



# 2022 QFS ANNUAL REPORT



## QUALITY, FOOD AND FEED SAFETY

As a leader in the global food production chain, Bunge works to continuously improve our integrated operations to create the highest possible level of quality and safety for food and animal feed. Quality, Food and Feed Safety (QFS) is a foundational pillar of how Bunge operates across the globe, and all employees have a responsibility to ensure everyone along our value chains follows safe food and feed practices.

That's why in 2022, Bunge QFS launched a new global campaign called **Quality, Food and Feed Safety – It's Everyone's Responsibility** to

further elevate Bunge's QFS culture and help us all recognize our own role in protecting the quality and safety of Bunge products.

Throughout 2022, our QFS teams exemplified Bunge's dedication to supporting the needs of our customers and delivering safe and high-quality products so we can achieve our overall mission: Protecting the health and well-being of consumers by delivering safe and high-quality products around the world.

Find out how we delivered value to our operations and businesses based on our 5 QFS pillars.

## 1 - High Performance QFS Team & Culture



### Quality & Food Safety

is the Best of Bunge Everywhere

# In 2022

all regions completed their QFS BPS Self-Assessments. Facilities are now working to close Level 1 gaps and advance to Level 2 compliance.

All Bunge South America ports, silos and facilities held a series of QFS training "campaigns" throughout 2022, with a total of

# 1,500 participants.

Topics included Food/Feed Defense, Document Management, and World Food Safety Day, among others.



Our QFS team in South America launched Bunge's first-ever **Quality Technical School** which aims to grow QFS management skills at all sites across the continent.

# 203

regulatory audits & product samplings, 100% passed

QFS staff in Martfú, Hungary, improved the efficiency of their oils and lecithin labs through a **5S initiative**, a five-step system used to create and maintain a clean, streamlined and safe workspace. With cross-functional support from their Plant Manager and maintenance department, corporate leaders, and Continuous Improvement, Martfú achieved the 5S standard by combining three smaller labs into a single space designed to organize workflow and reduce non-value added activity. These improvements not only reduce maintenance costs and increase lab safety, they also help Martfú demonstrate their commitment to high quality standards during audits and customer visits.

5S is a five-step system used to create and maintain a clean, streamlined and safe workspace



## 2 - Deliver Value to the Business



Harrowby, Canada was approved to sell canola meal into China, resulting in faster rail car turnaround at Harrowby and approximately

# \$1 million

crush rate savings in Q4 2022.

In collaboration with BLC's global analytical team, QFS teams at Xiamen, Pasir Gudang, Wormerveer, Channahon and Rexdale have worked to harmonize their labs' analytical operations, including the implementation of systems and methods that are faster and less expensive. These improvements ensure all sites generate consistent data, reassuring customers that BLC is a reliable and high-quality supplier of infant formula and shea oils. Analytical harmonization also reduces the cost of analyses across all BLC sites, which allows us to provide customers with a consistently high-quality product at a more competitive price.



Bunge's QFS teams prepared the soy protein unit in Bellevue, Ohio for expansion in the global food and feed market, including establishing QFS programs needed to achieve valuable "ready-to-eat" status. With a total annual capacity of

# up to 46,000 MT

Bellevue is now selling powdered and texturized soy protein concentrate to customers across North America, South America, the Middle East, Europe and Africa.



## Bunge's lecithin production

saw significant changes in 2022, including a historic transition at our facility in Decatur, Indiana. After decades of solely producing as a toller for other companies, Bunge now owns 100% of Decatur's lecithin production, doubling Bunge's capacity and adding new specialty lecithin products to our offerings. QFS in Decatur and U.S. corporate contributed significant efforts to the transition, including creation of all new SKUs, customer-facing and technical documentation, and product labels.



*The change has resulted in Bunge selling lecithin for new and more sensitive applications, including nutrition beverages, dairy powders and dietary supplements. It is expected to bring an additional 1900 MT in sales volume in 2023 thanks to new opportunities with existing customers such as Mondelez, who has approved Bunge's lecithin for use in Oreo cookies and Trident chewing gum, as well as Barry Callebaut, the world's leading chocolate producer.*

In close cooperation with the Bunge Protein Ingredients team, North America QFS achieved U.S. GRAS status for lentil protein and a "not novel" determination for mung protein in Canada, further expanding Bunge's markets for these in-demand proteins.



Bunge China worked with protein toller, Wonderful, to pass a critical onsite audit in order to help Bunge become a qualified supplier of non-gmo soy protein to Conagra.



**Take Part, Leave Your Mark (TPLYM)**, a QFS program that encourages plant employees to suggest improvements for their facilities, received **more than 2,800 submissions** in 2022.



## More than 150

QFS and refinery employees in Brazil and Argentina participated in a 9-month vegetable oil sensory training initiative in order to help standardize sensory testing and improve quality performance across Bunge South American oil refining sites.

## 3 - Customer Focus

Thanks to close collaboration between our commercial, technical and QFS teams, BLC won the **first-ever contract with Mondelez China**. The multi-year effort required overcoming significant specification challenges to achieve global alignment and meet Mondelez requirements, resulting in approval to supply their Chinese operations in 2023, with **2,300 MT in projected annual volume**.



Our oils facility in Xiamen is the **first BLC site to be approved by McDonald's China**.

Xiamen will supply more than **300 McDonald's restaurants** throughout the Fujian province, with **projected demand of 2,500 MT per year**.



**Nestlé** Over the past 2 years, Bunge has worked with Nestlé to implement a program to **monitor and mitigate MOSH/MOAH**, undesirable compounds sometimes present in the oilseed value chain. Through a joint effort by Bunge QFS, Nestlé commercial teams, and all Bunge facilities that supply Nestlé from Europe, Brazil, United States and Malaysia, we have become one of their highest-performing suppliers in MOSH/MOAH mitigation. In part due to our tremendous efforts, **our relationship with Nestlé has grown stronger and more profitable**.



When the iconic snack food manufacturer **Kellogg's** needed a cornmeal ingredient to produce a new snack, they knew they could rely on their 20-year relationship with **Bunge Milling** to make it happen. The new product, **Cheez-It Puff'd**, was developed in collaboration with U.S. Milling R&D and requires cornmeal produced to precise quality specifications. Thanks to the strong history of product quality at our U.S. corn mills, our mill in Danville, Illinois now supplies Kellogg's with **650 MT of the ingredient every month** to support production of the new snack.

## 4 - Risk Mitigation

QFS closely collaborated with Bunge's regional Regulatory and Government Affairs teams to network with trade organizations, understand and interpret legislation and other key issues that impact Bunge. This work helps Bunge to **pivot into new trade flows while minimizing international compliance risks.**

Industry organizations that are critical to Bunge's global trade flows include:

- GAFTA - The Grain and Feed Trade Association
- FOSFA - The Federation of Oils, Seeds and Fats Associations
- COCERAL - The top European trade association for cereals, rice, feedstuffs, oilseeds, olive oil, oils and fats and agrosupply



After rolling out Salmonella prevention training in 2021, Bunge QFS in Canada, Europe and Asia continued their work to **mitigate Salmonella in oilseed meal** by implementing prevention checklists to identify gaps and standardize feed safety practices. Bunge Canada's efforts led to a **significant reduction in Salmonella positives in 2022**, and our sites in Europe and Asia have completed the checklist and gap closures will continue through 2023. In addition to **helping Bunge meet customer requirements**, these feed safety efforts **protect our reputation as a supplier of safe and high-quality feed materials.**



Since the war in Ukraine began in February 2022, Bunge facilities have seen unpredictable quality of grain, oilseeds and feed materials purchased from the region, increasing the risk of contaminants that exceed legal and customer requirements. **Our facilities, warehouses and ports in Poland, Hungary and Turkey have worked with Bunge sites in Ukraine, logistics, procurement and traders to implement a robust quality control program**, including testing samples for contaminants while shipments are still in transit and ensuring third party transporters and storage sites meet the appropriate certification requirements. With these increased quality measures in place, **Bunge has been able to maintain food and feed safety while ensuring a reliable supply for our global customers.**



Bunge facilities around the world continue to improve their performance in the **analytical measurement and mitigation of the process contaminants GE and 3-MCPD** in order to meet growing customer and regulatory requirements. Multiple oils facilities in South America are now able to test for the contaminants in-house, which is less costly and time-intensive than testing with third party labs. **Internal analytical capabilities have enabled these sites to establish the operational controls, training and monitoring programs necessary to meet the requirements of high-value customers such as Nestlé.**



*QFS at our margarine facility in Kruszwica, Poland demonstrated their GE/3MCPD analytical excellence, taking the top prize at Bunge's first-ever Europe and Asia Productivity Convention. Their work to reduce sample preparation time from 20 hours to only one hour has led to cost savings and faster product release and shipping.*

## 5 - Standardized QFS Programs

When a customer purchases the same product from multiple Bunge facilities, it's critical for each facility's lab to produce analytical results that are consistent with the other sites. This ensures the product will meet the required specifications, regardless of which Bunge facility makes it. In 2022, Bunge South America worked to achieve this uniformity by evaluating and aligning analytical methods for lecithin and soybean oil across 13 facilities. Not only does this increase customer confidence in Bunge's products, it also ensures all labs are performing at the same level and that product quality is consistent across all sites.



Bunge QFS is **working towards a digitized future** by aligning the use of QFS software across regions. **TraceGains**, a platform used to document and maintain supplier compliance, is now used by 52 sites across North America, Europe and Asia. The **Salesforce Issue Management System (SIMS)** platform is now used at 41 sites across North America, Europe and Asia to investigate and resolve customer quality issues.



Bunge's first-ever **Global QFS Recall/Withdrawal Standard and incident classification system** was launched in 2022, supporting Bunge's increasingly global trade flows by creating unified response procedures for incidents that impact product quality and safety.