant Products *(i.e. Fruits and fresh Juices, Vegetables, Grains, Nuts and Pulses)* ☐ **CIII** Processing of perishable Animals and Plant Products (mixed products)

	- Animal Feed Production (DI, DII): ISO / TS 22002-6:2016* *- Catering (E): ISO / TS 22002-2:2013* *- Retail (FI): BSI / PAS 221:2013* *- Transport and Storage (GI, GII): NEN/ NTA 8059:2016* *- Packaging (I): ISO / TS 22002-4:2013* *- (Bio)Chemicals (K) ISO / TS 22002-1:2009* *- Pet food only for Cats and Dogs (DII): ISO / TS 22002-1:2009*	(i.e. Pizza, Lasagne, Sandwich, Dumpling, Ready- to- eat meals) ☐ **CIV** Processing of ambient stable products (i.e. Caned food, Biscuits, Snacks, Oil, Drinking water, Beverages, Pasta, Flour, Sugar, Food grade salt) ☐ **DI** Production of animal Feed ☐ **DII** Production of Pet food for Dogs and Cats ☐ **DII*** Production of Pet food for **other Pets than** Dogs and Cats ☐ **E** Catering ☐ **FI** Retail ☐ **GI** Provision of Transport and Storage Services for perishable Food and Feed ☐ **GII** Provision of Transport and Storage Services for ambient Food and Feed ☐ **I** Production of Food and Feed Packaging and Packaging Material ☒ **K** Production of (Bio)Chemicals
Scope statement	*Specify the products or product categories, processes and production sites that are covered by the food safety management system and mentioned on the certificate.*	**The manufacture of citric acid, sodium citrate, potassium citrate and liquid citric acid (exemption – fermentation process and feed product)**
Exclusions *(when appropriate)*	*Description of exclusion(s) from the scope*	fermentation process and feed product
Verification of the Scope statement	*Conform that the Scope statement is in compliance with the FSSC 22000 Requirements (will be verified out by DQS technical reviewer)*	☒ The Scope statement is in compliance with the FSSC 22000 Requirements. Its has been verified by the DQS CFS technical reviewer. ☐ The Scope statement is **not in compliance** with the FSSC 22000 Requirements due to:

General findings		
Legal compliance	*Summarize the status, any governmental inspection findings, etc.*	☒ No govermental inspection findings, since the last FSSC 22000 Audit
		☐ Summary of govermental inspection findings:
Change management *(Relevant Changes since the last audit)*	*Documentation*	None
	Requirements	None
	Processes	None
	Products	None

Complaints management	*Insert Complaints KPIs in PPM*	3 complaints YTD; 111MM lbs produced;			
Recalls and withdrawals	*Summary of recalls / withdrawals*	☒ No recall(s) ☒ No withdrawal(s)			
			Date	Product	Product Volume
		☐ recall(s)			
		☐ withdrawal(s)			

Summary of audit findings Stage 1				
Date of Stage 1 Audit	*Insert date of Stage 1 audit*	☒ Not applicable ☐ Date:		
Non-conformities		**Standard & Clause**	**Audit findings**	**CAP closed by:** *(DD/MM/YYYY)*
Areas of concern (*Stage 1 only)*	*Number and short description of the Stage 1 findings that may lead to a nonconformity during the stage 2 audit*			

Summary of audit findings					
Non-conformities		**Standard & Clause**	**Audit findings**	**closed CAP**	**CAP closed by:** *(DD/MM/YYYY)*
Critical non-conformities	*Short description of critical non-conformities*			☐ Yes ☐ No	
Major non-conformities	*Short description of Major non-conformities*			☐ Yes ☐ No	
Minor non-conformities	*Short description of Minor non-conformities*	TS 220[illegible]2.1 5.7	A partial uncovered pallet of FIBC was observed in the FIBC packing room.	☐ Yes ☒ No	
		TS 22002-1 8.2	A gasket covering the anacit heater port was deteriorated allowing for possible contamination.		
		TS 22002-1 8.6	Several pieces of duct tape were used in the C513 crystallizer area to suppress vacuum leaks. Tape was not dated and initialed per site's policy. No workorders could be provided indicating they were scheduled for repair.		
		TS 22002-1 11.3	Several instances of parts and tools were observed on floors, grates, and cross-beams. Areas under the sifters had large accumulation of product.		
		ISO 22000 8.4.1b	Not all internal audits to the standard were conducted as scheduled as none of the second quarter audits were completed.		

			There is also a backlog of corrective actions for findings.		

Executive summary

A statement on the conformity and the effectiveness of the management system together with a summary of the evidence relating to:
-the capability of the management system to meet applicable requirements and expected outcomes;
- the internal audit and management review process

Implementation, consistency and effectiveness of the food safety management system, especially of the prerequisite programs and the HACCP-plans, are checked, verified and evaluated in this audit by means of the following methods and processes:

- Inspection and auditing of the site, including receiving, recovery, and load out for both truck and tanker cars by both the food safety team and the operators.
- Auditing of support processes such as the laboratory, pest control, inspection of measuring and test equipment, water supply, compressed air supply, steam supply and maintenance.
- Auditing of processes for release and hold of product.
- Reviewing customer complains as they pertain to quality or food safety.

Processes are found to be in compliance with internal procedures and with the requirements of the standard.

During the interviews it was found, that all employees are well aware and trained regarding product quality and food safety.

Food Safety Management System (ISO 22000:2005) findings	
	Summary: *Summary of findings related to ISO 22000:2005 sections 4 to 8 while highlighting all of the sections shortly and in particular the ones where NC were noted including reference to the checklists with more details.*
4. Food safety management system	4.1 General requirements The food safety management system has been implemented and in use over the past 7 years. This information is held within the quality manual on the electronic Policy Tech system and updated on an as needed basis. The most recent update occurred in October 2018. 4.2 Documentation Requirements The document control procedure for the Food Safety Management System (FSMS) is located in the Policy Tech quality manual . The SOPs and policies pertaining to the FSMS are scheduled to be reviewed on at least an annual basis. The FSMS standard is located on the Policy Tech in the company intranet and is accessible to the employees working in the the facility. Employees interviewed were able to quickly find the SOP desired.
	Details of non conformities if identified during the audit:
	Details to Non- Conf.

5. Management commitment	5.1 Management commitment Top management is committed to implementation of the FSMS. This is evidenced by the establishment of a food safety policy and continuous improvement efforts. There have been no non-conformities during the previous two audits and additional opportunities from the previous audit were addressed. Monthly management reviews are conducted specific to discussing food safety issues. Key performance indicators had been developed and are monitored to ensure targets are met. These include but are not limited to monitoring customer complaints, quarterly sanitation scores, internal rejection rates, and supplier audits. All are performing at or above target. 5.2 Food safety policy The food safety policy stated: ADM Southport Citric Acid Division is committed to producing safe and superior quality products that meets all applicable legal, statutory and regulatory requirements of food safety. The Food Safety policy was signed and dated by the Plant Manager, QA Superintendent posted in several locations and available to all personnel on the intranet via Policy Tech. Food safety had clearly been integrated into the company's policy. There was evidence of commitment to food safety and quality on all levels of the organization. 5.3 Food safety management system planning Regular reviews are conducted and minutes are kept. Daily, monthly and quarterly management meetings are conducted. 5.4 Responsibility and authority

	An organzation chart is developed with both a chain of command and for the food safety quality team. The food safety responsibilities are clearly designated for staff members as is back-up roles. This was reviewed for the Plant Manager, Technical Superintendant, Plant Superintendent, QA Superintendent, Purchasing Manager, Engineering Manager. All departments – Operations, QA, Maintenance, Engineering, IT, EHS/HR reported directly to the Plant Manager. 5.5 Food safety team leader The food safety team leader was identified as Scott Phillips, QA Superintendent. His responsibilities included: a. Manage the Food Safety Team (FST) and organize its work. b. Ensure relevant training and education of the FST members. c. Ensure the FSMS is established, implemented, maintained, and updated. d. Provide a communication channel from the FST to the Plant Manager and Corporate Management. The food safety team leader has had the appropriate training in HACCP, ISO and FSSC either conducted by Corporate QA or by UL-DQS training group. 5.6 Communication Both external and internal communication efforts has been addressed and are included in the quality manual. External – Communication with customers regarding specifications, shelf life studies, letter of guarantees, complaints, corrective actions, sales and satisfaction are channeled thru Corp Sales and Technical teams. However, the plant does have direct communciation with customers on complaints and issues. Communication with suppliers and contractors are channeled thru ADM Global Sourcing Unit for items that are globally bought. Majority of materials required by the facility are source by the plant. Contractor and facility specific supplier approval and management process is under the facility control. All other supplier management process is under Corporate Purchasing control. Risk assessment is conducted for each supplier are based on the risk, the suppliers are managed by audits, require certification, incoming material inspection or reliance on COA. A letter of gurantee is required from relevant suppliers, contractors. A copy of all letters were kept on file including the Pest Control Operator, Uniform services. Internal – Numerous types of meetings and comunication are held on regular basis. Examples of meetings held were Daily Operation meetings, Monthly and Quarterly management meetings. Monthly Safety meetings, Quarterly Management review meeting which is also the Food Safety/HACCP Team meeting as members of the management team are same members as the Food Safety team. Quarterly Employee meetings are held to share objectives, safety, food safety and business updates. 5.7 Emergency preparedness and response Procedures for emergency management were in place directed by Corporate. This included elements of both physical and personal safety. Emergency preparedness procedures does address the safety of the product in the event of an incident. Crisis management and procedures for withdrawal are in place. Effectiveness of the procedures for product recall is tested by regular mock recalls for all product types (4/year). The last mock recall conducted by the facility on 2018-07-30 was reviewed and resulted in 100% recovery within 4 hours.. A mock recall and tracebility exercise was conducted during this certification audit. The auditor requested a recall of Granular Citric Acid prackaged on 2019-04-19. The site was able to recover 100% in 2.5 hours with all requested documentation. The exercise included a mass balance on the packaging material (FIBC) in wjich 100% was accounted for. As a result, the procedures are found to be effective. 5.8 Management review Management reviews addressing the requirements of the standard are conducted quarterly. The most recent review was held on 2019-05-13 and included opportunities for improvement as well as prervious meeting follow-up. Detailed minutes of the meeting were recorded and maintained on file. The minutes and presentations indicated that the meeting are sufficiently detailed to cover all aspects of the standard.

	Examples of topics covered at this meeting are: customer complaints, training needs, process changes, verification activities (audits, CAPA), system updates,communications and KPI/objectives.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.	

6. Resource management	6.1 Provision of resources Adequate resources have been provided for the implemetation of the FSMS. This was evidenced by management sending all Food Safety team member to a third party HACCP or Corporate HACCP training session and FSSC 22000 training. Training is distributed between annual, 2 year and 3 year frequencies. This included annual refresher training for GMP, food safety, and HACCP. All scheduled food safety training was completed for 2018 and the first 2019 session was completed in March. 6.2 Human resources All employees are required to have GMP, HACCP, and FSSC training. This is conducted at new hire and on an annual frequency. Proficiency testing is conducted at the end of the training. 6.3 Infrastructure This site was built specifically for chemical manufacturing. Since this facility operates 24 hours a day it is essential that the infrastructure be sound. Equipment, premises and grounds are subject to regular self-inspections and improvement projects were reviewed. As a whole, the site is maintained. 6.4 Work environment A positive work environment was maintained as evidenced in interviews with employees.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.	

7. Planning and realization of safe products	7.1 General Overall, the facility has taken the necessary steps to develop the processes needed to ensure safe products. This included implementing PRPs, establishing the oPRP's and a HACCP plan. The fundamentals of CODEX Alimentarious are followed when developing the HACCP plan. 7.2 Prerequisite programms (PRPs) All necessary and relevant PRPs has been identified and developed. These are included in the HACCP plan and is implemented throughout the process. PRPs verification via audits are planned and frequency of audits are established. Monthly audits are conducted on Sanitation/GMP. Other PRPs –eg., incoming material receiving, pest control, chemical, security audits are rotated monthly to achieve 1/yr frequency. PRPs are documented and readily accessible by all employees via Policy Tech. 7.3 Preliminary steps to enable hazard analysis A multi-disciplinary team has been put together for the HACCP and Food Safety team. All members had received HACCP training. A detailed description of the product with respect to the raw materials and the characteristics of the end product has been developed. The flow diagram has been verified by the HACCP team on 2018-10-18. The intended use of the product is clearly defined and there are no consumer groups identified as vulnerable. 7.4 Hazard analysis A detailed hazard analysis has been developed as a part of the HACCP plan. The hazard analysis contained excellent detail pertaining to all chemical, physical and biological hazards that may occur in the process including all raw materials, utilities and chemicals used. Historical data backing up the control measures were used . 7.5 Establishing the operational prerequisite programms (PRPs) The facility has established four oPRPs in the process: 1. Scalping screens on the packaging lines 2. Filter on the Citrosol tanker load-out line 3. Sulfate monitoring on the white liquor treatment 4. Metal detection on the packaging lines (also designated as a preventive control). All preventive control records reviewed were signed off by the PCQI per FSMA requirements. 7.6 Establishing HACCP plan The HACCP plan is well detailed to reflect the hazards and process at the facility. The metal detectors and the scalping screens are identified oPRPs on the citric acid, sodium citrate and potassium citrate bags, supersack and drum lines. The products are considered low risk products. Current practices are effective, metal detector monitoring frequencies as stated in the HACCP plan do agree with current procedures as delineated by site's SOP. Metal Detector Procedure MFPMH.101 V8.0 fully addresses all potential situations in the event of a metal detector failure. This was supported by interviews with employees. 7.7 Updating of preliminary information and documents specifying the PRPs and the HACCP plan The HACCP plan was reviewed on an annual basis or as needed. The most recent review was conducted on 10/24/2018. 7.8 Verfication planning The verification planning is well documented. The oPRPs were being verified. Verification results are recorded and communicated to the food safety team.

7.9 Traceability system
All products are manufactured using a batch type coding system. Full traceability is provided by batch records. The system is tested internally by the mock recall program on an annual frequency.

The lot number of the product is used for the recall procedure. Using flow rates of the process, the raw materials used for the production of the recalled product can be identified. The lot number of the product is also used to trace the location of the recalled product. Traceability records are maintained for a minimum of five years. The Product Recall, Withdrawal SOP was viewed. This SOP is linked to the Corporate Recall policy.

7.10 Control of nonconformity
Control of nonconformity is well implemented and understood at this facility. The site is able to reprocess, downgrade from food to technical/feed grade and as needed reject and disposed of via the in-house waste treatment faciity.

A deviation report is developed when nonconforming product is identified and records are maintained on file. Employees interviewed have clear understanding of the process. Only 3 deviations were documented YTD and all were complete, unambiguous, and correct reactions taken.

The most recent mock recall was conducted 2018-03-30 and took <4 hours to complete, and was able to account for 100% of the product. In addition, separate forward and backward mock traceability exercises are conducted to challenge packaging materials, ingredients and blend tracing.

The auditor requested a vertical audit of Citric Acid Granular produced 2019-04-09. The facility was able to recover 100% of the product in 2.5 hours. All requested documentation was provided. This exercise proved challenging as this batch included a mass balance on the packaging material. All was accounted for.

Details of non-conformities if identified during the audit:

Details to Non- Conf.	

8. Validation, verification and improvement of the FSMS	8.1 General The food safety team had validated the control measures to verify and improve the food safety management system. Validation of the scalping screens, metal detectors and sulfate test were conducted 2017-03-17. The metal detectors (CCP) are validated each year by the OEM. Records reviewed for the 2019-04-19 service were complete and supportive of their capability. 8.2 Validation of control measure combination The oPRP's and HACCP plan was validated prior to implementation or during subsequent reviews 8.3 Control of monitoring and measuring A calibration program for process monitoring and measuring instrument and laboratory instruments were in place to ensure all operational equipment was calibrated on the proper frequency. Process monitoring & measuring instrument calibration program are managed by Maintenance via the MAXIMO database, where notification to appropriate personnel to schedule work when nearing due dates. Lab instruments are currently manually managed by the lab manager. Instrument calibration are conducted by 3rd party calibration services. Scalping screens are examined at start of every shift. Metal detectors are challenged with appropriate 2.0mm 316SS, 1.5mm FE, 1.8mm non-ferrous sized test samples at start of each shift, mid shift, and end of run. Filters are changed prior to each lot for drums and differential pressure monitored for bulk loads. 8.4 Food safety management system verification. The internal audit had been implemented. Audits are conducted by a site audit team that includes QA, and Engineering. Each has been trained in internal auditing. A schedule had been developed for auditing Sanitation/GMP of the various areas of the facility and other identified PRPs. This schedule was to ensure all PRPs would be covered over the course of the year. Note non-conformance below. 8.5 Improvement Since the implementation of the Food Safety System, the Management and Food Safety Team ensure the continual improvement of the food safety management system through the management review and monthly internal inspection.
	Details of non-conformities if identified during the audit:
	Details to Non-Conf.: 8.4.1 MNC - Not all internal audits to the standard were conducted as scheduled as none of the second quarter audits were completed. There is also a backlog of corrective actions for findings.

Food defense	*Due to the regulatory requirements of Marsec (Coast Guard), the site has a very robust food defense and site security plan. Computor modeling was used to analyze all areas of concern and establish controls. The model evaluated 44 agents against all access points. Controls include 24 hour security service, camera monitoring of all critical areas, escort of all visitors, and supervision of contractors. Most critical sites are secured to all employees controlled by badge access.* *The plan was most recently reassessed in August 2018. It is currently under review with modifications pending. It was reviewed by the auditor. This are was considered a strength.* *The campus as a whole is under a security program with a security team in place and fenced. Food defence is addressed. An annual food defence/security assessment are conducted by Corporate Security and also by the USCG. In addition, the HR/Safety department conducts audits and reported to both Corporate and USCG.* *Previous non-conformance regarding unsecured access door was effectively actioned.*
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Food fraud prevention	*The site has evaluated and documented the risk of adulteration for it's ingredients and finished product. Ingredients and process aids include:* • *White liquor* • *Sodium Hydroxide* • *Potassium Hydroxide* • *Barium Carbonate* • *Perlite* • *Carbon* *There has been no history of adulteration for these items. All items are either received based on COA and testing or in the case of white liquor directly from ADM. Additional control or detections is not necessary due to the processes. Adulterated ingredients would most likely be evident in the fermentation performance and/or the reactors. All finished product is analyzed to detect contaminants.* *Overall the risk of adulteration is very low.*
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Prerequisite Program findings (name of PRP standard version)		
Summary of PRP implementation	*Mark according Prerequisite program:* *- Farming (AI, AII): ISO / TS 22002-3:2011* *- Food Manufacturing (CI,CII, CIII,CIV): ISO / TS 22002-1:2009* *- Animal Feed Production (DI,DII*): ISO / TS 22002-6:2016* *- Pet food **only** for **Cats** and **Dogs** (DII): ISO / TS 22002-1:2009* *- Catering (E): ISO / TS 22002-2:2013* *- Retail (FI): BSI / PAS 221:2013* *- Transport and Storage (GI,GII): NEN/ NTA 8059:2016* *- Packaging (I): ISO / TS 22002-4:2013* *- (Bio)Chemicals (K): ISO / TS 22002-1:2009*	☒ **ISO TS 22002- 1:2009** ☐ **ISO TS 22002- 2:2013** ☐ **ISO TS 22002- 3:2011** ☐ **ISO TS 22002- 4:2013** ☐ **NEN NTA 8059:2016** ☐ **ISO TS 22002- 6:2016** ☐ **BSI PAS 221:2013**

	Summary: *Summary of findings related to according PRP(s) while highlighting all of the sections shortly and in particular the ones where NC were noted including reference to the checklists with more details.*
Construction and Layout of Buildings / Premises / Workspace	The facility resided within a compound that Is fenced and gated. Additionally, the site is also monitored by camera. The facility Is constructed specially for the manufacture of organic chemicals and is maintained and poses no hazard to the product. There are no potential sources of contamination from the environment. The exterior is well maintained, vegetation removed, road and parking areas up kept. There are no neighbouring industries and the site is surrounded by woods. This has been taken into consideration by the food safety team and the risk is determined as negligible. The layout of the facility is suitable for the product manufactured. The recovery process building is segregated from the packaging and warehousing building. Each packaging line is within enclosed rooms. Flows of finished product are via hard pipes into each packaging rooms. Drums, sacks and other packaging materials are brought into the packaging rooms from the materials warehouse as needed. The GMP level of the facility and equipment are maintained satisfactorily. The Analytical laboratory is housed in the Recovery building of the facility. There is no Microbiology laboratory on campus. Break rooms are provided in each area, one in the Recovery area, one in the Warehouse for Packaging and Warehouse personnel, one in the Administration building for management and maintenance and vending machines are available in the vicinity. Bulk raw materials are stored in dedicated tanks. The warehouse for raw materials, packaging materials are separate from the finished product warehouse. One issue noted below.
	Details of non-conformities if identified during the audit:
	Details to Non-Conf. — 5.7 - A partial uncovered pallet of FIBC was observed in the FIBC packing room.

Air, Water, Energy	All of the utilities supplied has been addressed in the quality manual. The water is supplied from County of Brunswick. Water quality reports are available. Steam is supplied from Capital Power. Letter of compliance is available. The facility has capability of generated their own steam when Capital Power cannot supply the demand. Boiler chemicals are all FDA approved with appropriate documentation on file. There is a program to test amines levels when facility generated steam condensate is produced. 3rd party contracted lab Environ Chemical, conducts monthly quality tests on city water and steam condensate. Compressed air,instrument air is used, it is filtered and food grade oil is used. The filters are changed on a prescribed frequency as designated by the manufacturer's recommendations. The lighting is suitable for the intended purposes.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Waste Management	The waste program at this facility is detailed, regulated and monitored by the Safety manager to ensure compliance to both Corporate ADM and EPA regulations. Waste water and product waste are treated by ADM's WWTP. Labelled product containers when defaced, label numbers aere required to be recorded and accounted for prior to disposal. Non-conforming products that are rejected are disposed of via the WWTP.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Equipment suitability, cleaning and Maintanace	This is a closed system recovery that had food grade equipment. All equipment is closely monitored to any issues that may arise. The overall design is suitable for the intended purposes. See NC 8.2 below. Cleaning is assigned by the supervisor. A cleaning program using the clean as you go method is in use. Operators are assigned cleaning on a daily/weekly schedule requiring sign off and verification by area lead. Dedicated and color coded cleaning tools are in use. An online preventative & predictive maintenance system (MAXIMO) is in use that automatically generated action requests. Work orders are entered into MAXIMO for identified maintenance items from audits and daily monitoring for work that are handled by Maintenance. Any maintenance work that is food safety related required release back to production acceptance. The release back to production include a verification and sign off by Operations supervisor and clean-up or sanitizing as appropriate. In general, sanitation is quite good for the processes involved. Temporary repairs were observed in one area. See NC below.
	Details of non-conformities if identified during the audit:
Details to Non- Conf.	8.2 - A gasket covering the anacit heater port was deteriorated allowing for possible contamination. 8.6 - Several pieces of duct tape were used in the C513 crystallizer area to suppress vacuum leaks. Tape was not dated and initialed per site's policy. No workorders could be provided indicating they were scheduled for repair.

Purchased Materials	This facility managed the suppliers of purchased materials and services by risk ranking. Based on risk level management of suppliers range from requiring audit of the supplier facility, 3rd party certification, letter of guarantees, COA and/or receiving inspection acceptance. A procedure on how to handle the purchasing of materials has been developed and is in accordance to the standard. Some suppliers are managed by Corporate Global Sourcing Unit. Supplies and services unique to the facility are managed by the facility Purchasing Department. Incoming bulk raw materials and chemicals trucks and tankers are inspected for proper paperwork, seals, wash tickets and required lab testing (as applicable) prior to unloading. Incoming ingredients and packaging materials are inspected for proper paperwork, trailer conditions, seals on full loads, QA inspections, COA and or lab testing.
	Details of non-conformities if identified during the audit:
Details to Non- Conf.	

Prevention of Cross-contamination	Micro contamination is unlikely due to the nature of the product produced. A micro sampling program exists for water and steam condensate used in the process. Micro testing is conducted by 3rd party lab, Environ Chemical. There are no allergens in the product or in the process. An allergen program is in place. Allergen statements from suppliers are obtained. The allergen program included employee training and all employees has received the training. Glass and brittle plastic program is generally well managed. An audit program is included in the monthly GMP audit. Glass and brittle plastic policy #169, the glass audits conducted on January to date and Glass Breakage report folder were reviewed. Employees are trained on this policy as part of the Food Safety program training and Policy Tech SOP review. Only new wood pallets are used in the warehouses. Potential contamination is minimized by use of non-wood tools and inspection of incoming materials pallets. A chemical control program is in place and is observed to be well managed. Equipment requiring food grade lubricants are identified and the PM checklist of these equipment stated the food grade requirement. Product liners were not observed covering equipment. This is a correction to previous finding.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Cleaning, sanitasion and desinfection	A cleaning program has been developed and is managed. Cleaning is assigned by the supervisor. Dedicated and colour coded cleaning tools are in use. List of approved cleaning chemicals is available, cleaning chemicals noted in the facility are labelled, stored safely, identified as food or non-food grade. All evidence noted during the audit indicated that there are no major issues with cleaning in the warehouses, pack-out, and Maintenance shop sanitation. Issues with recovery are noted below.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.
	11.3 - Several instances of parts and tools were observed on floors, grates, and cross-beams. Areas under the sifters had large accumulation of product.

Pest control	The facility contracted Steritech as the Pest Control Operator (PCO). Services are conducted on a monthly basis for the exterior and weekly on the interior. Service reports indicated no abnormal activity. An annual review was conducted by Steritech with the facility contact personnel (QA manager). Trend analyses for all pest types were provided but could be improved. The pest control map were verified as current 2018-02-06. All licenses are noted on file for the operators. All pesticides approved for use were acceptable for use at food processors. The pesticides agreed upon by the facility and the PCO must meet NC EPA and ADM compliance. Overall pest activity was very low and pesticide usage was limited to bait stations.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Personal hygiene	Appropriate number of restrooms, locker rooms and break room are provided and appropriately located away from the Packaging rooms. Signage to wash hands and hygiene training included details on how and when hands should be washed. Gloves are required throughout the facility. Disposable gloves are available and worn by Packaging operators and were observed to be used. Hairnets and beard nets are required in the drum and supersack packing rooms and when conducting the scalping screen checks and are available at each entry points. Uniforms are provided for all employees. Maintenance personnel uniforms were laundered by a laundry service which was with Unifirst, an ADM globally sourced vendor. Illness and medical health status reporting awareness are included in the GMP guidelines/policy. In addition, personal behaviour i.e., eating, drinking in designated areas, jewellery control was included. This was a smoke free facility. Training on GMP and hygiene was conducted annually for all employees including contractors.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Rework	The non-conforming procedure detailed acceptable handling of issue products i.e., reprocess back into product stream, downgrading or waste. Disposition of non-conforming product are under QA control and is discussed at management meetings. Non-conforming packed products are labelled accordingly and quarantine status placed within the electronic inventory system where held products are not visible to Shipping to be able to select for shipment. Traceability is able to be maintained during any rework process. This was evidenced during the recall exercise. Log sheets are used to capture all products reworked into the product steam. Mock recall and traceability exercises are conducted to challenge this process.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Recall / Withdrawal	The recall program is tested on an annual frequency. A list of employees on the recall team has been developed. An SOP was in place defining the procedure. During the audit, the recall program was tested and was completed within 2.5 hours. The recall procedure included a one-step up one step down trace. Employees involved in the recall program are aware of their responsibilities. Overall, this is a well-managed program based on the well-organized records maintained on electronic database files.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Warehousing	Bulk raw materials are stored in dedicated tanks. The warehouse for raw materials, packaging materials are separate from the finished product warehouse. FIFO is in placed and managed in an electronic database. Incoming bulk raw materials and chemicals trucks and tankers are inspected for proper paperwork, seals, wash tickets and required lab testing prior to unloading. Incoming ingredients are inspected for proper paperwork, trailer conditions, seals on full loads, QA inspections, COA and or lab testing.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Consumer Information	Product labels are strictly controlled and accounted for. Strict control of pre-printed labels included restricted access to locked storage cabinet and records of destruction maintained. Product wastes and rejects are processed by the facility WWTP, defaced of labelled containers prior to recycling or waste disposal.
	Details of non-conformities if identified during the audit:
	Details to Non- Conf.

Additional Requirements findings		
	Summary of findings according to FSSC 22000 Version 4.1 additional Requirements, while highlighting applicable sections shortly and in particular the ones where NC were noted including reference to the checklists with more details.	
Management of services	*Summary:*	*Services are managed at corporate purchasing and are handled similarly to ingredients. The company is fairly well vertically integrated so few services are contracted. Service agreements with Steritech (pest control), Unifirst (laundry), and the ADM Packaged Carrier Contract Agreement were reviewed and found to meet the criteria of the standard.*
	Details of non-conformities if identified during the audit:	
	Details to Non- Conf.	

Product Labelling	*Summary:*	Product labels are strictly controlled and accounted for. Strict control of pre-printed labels included restricted access to locked storage cabinet and records of destruction maintained. As this product is for further processing, labelling requirements are not detailed. Labels include product name, product code, weight, and a statement "for further processing". All labels include the Kosher and Halal insignia.
	Details of non-conformities if identified during the audit:	
	Details to Non- Conf.	

Logo use	*Summary:*	*The FSSC logo is not used*
	Details of non-conformities if identified during the audit:	
	Details to Non- Conf.	

Management of allergens **For categories C, I, and K only**	*Summary:*	*There are no allergens used in the process. The site does train annually on allergen awareness. All non-production chemicals were vetted for allergen inclusion and all new chemicals are evaluated.*
	Details of non-conformities if identified during the audit:	
	Details to Non- Conf.	

Environmental monitoring **For categories C, I, and K only**	*Summary:*	An environmental monitoring program is in place and detailed in SOP.164. Swabs are taken at multiple product contact points withing the packaging room twice per year and evaluated for salmonella and listeria by a certified lab (Silliker). Certification document was reviewed. Since the products are low pH and water activity, frequency is adequate. Reviewed the results from 2018-12-19. All results were negative for pathogens.
	Details of non-conformities if identified during the audit:	
	Details to Non-Conf.	

Formulation of products **For category DII only**	*Summary:*	*N/A*
	Details of non-conformities if identified during the audit:	

	Details to Non- Conf.	

Management of Natural resources **For category A only**	*Summary:*	N/A
	Details of non-conformities if identified during the audit:	
	Details to Non- Conf.	

				Confirmation	
		Please mark only the corresponding section		**Yes**	**No**
Conformation that audit objectives have been fulfilled	*Conform that the audit objectives according to FSSC 22000 Requirement and have been fulfilled*	**Initial (Stage 2)**	Changes to the certified client and its management system	☐	☐
			Verify continuous management system implementation	☐	☐
			Review effectiveness of measures arising from the previous audit (if available)	☐	☐
			Confirm fulfillment of certification requirements	☐	☐
			Enquiries on aspects of certification (Complaints)	☐	☐
			Reviewing any client's statements with respect to its operations (e.g. promotional material, website)	☐	☐
		Surveillance audit	Changes to the certified client and its management system	☒	☐
			Verify continuous management system implementation	☒	☐
			Review effectiveness of measures arising from the previous audit (if available)	☒	☐
			Confirm fulfilment of certification requirements	☒	☐
			Enquiries on aspects of certification (Complaints)	☒	☐
			Reviewing any client's statements with respect to its operations (e.g promotional material, website)	☒	☐
		Re-certification or transfer	Account/evaluate performance of the management system over the period of certification	☐	☐
			Review of previous surveillance audit reports	☐	☐
			Review effectiveness of measures arising from the previous audit (if available)	☐	☐
			Evaluate effectiveness of the management system in its entirety in the light of internal and external changes	☐	☐
			Evaluate demonstrated commitment to maintain the effectiveness and improvement of the management system	☐	☐
			Evaluate achievement of the organization's policy and objectives	☐	☐
Unresolved issues	*Unresolved resulting from the audit finding(s)*				

Annexes (in local language)	
Annex I:	Audit plan and audit program
Annex II:	Attendance Sheet
Annex III:	ISO 22000:2005 checklist
Annex IV:	PRP standard checklist(s) applicable to scope
Annex V:	Additional FSSC requirements checklist