

**GLOBAL PARTNERS**

- International Institute of Risk and Safety Management (Worldwide)
- International Safety Council
- National Safety Council of Australia LTD
- Minerva Canada
- Workplace Safety & Prevention Services
- China Occupational Safety and Health Association
- Institute of Safety and Health Practitioners, Hong Kong
- Occupational Safety and Health Council, Hong Kong SAR
- Chinese Association of Workplace Safety
- European Network Education and Training in Occupational Safety and Health, ENETOSH
- BG RCI
- National Safety Council of India
- Korea Occupational Safety & Health Agency
- Center of Environmental Safety and Health Technology
- Taiwanese Institute of Occupational Health and Safety

# 2020 Robert W. Campbell Award Application

Submitted by:  
**The Mosaic Company**

## Attention

The information contained in this material is for educational use only; it may not be modified, copied, published, disclosed, distributed, displayed or exhibited, in either electronic or printed formats without written authorization from the National Safety Council. By downloading this document you further agree to the [Terms and Conditions](#) of the Campbell Award/Campbell Institute website.



**DEDICATE ▪ LEAD ▪ CONTRIBUTE**

1121 Spring Lake Drive ▪ Itasca, IL 60143-3201 USA ▪ [CampbellAward@nsc.org](mailto:CampbellAward@nsc.org) ▪ [CampbellAward.org](http://CampbellAward.org)

# The Mosaic Company Narrative

Nancy Case,  
Vice President Environmental,  
Health & Safety

The Mosaic Company  
101 East Kennedy Blvd, Suite 2500  
Tampa, FL 33602

813-545-4563  
[nancy.case@mosaicco.com](mailto:nancy.case@mosaicco.com)



**Table Of Contents**

<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>SECTION I: BUSINESS PROFILE .....</b>	<b>1</b>
<b>SECTION II: LEADERSHIP .....</b>	<b>4</b>
<b>SECTION III: INTEGRATED EHS MANAGEMENT SYSTEM .....</b>	<b>8</b>
<b>SECTION IV: PERFORMANCE MEASUREMENTS &amp; INFORMATION MANAGEMENT .....</b>	<b>25</b>
<b>SECTION V: LINKAGE BETWEEN EHS &amp; BUSINESS PERFORMANCE .....</b>	<b>28</b>
<b>SECTION VI: LESSONS LEARNED .....</b>	<b>32</b>

**EXECUTIVE SUMMARY**

The Mosaic Company (NYSE:MOS) is the world’s leading producer and marketer of concentrated phosphate and potash crop nutrients. We employ more than 12,000 people in six countries and participate in every aspect of crop nutrition development.



Through our broad product offering, we are a single-source supplier of phosphate- and potash-based crop nutrients and animal feed ingredients. We mine and process phosphate and potash minerals into crop nutrients, and then ship them via rail, barge and oceangoing vessel to our customers in the major agricultural centers of the world. We serve customers in approximately 40 countries.

Mosaic is an important driver of economic activity in each of our operating communities. We strive to be a thoughtful and engaged neighbor, using our financial resources, expertise and innovative spirit to demonstrate our shared commitment to good corporate citizenship.

Our annual net sales exceeded \$8.9 billion in 2019.

**Our Mission**

To help the world grow the food it needs.

**About The Mosaic**  
(NYSE: MOS)

**Our Mission**  
We help the world grow the food it needs.

**Our Work**  
We are the world's leading integrated producer and marketer of concentrated phosphate and potash.

## Our Principles

We are responsible, innovative, collaborative and driven. We are accountable for the safety and well-being of our colleagues and our company. We act with integrity and conviction. We are careful stewards of natural resources. We foster innovation and encourage ideas that make us better. We collaborate across departments and geographies to accelerate our performance. We strive to achieve excellence, knowing that we can always improve.

## Our Priorities

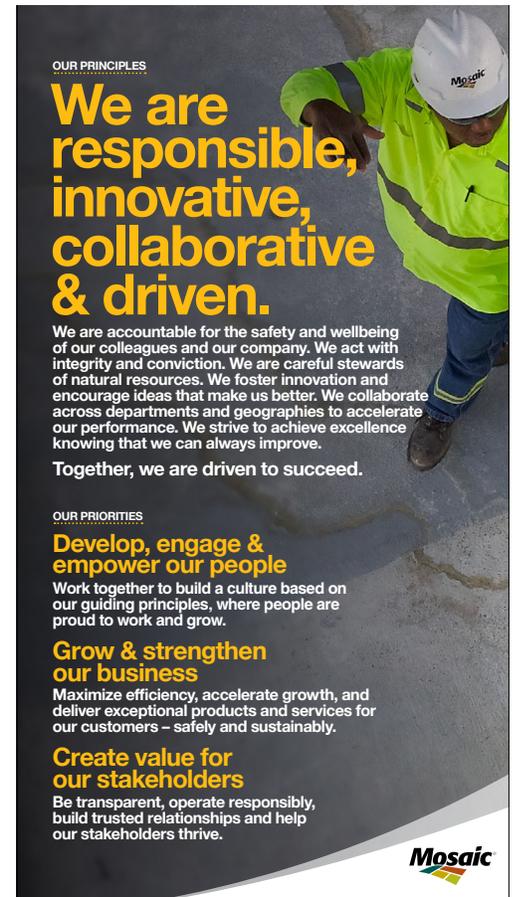
- **North America Transformation**  
Uncover and pursue new opportunities to improve the profitability and competitiveness of our Potash and Phosphates businesses
- **South America Growth Engine**  
Leverage Mosaic's in-country capabilities to drive additional growth and profitability
- **Grow and Strengthen Our Product Portfolio**  
Pursue diverse opportunities that make us stronger and that yield mutual benefits for Mosaic and our customers
- **Drive Functional Collaboration and Efficiency**  
Rethink and re-engineer outdated and inefficient processes, and continue to look for new ways to improve
- **Optimize Operating Assets and Capital Management**  
Continually assess, prioritize and allocate capital across the business and make decisions that strengthen our balance sheet
- **Act Responsibly**  
Be a good corporate citizen and contribute to the vitality of the people and the communities around us

Mosaic's senior leadership team believes in our mission, lives by our principles and is guided by our priorities.

Each employee at Mosaic adheres to the same company wide principles and priorities and contributes to our company strategy: to win in our core businesses of phosphate, potash and international distribution, and to grow in new ways. In addition, Mosaic's management system is embedded in the workplace culture and enables our organization to thrive.

## Environment, Health and Safety

Mosaic places the highest value on the health and safety of its people and reducing our environmental impact. Safety is serious business; it is about people, not numbers. In a moment, a life can be forever changed. Our first responsibility is to have everyone return home safely at the end of each day. Our safety performance has improved steadily and significantly since our company was formed in 2004, and we remain committed to maintaining a safe, healthy and respectful work environment for our workforce. Mosaic's management system is generally aligned with ISO/OHSAS standards and provides a structured approach to effectively manage and control risk for the safety and well-being of our colleagues, the environment and our stakeholders. In addition, our management system establishes foundational elements to drive continual improvement aligned around the cycle of Plan-Do-Check-Act and is an investment in systems and processes that help support a safe work environment.



## Sustainability

The work of mining and processing potash and phosphate minerals is an energy- and water-intensive endeavor. We work carefully to maximize efficiencies and minimize our use of energy and natural resources and have made significant progress in reducing Mosaic’s environmental footprint.

We take an “every drop counts” approach to water management, and we aim to recycle or reuse water at every opportunity. We set measurable goals and hold ourselves accountable for the reduction of waste, water use and greenhouse gas (GHG) emissions while increasing electrical cogeneration and our use of alternative energy sources. We continually seek to prevent, minimize and mitigate environmental impacts where we operate.

## Land Reclamation

In our Florida phosphate operations, we work to implement effective, acre-for-acre methods of returning mined lands to productive uses for both wildlife and people.

Our teams of professional biologists, ecologists, hydrologists and other specialists take great pride in the exceptional quality of our reclamation work, and we focus on creating successful, sustainable wildlife habitats and land suitable for agriculture and other diverse uses.

## What Sets Us Apart

As an employer of more than 12,000 people globally, Mosaic is an important driver of economic activity in each of our operating communities. We strive to be a thoughtful and engaged neighbor, using our financial resources, expertise and innovative spirit to demonstrate our shared commitment to good corporate citizenship.

Mosaic aims to invest 1% of profits on a three-year rolling average in our communities through lasting partnerships with organizations focused on food, water and local initiatives. We contribute to the strength and vibrancy of the communities where we live and work.

At Mosaic, we deliver shared value to our stakeholders by acting sustainably and responsibly. We’ve been recognized as an industry leader in sustainability and named a top place to work. In the communities where we operate, our investments in food, water and local initiatives have helped Mosaic and our partners earn honors for programs that support neighbors in need and protect the environment.



## Corporate Citizenship and Workplace Awards

A few of our awards are shown and a full list is available [here](#).

In December 2019, Mosaic President and CEO Joc O’Rourke was presented with International Fertilizer Association’s (IFA’s) 2019 Industry Stewardship Champion Gold Medal. The medal—awarded to 34 companies—represents leadership in safety, health and environment as related to IFA’s recent performance benchmarks on safety, emissions and energy efficiency.

These honors demonstrate Mosaic’s commitment to corporate citizenship—and they inspire us to continue leading with purpose as we grow our company.

THIS PAGE IS INTENTIONALLY BLANK PAGE.

---

## SECTION I: BUSINESS PROFILE

**Business Description:** The Mosaic Company was formed through the merger of IMC Global Inc. and the fertilizer business of Cargill Inc. in October 2004. In addition, on January 8, 2018, we completed the acquisition of Vale Fertilizantes S.A. (now known as Mosaic Fertilizantes P&K S.A.) in Brazil.

Mosaic produces and markets concentrated phosphate and potash crop nutrients. We mine phosphate rock in Florida and Brazil and are the majority owner of a joint venture operating a phosphate rock mine in the Bayovar region of Peru. We process phosphate rock into finished phosphate products at facilities in Florida, Louisiana and Brazil. We mine potash in Saskatchewan, New Mexico and Brazil and refine it into finished potash products in these locations. We have other production, blending and distribution operations in Brazil, China, India and Paraguay, and participate in a joint venture to develop and operate a large phosphate rock mine and processing facilities in the Kingdom of Saudi Arabia.



Mosaic conducts business through wholly and majority-owned subsidiaries, as well as business in which we own less than a majority or a noncontrolling interest. We are organized into three business segments (business units): Phosphates, Potash and Mosaic Fertilizantes.

**Phosphate:** We sell phosphate-based crop nutrients and animal feed ingredients throughout North America and internationally, accounting for approximately 73% of estimated North American annual production of concentrated phosphate nutrients. Our North American phosphate operation consists of four mines and six production facilities. The Phosphates business unit produced 8.4 million tonnes of finished phosphate fertilizers in 2018 and employs over 3,300 workers of which 3,000 are in Florida. In addition, Mosaic employs around 3,000 contractors in our Phosphates business unit.

**Potash:** We sell potash throughout North America and internationally, principally as fertilizer, but also for use in industrial applications and, to a lesser degree, as animal feed ingredients. We account for approximately 40% of estimated North American annual potash production. Production during 2018 totaled 9.2 million tonnes, and our potash operation employs over 2,500 people and around 1,500 contractors. In 2018, we operated three potash mines in Canada, including two shaft mines with a total of three production shafts and one solution mine, as well as one potash shaft mine in the United States. We also own related refineries at each of the mines. Construction of our new Saskatchewan potash operation, Esterhazy K3, is ahead of our original target, with work expected to be completed by mid-2021 (originally planned for 2024). Upon completion of K3, Mosaic's Esterhazy operation is expected to be the largest, most competitive underground potash mine in the world.

**Mosaic Fertilizantes:** We produce and sell phosphate and potash-based crop nutrients, and animal feed ingredients, in Brazil. In addition to five phosphate rock mines, four chemical plants and a potash mine in Brazil, this segment consists of sales offices, crop nutrient blending and bagging facilities, port terminals and warehouses in Brazil and Paraguay. The Mosaic Fertilizantes segment also serves as a distribution outlet for our Phosphates and Potash business units. We account for approximately 77% of estimated annual production of concentrated phosphate crop nutrients in Brazil and 100% of the annual potash production in Brazil. Our Fertilizantes business unit produced 9.2 million tonnes of finished product in 2018. Fertilizantes employs over 6,000 workers and around 12,000 contractors.

In 2020, our North America integration combined two strong businesses (Phosphates business unit and Potash business unit) into one unified team, North America Business, by leveraging our best practices, technology and talent into the future.

Mining, producing and delivering millions of tonnes of fertilizer each year to customers around the globe is complex. It requires teams of dedicated professionals working to make responsible decisions each day and at every step in the production process and supply chain. Unlike many of our competitors, we have our own distribution system to sell phosphate- and potash-based crop nutrients and animal feed ingredients, whether produced by us or by third parties, around the globe. In North America, we have one of the largest and most



strategically located distribution systems for crop nutrients, including warehouse facilities in key agricultural regions. We also have an extensive network of distribution facilities internationally, including in the key growth regions of South America and Asia, with port terminals, warehouses and blending plants in Brazil, Paraguay, China and India. Our distribution operations serve the top four nutrient-consuming countries in the world: China, India, the United States and Brazil. Our global presence allows us to efficiently serve customers in approximately 40 countries.

The award submission covers our three business units: Fertilizantes, Phosphates and Potash.

Each business unit has an environmental, health and safety (EHS) structure that ultimately reports to the senior vice president for each business unit. Operations leaders report to the senior vice president for each business unit as well. EHS employees are embedded at each site to support our frontline operations with day-to-day EHS activities. In addition, our site EHS employees support each other within the business unit and collaborate with all EHS employees around the globe. Mosaic also has a corporate EHS team that reports to the senior vice president of supply chain. The corporate EHS team is structured into work streams. All senior vice presidents report directly to the chief executive officer (CEO).

The Mosaic Company is classified with the below-listed North American Industry Classification System (NAICS). The industry represented includes the manufacturing of nitrogenous or phosphatic fertilizer materials, and/or manufacturing of fertilizers from sewage or animal waste, and/or manufacturing of nitrogenous or phosphatic materials and mixing with other ingredients into fertilizers, and/or mixing ingredients made elsewhere into fertilizers.

NAICS: 32531	Fertilizer Manufacturing
--------------	--------------------------

**EHS, Business & Sustainability Challenges:** Since forming in 2004, Mosaic has grown to be a global leader in phosphate and potash crop nutrition. We are proud to be a competitive, low-cost producer with strong customer relationships and the financial strength to invest in growth. We’ve led the industry in developing high-quality premium products that help growers succeed. We are focused on executing against our strategic priorities for our future success.

Mosaic’s sustainability targets and performance are closely aligned with our operational and financial goals. We respond annually to [CDP](#) and use the Global Reporting Initiative (GRI) framework with the Mining and Metals Sector Supplement to report on our environmental and sustainability performance. Our reporting index is aligned to many of the Sustainability Accounting Standards Board (SASB) metrics for the metals and mining, and chemicals industries.

Sustainability leadership begins with our board of directors. The Environmental Health, Safety and Sustainable Development (EHSS) Committee of the Mosaic board of directors provides oversight of our environmental, health, safety and sustainable development strategic vision and performance. Our board of directors continually challenges the company to develop innovative ways of doing our work. These innovations increase our efficiency while demonstrating our respect for the Earth’s resources. And they enable us to continue driving toward our

goal of an incident- and injury-free workplace. These efforts support our ability to deliver value to our employees, customers, shareholders and stakeholders around the world.

Mosaic's approach to sustainability reflects our commitments to global food security, the environment, our people, the communities where we operate and our company. We encourage each person at Mosaic to act responsibly and contribute to our company's mission—to help the world grow the food it needs. It's our collective decisions and actions that must be ethical, strategic and sustainable.

Mosaic's sustainability goals are complementary to our EHS goals, and both goals align with Mosaic's strategic priorities. Mosaic's management system provides the structure to harmonize sustainability and EHS goals to achieve the common goal of social responsibility and safety. Mosaic's new 2030 vision demonstrates how we engage all levels of the organization to set aspirational targets for ongoing EHS advancement. Mosaic created the 2030 EHS vision in 2019 to provide long-term strategic direction for Mosaic's approach to the management system, technology, worker wellness and social responsibility. Details for the 2030 EHS vision are highlighted throughout the application.

Mosaic's strategic 2020 sustainability targets are designed to advance innovation across the company, drive resource conservation and result in cost efficiencies and savings. They are the company's second set of sustainability-related goals since 2009. The sustainability targets include metrics for safety, freshwater, energy and emissions reductions.

At Mosaic, we understand that our business and our communities are linked. Mosaic is dedicated to advancing the many ways that our business contributes to the sustainable development of the communities where we operate: investing in the areas in which we operate, hiring local employees and vendors, offering competitive wages and benefits to our workforce, and developing our people.

Respect for the natural environment is essential to the sustainability of our business. Throughout our operations in North and South America, we strive to optimize our production processes and reduce our environmental impact.

Our management of water, energy, GHG emissions and waste is guided by our Environmental, Health & Safety Policy and commitment to the United Nations Global Compact. Our sustainability targets, progress toward which we report annually, help focus our efforts and track our progress on these key issues. Mosaic's accomplishments are highlighted in Section III – Integrated EHS Management System, and additional information on water, energy, emission, biodiversity, waste and others can be referenced in our sustainability report. Our 2019 sustainability report will be published in May 2020, and all our reports are available at [mosaicco.com](http://mosaicco.com).

Phosphate mining represents a temporary disturbance of ecological resources. Once mining is complete in Florida, we conduct acre-for-acre reclamation and return mined lands to productive uses for wildlife and people. Mosaic's reclamation department focuses solely on reclaiming mined land.



We work closely with regulators to comply with all applicable regulations and agency-approved management plans and to fund and/or conduct research that promotes the goal of wildlife and habitat conservation.

Each Mosaic site has an appropriate hazardous waste management system to properly and safely manage waste. We continue to improve our comprehensive waste management strategy, accounting for federal, state and local requirements and aligning it to the Mosaic management system.

Our journey is ongoing, and we’re continually evaluating what it means to be a good employer, supplier, neighbor and value creator. A good bar to measure this by globally is through contributions to the United Nations Sustainable Development Goals, like clean water, sanitation, responsible consumption and production. Additional information is detailed in Section III – Integrated EHS Management System.

**SECTION II: LEADERSHIP**

**Organizational Leadership:** Mosaic’s guiding principles are to be responsible, innovative, collaborative and driven. We are accountable for the safety and well-being of our colleagues and our company. We act with integrity and conviction. We are careful stewards of natural resources. We foster innovation and encourage ideas that make us better. We collaborate across departments and geographies to accelerate our performance. We strive to achieve excellence knowing that we can always improve. Together, we are driven to succeed.

We use our priorities to execute our mission and stay true to our guiding principles.

**OUR PRIORITIES**

**Develop, engage & empower our people**  
Work together to build a culture based on our guiding principles, where people are proud to work and grow.

**Grow & strengthen our business**  
Maximize efficiency, accelerate growth, and deliver exceptional products and services for our customers – safely and sustainably.

**Create value for our stakeholders**  
Be transparent, operate responsibly, build trusted relationships and help our stakeholders thrive.

**Mosaic’s Strategic Priorities**

- North America Transformation**  
Uncover and pursue new opportunities to improve the profitability and competitiveness of our Potash and Phosphates businesses
- South America Growth Engine**  
Leverage Mosaic’s in-country capabilities to drive additional growth and profitability
- Grow and Strengthen Our Product Portfolio**  
Pursue diverse opportunities that make us stronger and that yield mutual benefits for Mosaic and our customers
- Drive Functional Collaboration and Efficiency**  
Rethink and re-engineer outdated and inefficient processes, and continue to look for new ways to improve
- Optimize Operating Assets and Capital Management**  
Continually assess, prioritize and allocate capital across the business and make decisions that strengthen our balance sheet
- Act Responsibly**  
Be a good corporate citizen and contribute to the vitality of the people and the communities around us



The senior leadership team has clearly and concisely communicated our mission, principles and priorities. Mosaic’s president and CEO consistently shares EHS information in quarterly Town Hall meetings, where he shares business updates and earnings results. He shares his vision for the company and emphasizes the importance of being committed to health and safety, our environment and our community. EHS has been included in the annual business report, and the latest CEO message in the 2018 annual business report calls out EHS performance and results. All [business reports](#) are available on our [website](#).

“Most important, across the company, we produced record-setting safety performance and a 70% decrease in recordable injury frequency rate since 2011. Our first priority is and always will be to ensure that each of our workers returns home uninjured, and we are proud of our safety progress.”

—Mosaic President and CEO, Joc O’Rourke

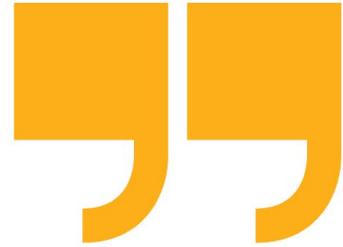
In addition, our president and CEO has been committed to the management system ever since he initially recommended its implementation for Mosaic. Mr. O’Rourke is the greatest supporter of our management system.

Our business unit senior leaders show the same compassion as our president and CEO. Each business unit senior leader communicates EHS information to all employees via Town Halls, email communication, on screens in work locations or in person at a site. Every employee understands the importance of integrating EHS into our operations and behavior at work and at home.

Our senior leadership team participates in our quarterly management system reviews. Each element of the management system has to be reviewed at least once a year. Every quarter, information from all business units on a variety of elements is shared. An action item register is kept for any follow-up items for updates during the next meeting. The review meetings are valuable for reviewing and sharing management system information with the senior leadership team.

**Absolutely nothing is more important than the safety of our 13,000 employees. We work diligently to ensure that each person returns safely to their home and family after each shift.**

**NANCY CASE**  
VICE PRESIDENT, ENVIRONMENTAL, HEALTH AND SAFETY



The management team at each site utilizes many ways to communicate EHS commitment and to be personally accountable for their own EHS commitment. Our management teams host monthly safety meetings with all employees at the site to share EHS performance and to review selected incidents from across the company. The goal is to learn from incidents and take actions to help prevent a similar incident at the site.

Mosaic's operational leaders are involved in assessing the effectiveness of the management system at their site. The management system is embedded in operations, and operational leaders put their philosophy of a safe work environment and environmental focus into practice by supporting and evaluating the effectiveness of the management system.

A few years ago, operations leaders started to be part of the management system assessment team. Being part of the assessment team is very helpful for our leaders since they are able to review/assess processes at other sites and share best practices during the review and/or apply improvements to processes at their sites. This is a great collaboration opportunity for our sites. Furthermore, our site leaders live by the management system. Individual elements from our management system are assigned to a member of the site management team. The member of the management team is responsible for training, implementation, improvements and compliance for the assigned management system element throughout the site. This process fosters embedding individual EHS philosophy and linking it with the management system.

Mosaic's risk reduction projects are another example of integrating EHS behaviors into day-to-day activities. Risk reductions are an important element of the management system, and the risk reduction metrics show the success of the program. The program will be explained in Section III – Integrated EHS Management System.

Mosaic's leadership team is concentrating on EHS goals with our NextGEN focus. We are expanding the scope of our transformation initiative, with a focus on technology and the benefits that come with it. The focus continues to be on fundamental ideas from the ground up, with concentration on high-tech and digital-type benefits to realize our true ultimate success. We are incorporating the next generation of technology to build a safer, stronger and more sustainable business for the next generation that will bring opportunities not only for our existing talent but also for the future talent that we want to attract. Our NextGEN plan provides visibility to identify and prioritize additional opportunities across our business and aligns with Mosaic's strategic priorities. This concept is still looking at our safety and environmental performance and how to take it to the next level to

reduce exposure to hazards and make sure people go home to their families safe. Available technology greatly reduces or eliminates hazards, and our leadership team is prioritizing our projects.

**Commitment to EHS Goals:** Mosaic's approach to sustainability reflects our commitments to global food security, the environment, our people, the communities where we operate. We encourage each employee at Mosaic to act responsibly and contribute to our company's success. It's our collective decisions and actions that must be ethical, strategic and sustainable. Sustainability leadership begins with our board of directors (board). The board provides oversight.

As feasible, our board of directors travels throughout the year and holds strategic tours of site locations and areas that hold special interest to board members. Our board of directors makes every effort to interact with at least one of our sites annually. Site visits are scheduled on a rotating basis or by special interest. Our board of directors visited Brazil and Canada in 2019.

At Mosaic, we are committed to EHS goals through all levels of the organization and are directly linked to the management system. Every employee has responsibilities as required by the management system. For example, the senior leadership team is responsible for issuing Mosaic's EHS policy, for the implementing and governing of the Mosaic EHS policy and management system, and for reviewing and updating the management system to ensure continued relevance to Mosaic.

Site-level management carries the responsibilities for meeting management system objectives, and that management system requirements and responsibilities are incorporated into each appropriate job description, periodic EHS audits and assessments are performed, including risk assessments and management system assessments, and appropriate controls are incorporated into new processes and equipment to reduce risks.

Site supervisors collect appropriate data, including performance and monitoring data, and recommend improvements; maintain well-kept workplaces and equipment that are in conformance with the site EHS procedures, safe work instructions and practices; conduct or arrange for risk assessments; and participate in incident investigations.

EHS goals are initially developed by Mosaic's senior leadership team, and then cascaded down to each business unit, site and individual employee. EHS goals for the senior leadership team are strategic and represent the global goal. An example of cascading an EHS goal throughout the organization is shown below.

- Senior Leadership Team – ZERO harm to our people – even one incident is one too many.
- Site Leadership – Focus on creation of an injury- and incident-free workplace through a continued focus on risk reduction.
- Site Management – Mitigate and close out three EHS risk reduction projects a month.
- Site Supervision – Identify two EHS risk reduction projects per month.
- Employees – Identify one EHS risk reduction project every quarter.

Mosaic maintains its ongoing commitments to EHS through the Mosaic EHS Policy that is signed by President and CEO Joc O'Rourke, Vice President of EHS Nancy Case, and general or facility managers. This [policy](#) is posted at each Mosaic facility, our internal Intranet site, and our [external site](#) and reaffirms the commitment to EHS and the management system by senior leaders.

Furthermore, every employee includes at least one EHS-related goal in their individual yearly performance goals. Performance goals are reviewed periodically and evaluated at the end of the year. A more in-depth description of our performance goal process is described in Section III – Integrated EHS Management System.

**Organizational Culture/Climate:** At Mosaic, we strive for a culture where employees are empowered to speak



up about safety or environmental issues. The employees and contractors who work at our facilities are highly valued. Keeping them safe and engaged in EHS is constantly a top priority to keep continuously improving the way we manage our business, our people and our facilities. Our EHS standards apply to everyone who works on our properties or on our behalf, and Mosaic takes pride in sending all employees, contractors, and visitors home safely at the end of every day.

Our leaders, managers and supervisors around the globe impact our organization's culture. It's important that the people we place in leadership, management and supervisory positions are properly trained for the role to rally employees around a vision of ZERO harm to people and ZERO environmental incidents. The Mosaic Leadership Model defines the skills and competencies needed to be an effective leader. Detailed information about this training is highlighted in Section III – Integrated EHS Management System of the application.

Leaders are prepared to communicate vision and strategy effectively, which influences the team to execute the vision. Being able to motivate and challenge the team is just as important, and our leaders are equipped with the necessary skills to know how far to push each employee to reach his/her full potential. As part of the yearly performance management process that aligns individual performance goals to the company's strategic priorities, each employee sets an individual development goal. The employee's manager will prepare a development plan with the employee and coach and support the employee throughout the year. Our leaders are equipped with the necessary skills to help employees grow and develop. Specific information is highlighted in Section III – Integrated EHS Management System of the application.

Our frontline supervisors are in the midst of operations and in constant contact with our frontline operators. All frontline supervisors receive leadership training and specific EHS training pertaining to operations. Site EHS staff is available to support all employees, but especially our frontline supervisors, with EHS-related questions.

Training is an important part of fostering our culture. Contractors work side by side with our employees daily, and our expectation is that all contractors perform to our EHS standards and comply with all our policies and standards. All contractors who enter any Mosaic site are required to attend a contractor training session.



We take steps to ensure that employees stay active and engaged in EHS at all levels of the organization. To do this, employees in all business units have participated in various safety surveys, including National Safety Council Safety Barometer surveys and Saskatchewan Safety surveys. We have used the information from these surveys to work on areas of concern to our workers. What we have focused on has improved and supported engagement and morale.

At Mosaic employees around the globe play a critical part in our success. Our corporate EHS team partners with local EHS teams at each site so that all EHS regulatory requirements specific to the region and site are implemented and being followed. Mosaic's standard policies and procedures are implemented at all sites unless specific regulatory requirements prevent their implementation.

All our business units follow the management system and EHS programs. The management system aligns with our principles and outlines a structured approach for managing EHS risks and for driving overall improvement. In addition, the management system aligns to ISO and OHSAS standards. Details for our management system are explained in Section III – Integrated EHS Management System.

Mosaic's corporate Emergency Preparedness and Response Policy documents the processes for identifying potential emergency situations, and for taking the action needed to prevent, respond to, and mitigate any health and safety consequences as necessary. Each site developed and implemented a site-level Emergency Action Plan,

supporting the corporate policy, to address potential emergency situations and to provide appropriate hazard and emergency preparedness plans for employees, contractor employees, external emergency responders, customers, visitors and the community, as applicable.

The fundamental component associated with effective incident response is the establishment of the Emergency Operations Center or Coordinator (EOC) and is to provide support to the emergency response team. The on-site management team will fill this role while addressing elevated emergencies. The role of the EOC is to assume command of the incident using the national incident command system structure. In addition, crisis response plans are in place to escalate events from the site to the business unit and to corporate, depending on severity.

After a critical event, the leadership team initiates the incident investigation process outlined in our management system. The purpose of the incident investigation is to improve operational controls and management system performance to prevent recurrence. The majority of the time, this is done by preparing a root cause analysis map.

Emergency response is one of our management system elements. We place high emphasis on being prepared. We train and practice emergency responses and continue to improve the process starting at the site and extending all the way to the senior leadership team.

### SECTION III: INTEGRATED EHS MANAGEMENT SYSTEM

**Policies, Goals & Objectives:** Mosaic is committed to conducting business activities in a manner that protects the environment and the health and safety of our employees, contractors, customers and communities. In addition, Mosaic values safety above all and is committed to protecting the life of all employees, contractors and visitors. Our principles of being responsible, innovative, collaborative and driven define how we conduct our business and how we interact with each other, our communities and our planet. We strive to help the world grow the food it needs—in balance with preserving the ecosystems around us. Mosaic is committed to complying with—and where possible, exceeding—applicable legal requirements and other commitments to which we subscribe.

Our implementation of the EHS policy has the following goals:

**Environmental Protection** –All phases of the business will be managed in a manner that minimizes the impact of our operations on the environment. Pollution minimization and prevention practices include substitution of environmentally friendly materials whenever feasible and the employment of sound reuse and recycling practices and pollution control technology.

**Health and Safety** – In support of our relentless pursuit of an injury-free and healthy workplace, we identify health and safety risks and take appropriate actions to reduce or eliminate these risks.

To achieve these goals, we have established a detailed management system that structures everything we do from an EHS standpoint, and consists of critical elements that set clear expectations around how we operate our sites. We set targets and develop objectives to drive and measure our progress. We conduct periodic leadership reviews and self-assessments that promote continual improvement to the management system.

Mosaic’s 2020 EHS vision (2010 – 2020) was the first long-term outlook for EHS that Mosaic undertook, and once



the main objectives were reached, focus began on the 2030 EHS vision. The next decade will bring even more new challenges. That's why alignment in a common vision across the organization is crucial in tackling each one head on. Our 2030 EHS vision builds off of the foundation that the 2020 vision created and aims to focus growth in four key areas:

We'll continue to collaborate across industries and strengthen our global positioning through our work within these key areas.

The emphasis placed on the management system in the 2030 EHS vision demonstrates how success of the management system is paramount to succeeding in all other areas as we continue to mature and advance in our markets. The 10 core elements of the management system for our North American operations and the 12 elements for our Brazil operations define the leadership and work required to effectively manage and control risk for the safety and well-being of our colleagues, the environment and our stakeholders. Our Fertilizantes business unit had an established management system in place at the time of the acquisition, and after a thorough review, we decided to continue using the established management system for this business unit. Some of these core elements will be discussed later in more detail, but are outlined below:

North America Management System Elements	Brazil Elements
1. Governance and Leadership	1. Policy, Objectives and Targets
2. Risk Assessment and Planning	2. Hazards and Risks / Aspects and Impacts/ Management of Change
3. Operational Controls	3. Legal and Other Requirements
. Emergency Planning and Response	. Leadership, Roles and Responsibilities
5. Incident Investigation	5. Competence, Training and Behavioral Development
6. Management of Change	6. Communication, Participation and Consultation
7. Training and Competency	7. Documents, Records and Information
8. Assurance	8. Operational Control
9. Performance Evaluation	9. Inspection and Audits Emergency Preparedness and Response
10. Documentation and Record Control	10. Preventive Actions, Incident and Nonconformity Management
	11. Inspection and Audits
	12. Monitoring, Performance Indicators and Continuous Improvement

Over the last four years, our business units implemented lifesaving rules to protect the lives of employees, contractors and visitors. These rules are vital to our commitment to EHS. We are convinced we can do our jobs safely. These rules are not new. They are based on Mosaic's existing safety standards that address areas of greatest risk and activities that have the highest historical potential for life-threatening injuries or death. In addition, the rules are based on past potentially serious incidents (PSIs), recordable injuries (RIs) and industry best practice. Rules apply to all workers and contractors. Contractors receive the same information and have access to the same resources as Mosaic employees.

In addition, Mosaic has a five-year strategy that aligns to our vision and is updated each year. Focus areas to support the strategy are created yearly and cascaded to business unit goals and site-level goals. Individual or team goals are created to support site-level goals. Furthermore, the EHS focus areas are integrated with operational goals and strategies.

**Communications:** Mosaic's culture of communication is based on the principle of linking individuals to one another. Communication is an important aspect in our work environment. Our culture of communication

evolved into being transparent and collaborating with each other. Our employees are our greatest asset, and proper communication is imperative for employee engagement, idea sharing and business performance. Mosaic communicates information from a senior leadership level, business unit level, site level and department level to employees and vice versa. In addition, Mosaic communicates information across business units and with stakeholders.

Our leadership teams and business units use a variety of communication tools for EHS-related information. With multiple generations in the workplace, Mosaic uses a number of approaches and tools to share information with employees. Examples are face-to-face communications, electronic information, paper document information sharing and social media accounts.

Mosaic operates an internal Intranet site where Town Hall presentations and other company information is shared with all employees. Furthermore, electronic screens (eScreens) are used throughout each site, in offices, production areas and break rooms, that share company-driven and EHS information. On occasions, leadership team members communicate specific messages throughout the organization.

Mosaic's public affairs team, corporate and business unit levels, distribute company information, including EHS updates, via an eNews newsletter through the email system. These teams work closely with the business units for specific EHS projects. The teams create and roll out communication plans specific for each EHS project. In addition, monthly EHS shares and lessons learned are shared with our employees.

Site leaders communicate information for recordable incidents or potentially serious incidents with the management teams across all sites. The information is shared via a standard document and is shared within 24 hours of the incident. After the incident is investigated, a standard final notice document is shared with the management team across all sites providing the root cause analysis, any supporting documentation and corrective actions. Many sites review the final notice document and implement similar corrective actions if applicable to their site. Being transparent helps all sites to improve.

Mosaic's sites use daily shift start information to start the day. The shift start information usually includes incident information, EHS performance, lessons learned, and an emphasis on specific EHS topics shared with all employees at the site. Some of the topics are a review of life-critical standards, and others focus on awareness for a specific subject, such as annual refresher sessions. Shift start meetings resulted from a best practice share during assessments that are highlighted in the "Audits and Assessments" section.

Our employees communicate EHS-related information through an assortment of methods. Our site leaders perform weekly EHS walk-throughs throughout the site. Management members for specific departments are included, and at times frontline employees are invited as well. This is an opportunity to share EHS and other information one on one with site leadership and management.

Site leadership and site management have an open-door policy, and employees are always welcome to stop by the office and share information. In addition, Mosaic has an established ethics hotline and EHS hotline for our Phosphates business unit where employees can report concerns confidentially, if needed.

One site in our Phosphates business unit is piloting an emergency alert mobile communication tool. All site employees there, including hourly employees, received company smart phones. The company can send employees a text message with important EHS information if needed. The tool is interactive, and employees can check in/reply to capture acknowledgement and awareness.

At the site level, employees share information during a handoff from shift to shift. The daily personal interaction fosters information sharing so the next shift can be successful. Other successful tools to foster communication among employees are the utilization of Microsoft Teams, shift start meetings, safety walk-throughs, site safety meetings and other interactions described previously. Employees also share information via surveys that are

distributed periodically.

Best practice sharing has evolved over time. In the past, sites and business units rarely shared best practices across the organization. To break down silos and share best practices, Mosaic has opened communication across sites and business units. EHS notable practices or lessons learned are summarized, in a one-page document. The document is shared with EHS leaders in each business unit and then cascaded through the business units to the sites. The document is also saved in our company repository for instant access.

Mosaic willingly shares best EHS practices with others. Mosaic representatives speak at various conferences and share EHS processes and best practices. Our VP of EHS, Nancy Case, participated in the EHS & Sustainability – Beyond the Buzzwords Executive Forum at the 2019 NSC Congress & Expo in San Diego. Growing and improving safety is not only about Mosaic, it is about improving industries, communities, home life and more. Sharing processes and best practices benefits us all.



Mosaic's public affairs department is involved in communication with external stakeholders. External stakeholders include community members, vendors, contractors, local, state and federal government employees, shareholders and more. Communication with community members transpires via the local paper, direct mail, social media, the Mosaic website, television or community meetings. Social media, such as LinkedIn, Facebook, Twitter and Instagram, is utilized heavily. Links to our social media accounts can be found [here](#).

Transparency and open communication are vital as we continue working together to build trusted relationships and support the communities where we live and work. Establishing Community Advisory Panels (CAPs) is one way we encourage open dialogue and share information on a regular basis with neighbors who live around our Florida and Louisiana facilities. CAPs are composed of community members, and the goal is to provide a forum for open, constructive dialogue—bringing together people who represent diversity of thought, age, gender and ethnicities. We also work to develop relationships with neighbors focused on growing and improving the communities where we live, work and play.

Our social media sites provide insight into the positive perception community members have of Mosaic. Comments to posts throughout North and South America's social media accounts show positive feedback, especially for community investments Mosaic supports. Helping the world grow the food it needs is our global mission, and many of Mosaic's sponsorships and volunteer efforts tie into our mission. We are proud to help fight hunger in our communities through programs for collecting food for local food pantries and providing lunches and weekend meals for schoolchildren just to name a couple of our efforts. We're also proud to collaborate with local sports teams to donate money to local food banks based on points scored. We believe this helps educate the community on the need to provide support in our communities and that it does so in a fun, exciting way.

Other events that we are involved in include supporting United Way, hosting school supply drives, collecting needed items for our aging community members, supporting medical research foundations, partnering with children's hospital foundations and Habitat for Humanity events. Additional information is listed later in the application under Environment & Social Responsibility and information on global community investment is available on our [website](#).



**Audits & Assessments:** Audits and assessments are key components of a successful management system and regulatory compliance within Mosaic. Audits are regulatory and risk driven, and are a combination of voluntary internal audits (completed by Mosaic and a third party) and required regulatory audits (completed by third-party auditors and Mosaic). Assessments check the health of Mosaic’s management system and are completed at each facility by both Mosaic employees and third-party assessors.

Compliance audits were historically completed at each North American facility on a three-year cycle to evaluate how well we were adhering to regulatory requirements. Now, audits are completed by teams of Mosaic and third-party auditors. Corrective actions are tracked based on findings and reviewed by management and senior leadership.

In addition, an assortment of government agencies visit our sites around the globe for a variety of reasons.

Prior to 2015, external assessments according to the ISO standard were performed. After 2015, Mosaic chose to govern the management system internally. That’s when management system assessments began at all North American facilities. Assessments use a detailed numerical scoring system for each management system element, which is combined into an overall management system effectiveness score. Assessments were designed to be a pulse check on the health of the management system, and they provided opportunities for improvement for each facility to drive continuous improvement of the management system. Using a combination of Mosaic employees from other facilities and third-party assessors led to great opportunities for cross-functional, cross-business unit sharing of best practices and pockets of excellence. An example of best practice sharing is our shift start process which was highlighted in the “Communications” section. Assessments also provided development opportunities for employees at all levels and locations within the organization to experience other processes and connect with different people within the company.

From 2015-2018, sites within North America had shown significant improvements of the management system through the assessments. This led to the next evolution of the assessments to focus resources where they were truly needed. In 2019, Mosaic announced that facilities that had reached a specific score in the management system assessment would no longer require a formal assessment. The identified sites had subject matter experts to maintain a standard of quality. Instead, the sites would complete self-assessments, one for each element of the management system, to validate compliance and identify potential gaps and improvement areas. Self-assessments and risk reduction controls (explained in the next section) would be verified by the corporate EHS team. High-risk facilities and processes will be audited more frequently to continue the focus on risk reduction. Facilities that manage ammonia fall within the high-risk category and extra precautions are taken due to the higher risk factor. Another focus is mobile equipment at some sites. A few sites in Brazil with haulage trucks and a few sites in Florida for tailings management had increased incidents historically and will continue to be assessed more frequently to confirm proper mobile equipment usage.

Site employees and contractors perform self-assessments in the field to evaluate compliance with policies and procedures.

Pre-job hazard assessments are completed for each maintenance job. In-process checks are performed for pre-job hazard assessments so that potential hazards are identified and mitigation steps taken prior to starting work.

If gaps are identified during an assessment or a compliance audit, action item(s) will be generated to close the gap. All action items are tracked in our RiskConsole (assessments and government inspections) application or Omega (compliance audit) application. In both systems, each action item is assigned to an employee accountable for the completion of the action item. A process is in place to verify accountability for completing tasks.

EHS corrective actions are tracked by each site as a monitored metric. Deviations identified during field self-assessments are generally corrected on the spot. If an issue could be a systemic concern, the information is forwarded to the site EHS department for review. If action items are identified during a field self-assessment, the

action items are added to the department tracking list.

Mosaic's insurance carrier performs an annual inspection of our sites to confirm that our policies and standards conform to the highest standards for safety and property loss prevention.

**Hazard Recognition & Risk Management:** Identifying hazards and implementing controls to reduce risk is one of the core elements of the management system and is ingrained in everyday life at facilities. Hazard recognition and risk management has evolved over time at Mosaic.

In 2011, Mosaic implemented a Safety Hazards/Environmental Aspects Assessment procedure that defined the processes to provide that health and safety hazards and environmental aspects were identified and their significance determined via the use of the Mosaic Risk Assessment Matrix (RAM) tool. The RAM is an objective tool for rating of risks to allow for explicit differentiation between high and low risks and to assist with determining required actions. The tool categorizes risks based on potential consequences and actual likelihood of occurrence. The RAM includes consequence impact categories for safety, environmental, business and image. In addition, the RAM tool captures likelihood options based on increasing historical occurrence. The RAM tool is also utilized to prioritize capital projects and allocate funds to capital projects.

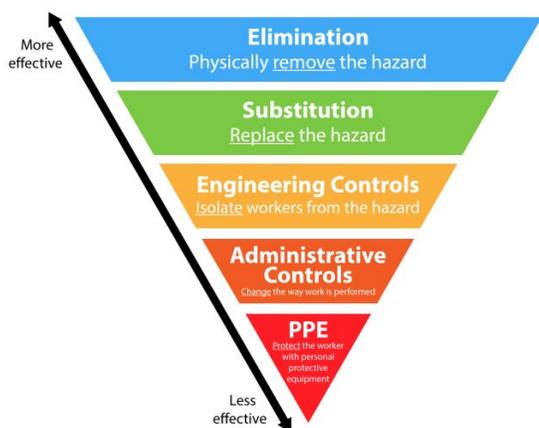
Safety and environmental incidents and near misses are assessed according to the RAM. A potentially serious incident (PSI) is an event that had the reasonable potential to result in a life-altering injury or fatality or to cause significant environmental damage; The majority of these incidents are near misses, first aid injuries, property damage events, OSHA recordable injuries or environmental releases, but the reasonable worst-scenario did not occur.

A serious incident (SI) is an event that results in life-altering injury, fatality or significant environmental impact.

PSIs require notification of senior leadership within 24 hours, a formal root cause analysis with tracked corrective actions, follow-up evaluations of effectiveness check and sharing key learnings from the event globally across the company. Additional information is listed in Section V – Linkage Between EHS & Business Performance of the application.

Each facility identifies and implements operational controls to manage risks. Mosaic defines operational controls as proactive and reactive measures put in place to prevent hazards from occurring. Controls can be engineering controls, such as equipment and devices, or administrative controls, such as procedures and training.

Mosaic utilizes the same hierarchy of controls for current operational controls.



In 2013, incident investigations revealed that failure to see hazards was a contributing factor in 41% of incidents. Mosaic acted and was committed to improving hazard recognition and awareness in the field among all employees. In 2014, a companywide hazard recognition training was rolled out, with Mosaic examples. The training focused on lowering risk tolerance directly at the jobsite. During the training session, employees had to identify the hazards from a list that included specifics based on chemical, ergonomic, physical or biological hazards. Mitigations for each hazard were discussed, and employees learned how to define jobsite conditions based on hazards identified

To complement the hazard recognition training and lower risk tolerance, Mosaic developed and implemented a pre-job hazard assessment program. This program is still in use at all our sites. The purpose of a pre-job hazard assessment is to aid in preventing health and safety incidents from ever occurring. It's accomplished by

identifying potential hazards associated with job/task steps and planning for and implementing controls prior to work starting. Pre-job hazard assessment must be completed at the jobsite with participation from all workers conducting the job. All task steps that are required to complete the job are reviewed and hazards are assessed. Acceptable controls for each identified hazard are required.

As part of their pre-job hazard assessment process, our Potash business unit introduced a formal, structured pause requirement called 20-20-20 (every 20 minutes, take 20 seconds to evaluate the area 20 feet around the job) to assess hazards and address them when conditions change and new hazards become evident.

Facility leadership, management, supervisors and EHS professionals also complete quality checks on pre-job hazard assessments to calibrate and provide feedback on the hazard assessments to drive continuous improvement and encourage dialogue between work groups and management on risk mitigation.

In 2015-2016, the Hazard and Aspect Matrix progressed to Mosaic's EHS Risk Register tool, which includes sophisticated risk scoring. The Risk Register is a tool used to identify and score various EHS risks, as well as document existing operational controls. Each facility has a Risk Register, whose purpose is to identify environmental and safety hazards, quantify baseline, inherent and residual risks, and collaborate with the workforce to implement operational controls to reduce or eliminate these hazards.

Risk scoring is calculated separately for safety and environmental risks based on severity of consequences and exposure/likelihood.

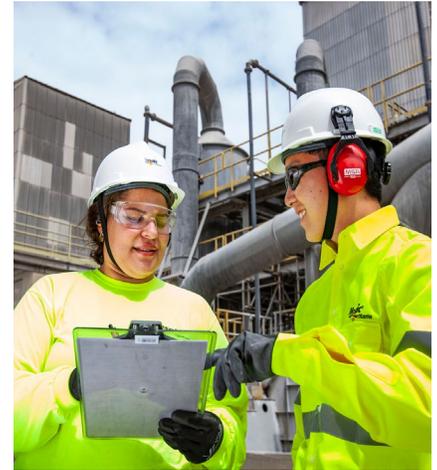
After the implementation of a new control, the risk is rescored based on the established calculation. The residual risk score will be lower than the original residual risk score since the hazard has been eliminated or reduced. In addition, every risk reduction and control has to be reviewed every five years. If a control is found not effective, a new project is started to reduce the risk with an effective control.

In 2019, as part of our incentive plan, targets for risk reductions were set by sites and our sites completed over 800 risk reduction projects globally. This is a testament to the value and empowerment the program brings to our employees. There is also the expectation that risk assessment is an ongoing part of the job. Operational controls of substitution or elimination account for over 20% of the completed projects in 2019. This is a great accomplishment for our teams.

Additionally, Mosaic utilizes a legal and other register (LOR) to manage legal and other requirements to reduce risk.

Some of our Phosphates sites are subject to the process safety management (PSM) and risk management program standards for identified processes set forth in OSHA 29 CFR 1910.119 and EPA 40 CFR 68 as part of our management system. The purpose of this standard is to have uniform, compliant and sustainable process safety and risk management plans and processes integrated into plant operations. This will help prevent accidental releases of substances that can result in harm to employees, the public or the environment and to mitigate the severity of releases that do occur. Some of our Fertilizantes sites are in the process of implementing the process as well.

Many of our sites implemented a behavior-based safety program. The program provides human error reduction training to cut down on common risks and errors that could lead to injuries and fatalities. The program is a blend of the



traditional observation-based approach with insights and proactive conversations on a peer to peer level and includes the frontline, management and the safety department. It provides meaningful observations and effective feedback that reduces injuries and boosts personal safety awareness. Potential improvement opportunities are identified during the observations as well. The goal is to teach people how to keep themselves safe and how to keep others from being hurt. One of our Potash site forms a subcommittee for the duration of a planned turnaround or large-scale outage, with the focus on quick turnover rates for projects identified in observations. The site performed 237 observations during the last outage and the observations resulted in 9 improvements — of which 6 were corrected within the outage, 2 are being prepared for the 2021 outage and the last was deemed not reasonable for the task.

**Prevention through Design:** While Mosaic is still a fairly young company, formed in 2004, we operate many sites and locations that have been around for many decades. Our oldest phosphate site has been in operation since 1924 (Riverview, Florida), our oldest potash site has been operating since 1939 (Carlsbad, New Mexico) and our oldest Fertilizantes site was established in 1994 (Cajati). Older infrastructure and technology can present challenges to continuing to operate safely while maintaining our social license to operate in the communities in which we are located.



Mosaic implemented processes so that EHS hazards are addressed in the planning and design stages. Mosaic follows an extensive Capital Project Management (CPM) process. A capital project is a long-term project to build, improve, maintain or develop a capital asset. This process is utilized for Greenfield and Brownfield projects. The CPM process is applied for replacement-in-kind assets, replacement with upgrades or new designs, and considers EHS and procurement risks and production and operations coordination.

Each phase of the CPM process has associated milestones and approvals to progress to the next phase. Safety-related reviews define the requirements, responsibilities and documents needed for maintaining a safe working environment during all project phases. Environmental-related reviews identify, address, assess and resolve all environmental issues and risks during the phases of a project so that environmental compliance is assured. In addition, we have a process to identify potential environmental and other regulatory permit issues, develop the information and documents for permit application, apply for permits and respond to agencies appropriately until the permits are received. Prior to commissioning any assets, a collaborative team, consisting of operations, EHS, engineering and finance, reviews all components of the project including an EHS focus. The review is performed through the pre-start-up hazard assessment. Reviews confirm that drawings and training materials are updated. Furthermore, safety reviews consider things like ergonomic issues of the new equipment when in operation.

To manage aging assets at facilities, Mosaic developed the Mosaic Mechanical Integrity (MI) Risk-Based Inspection (RBI) Program. The MI program will measure the condition of an asset through engineering inspections and assure asset quality and that a mechanical or structural component meets the design specifications for its intended purpose or application. The MI program establishes the remaining life of an asset, and a five-year plan for the asset is developed.

While the focus of the MI program is assets within a facility, there are various other aspects needed for continuous maintenance. The program includes predicting inspection intervals, preventative inspections, quality completion of corrective activities, documenting processes, training requirements and more.

Based on the outcome of inspections, other Mosaic processes are linked to the MI RBI process. Action items, if needed, are tracked in our RiskConsole software. If asset modifications are needed, the MI RBI is linked to the Management of Change (MOC) and Capital Project Management (CPM) process. If follow-up work is required, the MI RBI process is linked to our workflow process.

Asset information is captured in our Asset Health Register and includes remaining life, estimated cost of repair and any short- and long-term risk mitigation plans that need to be completed. The Asset Health Register is used for life cycle management. Out-of-service assets continue to be included in the MI process until demolition. The Asset Health Register information feeds into our five-year capital plan. The capital plan is reviewed yearly, and capital projects are prioritized based on various elements. Each capital project follows the established CPM process.

Quarterly meetings with the business units are in place to promote alignment. The MI program is audited by internal auditors on a regular basis to evaluate compliance.

All sites using ammonia for production follow our Process Safety Management (PSM) process. This process manages hazards and is intended to reduce the frequency and severity of incidents resulting from releases of chemicals and other energy sources. This process is utilized for new facilities or new processes. A Pre-Startup Safety Review (PSSR) is conducted for new facilities and for modifications that are significant enough to require changes in process safety information and are integrated in our MOC procedure.

Our frontline employees are closest to the process and identify potential safety and/or environmental risks. Being close to the process and being empowered to submit changes is the best way to redesign and rethink the way we complete existing tasks, and it optimizes physical and psychological compatibility between the employee and the process.

Mosaic proactively considers business changes and is creating closure plans that account for compliance with regulations in the future.

An example of our “cradle to cradle” life cycle management is the construction of one of our mines in Canada, the team focused on reducing environmental impacts. The team decided to install a conveyor instead of utilizing a previously approved haul road for trucks to move the material. In addition to cattle crossings, small and large animal crossings were incorporated in the design to reduce the impact on wildlife. Conveyors include a belt turnover at various stations. This cleans the belt, and the clean belt side is exposed to the ground to reduce potential material releases that may impact wildlife. Any wetlands that were impacted by the construction were replaced in an area outside of where we operate to provide a habitat for local wildlife.



Mosaic is involved in life cycle management of our products and supports organizations that work in watershed restoration, habitat conservation and nutrient stewardship. For years, we have also been transferring product, soil and agronomy knowledge to the farms that use our products. We partner with organizations to teach about [4Rs Nutrient Stewardship](#). 4Rs Nutrient Stewardship is an industry-wide approach for fertilizer best management practices around the globe. This approach considers economic, social and environmental dimensions of nutrient management and is essential to the sustainability of agricultural production systems. The concept is simple—apply

the right source of nutrient, at the right rate, at the right time and in the right place—but implementation is knowledge-intensive and site-specific. Mosaic’s agronomy team is committed to educating farmers, dealers and other stakeholders about the 4Rs Nutrient Stewardship initiative, as well as implementing these principles into their own practices.

**Operational EHS Programs:** At Mosaic, we are dedicated to preserving a safe, healthy, environmentally sustainable and respectful work environment for an engaged, inclusive workforce. The management system is

aligned to ISO 14001, OHSAS 18001 and ANSI-Z10, and integrates internationally regarded best management practices into our operations while affirming our ongoing safe and environmentally responsible performance. Regulations that apply to us are OSHA, MSHA, PSM, Mines Regulations Saskatchewan, Brazil Mines Regulations, Maritime Security, state, provincial and federal environmental regulations.

The management system is owned and updated by corporate EHS, with responsibilities cascading into the organization. At the corporate EHS level, Mosaic defines the EHS policy—10 management system elements and the corporate standards. These establish the high-level requirements for the organization that are meant to take us above and beyond regulatory compliance. Business units then define programs and procedures that align with the corporate standards and specific requirements and implementation plans.

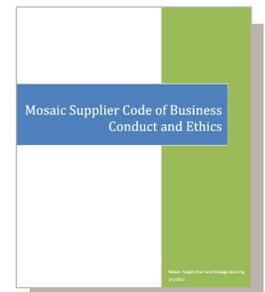
The Mosaic life-critical standards are an example of how we set standards to perform beyond compliance. We identified areas where we are at higher risk of incidents and injuries and have increased our working expectation beyond regulatory requirements to address them.

Since its implementation, Mosaic has been working to achieve operational ownership of the management system. The Management System Effectiveness Assessments (MSeA), which was previously performed annually at each facility, focused on the implementation and effectiveness of the management system. The next phase of self-assessments and risk reduction is integrating our management system into day-to-day activities. To achieve continuous improvement with operation ownership of the management system, monthly business unit alignment meetings are held. These focus on best practice sharing, discuss outcomes and lessons learned from incident investigations and share risk reduction projects. Mosaic also conducts quarterly management reviews with the senior leadership team and focuses on specific topics and identifies opportunities for improvement.

Many of the controls and assessments are utilized and completed by our frontline employees and supervisors, which means they are incorporated into daily activities.

**Contractor & Supply Chain Management:** Mosaic includes all contractors in our relentless pursuit of an injury-free workplace. Employees and contractors strive daily to reduce both the number and severity of incidents. Contractors are included in our RIFR and LTIF collection data. If a contractor has an incident at our location, Mosaic accounts for them, and contractor incident data is included in Mosaic’s safety calculations. A copy of our [Supplier Code of Business Conduct and Ethics](#) can be found on our [website](#).

Mosaic has partnered with ISNetworld since 2009 to streamline and more effectively manage contractor information. As a result of this initiative, contractors/suppliers and their subcontractors performing services for Mosaic are required to become subscribers to ISNetworld. Partnering with ISNetworld provides Mosaic access to key information such as company information, EHS performance statistics, insurance documentation, written safety policies and others.



Having this information available to Mosaic verifies that contractors that are approved and chosen to do work at our facilities meet our EHS and fiscal requirements. All contractors must comply with all applicable Mosaic policies, procedures and governmental regulations. These include, but are not limited to: Mosaic EHS Policy Statement and procedures; Site- or location-specific orientation training; Job-specific training; and U.S. OSHA/MSHA/EPA/DOT, Environment Canada, Saskatchewan OHS and mines regulations.

Contractor employees are responsible for reporting EHS incidents at Mosaic sites. In a medical emergency, contractors will follow the Mosaic medical emergency procedures. In case of a chemical or petroleum spill or an environmental release, an immediate notification shall be made to the Mosaic contact person and/or the Mosaic environmental department.

We host a yearly contractor of the year event to highlight contractors’ safety performance. This is a great venue to

share appreciation and emphasize the importance of EHS performance.

**Management of Change:** One of the 10 elements that define the management system is Management of Change (MOC). MOC evaluates and addresses risks from planned and unplanned changes, ensuring that performance expectations are not compromised. MOC within Mosaic is separated into six types.

- Process
- Procedure
- Procurement
- People
- Organization
- Legal



The key MOC process steps are initiation, MOC planning, MOC execution, monitoring and control and evaluate and close.

Each business unit has metrics related to MOC. One metric ensures the completion of the MOC prior to making the physical change. The effectiveness of the MOC elements is assessed annually as part of the management system assurance cycle.

**Workforce Empowerment:** Over two-thirds of our employees are on the front lines—making our products, completing high-risk work and monitoring processes to verify environmental compliance. So empowering

employees to own their personal safety and environmental responsibility is the most critical function of the management system. Examples are the implementation of our Risk Register where each employee is able to document hazards and our behavior based safety program that encourages peer to peer discussions relating to safety and the environment. In addition, all employees are empowered to stop a job to discuss and evaluate safety and environmental risks and assess and implement mitigations.

Each element states the roles and responsibilities for all levels of the organization—and engagement and participation in the management system and other EHS programs occurs in many ways across Mosaic. Examples are listed throughout the application.

The Risk Register tool was showcased previously and empowers our workforce to be actively engaged in hazard solutions. Over 800 risk reduction projects were completed and each department of ten employees or more was asked to complete one project over the course of the year. The Risk Register includes all locations and shows that every employee is involved in the process. This is an example of increased workforce motivation.

Workforce engagement is measured within Mosaic by completing enterprise-wide engagement surveys. The most recent survey was conducted in 2017. Engagement surveys are administered by the Corporate HR Talent Management Team—sponsored by senior leaders. Types of surveys and actions based on results are defined in Section II – Leadership.

Mosaic measures employee satisfaction approximately biennially in a comprehensive survey of employee engagement, an indicator of productivity and a force that drives business outcomes. Our last engagement score was 74%, which means a majority of employees recommend Mosaic as a great place to work, are proud to work for Mosaic, rarely think about looking for a new job with another company and are satisfied with Mosaic. We also address areas of opportunity.

To ensure that engagement survey results are shared and addressed effectively, they are cascaded from the top down—starting with companywide results distributed to senior leadership. From there, each business unit and

functional group is provided with their results. The results and action plans are developed at this level so that intentional and thoughtful discussions can be had at the business unit and country level. The leaders can focus on what is most impactful for engagement based on geographic location, culture, market conditions and many other contributing factors.

Each facility also receives a detailed report on engagement. This led to the development of site engagement committees. The purpose of these committees is to empower and connect employees. Engagement committees and safety survey information lead to changes to site safety committees to allow employees to have more involvement in addressing issues. The site engagement committees are tasked with addressing issues for their individual sites, while the business unit committee connects these groups and shares best practices. The committees also focus on communication to ensure that employees understand how their concerns are heard and addressed and to help them feel empowered to make future suggestions.

Employee engagement in EHS can be seen in our Risk Register process. Employees own risk and solution identification, and this program has been very successful. Employees own and facilitate monthly safety committee meetings at each site, where EHS information is shared with site leadership and progress on EHS projects is shared. In addition, every employee can stop a job if an EHS concern is present. Mosaic wants every employee to feel safe performing their duties, and therefore each employee is empowered to stop a job as necessary.

Our Potash sites in Canada host a yearly EHS Expo. This event is committed to engaging employees about EHS work practices that reduce risk and help ensure that we can return home unharmed at the end of each day.

Mosaic's EHS 2019 Strategic Priorities build on the success of our 2020 vision by emphasizing risk reduction—which is foundational to the management system. In partnership with our priority to Develop, Engage and Empower our People, we are recognizing the teams driving impactful and creative 2019 risk reduction projects. The Recognition Awards are meant to encourage engagement through personal recognition, one-on-one conversations and time spent highlighting positive and proactive actions taken to prevent potential risks.

The Recognition Awards have three primary driving factors: Moving beyond compliance, reducing impact to our future footprint and long-term sustainable impact to Mosaic's workers.

**Training & Competency Development:** Competencies link our business objectives with individual and organizational performance goals, learning and development and career growth. Therefore, Mosaic integrates competencies and development in our talent process, performance management, career development and succession planning. Mosaic focuses on training and individual competency development in various ways, such as career development plans (CDP), mentorships, internal training, professional registrations, memberships in professional organizations and external trainings and developments.

Mosaic is committed to offering employees many ways to grow in their careers. As part of a career development plan (CDP), training classes, special projects, cross-function teams, interim assignments and mentoring are just a few ways Mosaic bolsters employees' development. In addition, each employee identifies a development goal as part of the performance review process.

**Career Development Plan:** Mosaic's five-step CDP workbook guides people leaders and employees on how to write effective development goals and how to have quality development conversations that drive focused career development. Development can be used for both the current role (shorter term) as well as potential future role preparation (longer term). The five steps include:

- identifying development gaps
- reviewing the 70/20/10 model

- writing development goals
- conducting development conversations
- entering development goals into Mosaic's performance software program

In addition, Mosaic's ten competencies – business insight, strategic mindset, ensures accountability, drives results, collaborates, develops talent, communicates effectively, drives vision and purpose, courage and manages ambiguity – are explained in detail in the CDP workbook.



The competency worksheet provides definitions for each of the ten competencies regarding less skilled, skilled, talented and over-used. The worksheet helps develop discussions for competency skills. In addition, if an employee aspires to be in a leadership position, the workbook provides a leadership development roadmap with various internal and external programs and internal offerings available to help with developing leadership skills.

The CDP workbook provides an outline of the process and examples of discussions with the employee's people leader, note-taking, follow-up discussions, sharing development changes and progress.

Since the development goals are entered into Mosaic's performance software, the development goals are part of the semi-annual performance review. Mosaic's performance review process provides a consistent performance management process that aligns individual performance and development goals to the company's strategic priorities. This alignment around a common set of goals is critical to delivering better business results.

**Leadership coaching:** Mosaic offers leadership coaching, which can be an impactful development option. Leadership coaching is a significant investment and requires commitment, readiness and willingness to development by the coachee. Examples of leadership coaching are:

- helps new leaders make a successful transition into a key role
- develops leadership skills of a high potential emerging leader to fast-track their readiness for a more senior role
- helps a valued leader address a specific performance challenge
- develops new skills
- makes necessary, often difficult, behavioral changes

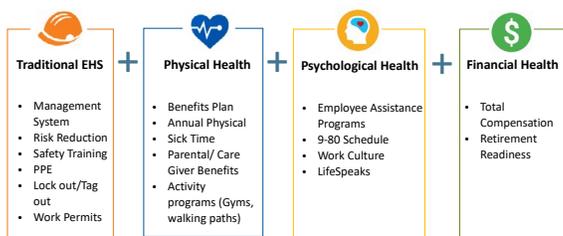
**Informal mentoring:** This is a partnership that is aligned with the employee's development goal. In this process, the mentee owns and drives the mentoring partnership. The mentee and mentor meet regularly, sharing frequently what is working and what can be improved. A worksheet with information about mentoring guides the employee on discussions and goals.

Internal training is focused on regulatory and job-specific information. Mosaic's training matrix is used to track what is required for roles versus what training has been completed. We adjust our training for generational and regional differences. Examples of various forms of training are classroom training, computer-based training, in-the-field training, mentorship, videos and more. EHS-specific training topics available to all employees include emergency action, environmental compliance to regulation, first aid and CPR, general safety, incident reporting/auditing, industrial hygiene, occupational health safety (OSHA), security and transportation/chemical handling.

Professional certifications, professional organization memberships, external trainings and tuition reimbursement are offered for all employees. Some of these benefits require manager approval. Many of our EHS professionals hold certifications and participate and collaborate with professional organizations to develop skills and knowledge.

Succession planning is an integrated process across all business units. Talent calibrations are performed yearly where employees with the same positions/pay grade levels are calibrated against Mosaic’s ten competencies. Employees who are high performers or have high potential are part of the succession planning process. Since EHS is part of the performance review process, EHS is part of the calibration and succession process. In addition, all employees at and above a set pay grade level are part of the succession planning process regardless of calibration results. A robust development plan is created that focuses on competencies, experience and knowledge.

Training, competency and succession planning are linked in the organization and are very visible in the EHS department. EHS and operations work together and are linked through employees and their work experience. Some of our EHS employees at all three business units have operational experience. Some of our EHS coordinators, EHS managers and EHS directors held operations roles and now serve the company in an EHS role. This is a great example of how EHS relates to operations and is not a stand-alone department.



**Health & Well-Being:**

**Mosaic Worker Wellness:** Mosaic controls the equipment used and processes followed at our sites, but as we have seen through incident investigations, psychological and physical health can contribute to incidents at work. Mosaic strives for ZERO harm to people and ZERO environmental incidents, and Mosaic’s Worker Wellness strategy is a key to everyone’s success. Protecting the health and wellness of our employees

has always been a priority at Mosaic. Mosaic began the process of formalizing our programs to create consistency for our managers and employees through Mosaic’s Worker Wellness program in 2019, and it is based off Total Worker Health® (TWH), championed by the Centers for Disease Control and Prevention (CDC) and the National Institute for Occupational Safety and Health (NIOSH). We intend to highlight this by incorporating worker wellness as a component of our management system to view it as a risk that must be mitigated. We are also expanding our definition of worker fitness for duty, which means providing resources for workers that promote healthy living and providing assistance with life changes. Worker wellness will include psychological, physical and financial aspects. Worker wellness is a key component of our 2030 EHS goals and includes traditional EHS, physical, psychological and financial health focus.

Throughout the company, Mosaic provides health benefits that include insurance plans, retirement savings plans, tobacco cessation programs, wellness incentive programs and flexible work schedules. In addition to bereavement leave, maternity leave, military leave, voting leave and jury duty leave, Mosaic offers a variety of additional employee leave programs. Many Mosaic locations offer additional site-specific wellness programs, such as on-site gyms, gym memberships and walking paths.

**“The four weeks of paternity leave provided a chance to bond with the boys right away and to support each other as new parents. Thank you to Mosaic for the support.”**

ADAM HERGES — SUSTAINABILITY AGRONOMIST

Mosaic offers the Employee Assistance Program (EAP) companywide. This program is confidential and addresses a variety of concerns, both personal and work-related. Discussion may occur by speaking with an EAP counselor over the phone, having a face-to-face meeting with an EAP

**What YOU can do to create a psychologically healthy workplace:**

- Lead** by talking positively and openly about the importance of psychological workplace wellness.
- Know** how to access psychological wellness resources.
- Respect** confidentiality of others in need.
- Provide** feedback for PHS program improvements.



counselor or through a referral to a mental health professional in the employee's local area. This benefit is meant to be an additional resource for wellness.

Psychological wellness training is in the second year of a business-unit-wide rollout in Fertilizantes and Potash and is in the planning phase for Phosphates. This training is designed so that employees understand how stress can impact them and their job and highlight resources Mosaic offers to assist employees and their families when they need additional help. The program also provides training for frontline supervisors to identify potential triggers for psychological distress. The frontline supervisors are trained to ask questions related to the well-being of the employee and provide guidance on resources available, including our occupational medical staff.

It is Mosaic's policy to provide a safe and healthy working environment for employees who have sustained an injury or illness in the workplace. In the event of an illness or injury, Mosaic is committed to providing employees with the support they need to facilitate the recovery process, wherever possible. Our Return to Work program is based on the collaborative efforts of our human resources and EHS teams. Together, they built the framework that will enable our people to get back to work in a safe and timely manner. Mosaic provides occupational health services throughout the business to assist with the return-to-work process. This medical professional is the main contact for work-related injuries and works with the patient/employee on a back-to-work schedule based on medical feedback from the physician who treated the employee. At Mosaic, we believe in returning employees to work, if possible, even if duties are restricted by a medical professional. Mosaic believes that having a purpose and returning to work on restricted duty supports the employee's wellness.

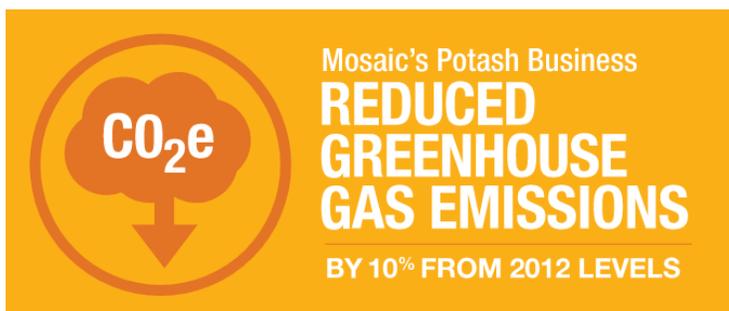
**Fatigue Management:** Mosaic is committed to providing an injury-free workplace, and combating physical and mental fatigue is no exception. In an industrial setting, the potential for fatigue to impact an employee's performance is possible, and steps must be taken to mitigate the risks.

- Shift start and end-of-day check-ins (psychological and physical well-being)
- Pre-job hazard assessment (includes the job, environment and employees)
- Physical ability requirements per position
- Job planning
- Ergonomic workstation assessments and sit/stand desks
- Job rotation
- Work hours (change work times to mitigate a risk: for example, heat)

Mosaic does set work hour limits based on union agreements and safety best practices for the work occurring. In addition, we offer resources for managing sleep and fatigue for our shift workers. "The Science of Sleep: Sleeping for Shift Work" is an example specific for our shift workers. The training highlights the importance of sleep for our physical and mental health. In addition, the training provides scientific information of the brain and strategies for changing sleep schedules. Strategies include creating consistency in sleep schedules by eliminating noise and light from the bedroom, limiting caffeine intake and exercise for 4 – 12 hours prior to bedtime and getting

everyone in your family onboard. The training helps shift workers adopt healthy sleep habits.

**Environment & Social Responsibility:** As described earlier, Mosaic's management system encompasses the environment. The environment is integrated into all elements of our management system. An operational site will engage in environmental near-miss reporting and risk reduction



projects. Mosaic maintains a Risk Register for environmental risks reflecting small- and larger-scale potential impacts. Environmental risks are considered at the same time as safety risks when completing project reviews, MOCs, pre-job hazard assessments and others.

At Mosaic, we define sustainability broadly. From environmental performance to safety and community investments to operational efficiency, we are committed to making progress in areas that matter most to our many stakeholders.

Sustainability and social responsibility at Mosaic means:

- We are responsible corporate citizens. We keep our promises from mine to market.
- Companywide, Mosaic has achieved reductions of 13.9% in GHG emissions, 12.1% in energy use and 8.9% in freshwater use since 2012.
- We support and promote the 4R Nutrient Stewardship framework to achieve the agricultural benefits of fertilizer and reduce crop nutrient loss to the environment. Since 2015, Mosaic has helped implement 4R management practices on more than 6 million acres of farmland.
- We conduct more than 2,000 crop nutrition research and development trials with researchers, universities and growers in the United States, Canada, Brazil, China, India, Northern Latin America (Mexico to Peru), Argentina and Chile.
- We conduct acre-for-acre reclamation of phosphate-mined lands for use by wildlife and people.

## By the Numbers

PARTNERSHIPS

100+

TOTAL FUNDING SINCE 2004

>\$19M

ACRES OF FARMS

6M

under 4R management  
since 2015

WATERSHEDS IN 4 COUNTRIES

139

### Why we invest in our communities

On a global level – As a global leader in crop nutrition, we sit at the nexus of two of the worlds’ most pressing problems: food security and water scarcity. We feel it is our responsibility to bring our financial resources, expertise and an innovative spirit to the table, helping the world grow the food it needs through strategic partnerships with innovative organizations.

On a local level – At Mosaic, we understand that the sustainability of our business and our communities are indelibly linked. Our communities are also our homes—where we live, work and raise children. We strive to be a thoughtful and engaged neighbor who invests carefully and generously and seeks long-term partnerships with organizations that are making a difference.

In the community – In 2018, combined contributions by The Mosaic Company, The Mosaic Company Foundation and The Mosaic Institute in Brazil through philanthropic funding, employee engagement and in-kind donations totaled approximately \$12 million.

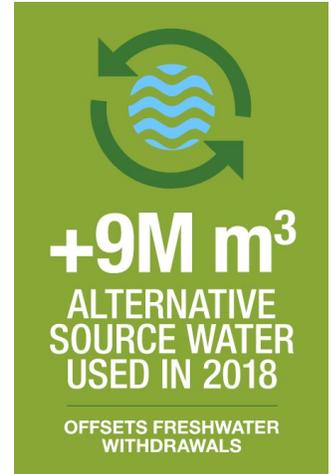
Food – Our mission is to help the world grow the food it needs. For us, this is both a business and social mission. To feed a growing global population, food production will have to double by 2050, a daunting challenge considering that today, one billion people go to bed hungry each night. We seek to address these issues by concentrating on the following funding areas:

- Hunger, food insecurity and food system development in local communities where we have facilities and offices
- Global agricultural development programs focused on smallholder farmers in developing nations where we have key stakeholders
- Agricultural research, education and extension programs, primarily focused on balanced crop nutrition and increasing the capacity of farmers to grow more food sustainably

Water –Water is the greatest limiting factor to growing more food. By 2030, it is estimated that the world will experience a 30% shortfall in freshwater supply at current consumption rates.

We seek to address water conservation by concentrating on the following funding areas:

- Habitat conservation: conserving resources and encouraging stewardship of the environment, including biodiversity and habitat protection where we have facilities and offices
- Nutrient stewardship and ecosystem management programs that promote sustainable agriculture and best-management practices in key watersheds where we have facilities and offices or sales and customer relationships
- Watershed restoration in regions where we have facilities and offices



Local community – Our local communities are our homes, and we have a vested interest in their sustainability. We understand that for Mosaic to prosper, our communities must also. Mosaic strives to make investments that will protect and enhance the long-term quality of life in our communities for our neighbors, our families and ourselves. We concentrate funding in the following areas:

- Philanthropic or civic partnerships that enrich the long-term strength of communities in which Mosaic has offices and operations
- Organizations in which our employees are donating their time, talent and expertise

Disaster relief – While it’s not one of our focus areas, Mosaic occasionally responds to global disasters that impact our employees or customers. These gifts support emergency response and are not eligible for the formal application process.



In 2018, we supported more than 35 Indigenous and Métis projects in Saskatchewan.

Indigenous Community Investments (Canada) – At Mosaic, we understand that the sustainability of our business and our communities are strongly linked. We strive to be a thoughtful and engaged neighbor who invests carefully and generously, and, through working with First Nations and Métis communities, identify strategic opportunities to target grant funding to initiatives and projects that are important to the growth and sustainability in the areas where we operate.



Mosaic supports many projects and initiatives. An example is shown.

**Krishi Jyoti India – Helping Smallholder Farmers** – Since 2008, the Mosaic Villages Project in India—a partnership led by Mosaic, the Sehgal Foundation and The Mosaic Company Foundation—has helped bring modern agricultural tools and products to more farmers. Through a community-centered approach, farmers, community leaders, Mosaic, the Sehgal Foundation and The Mosaic Company Foundation partner to develop the needed infrastructure and capacity to nourish their communities sustainably.

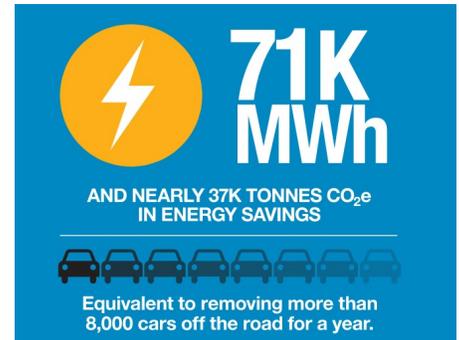
The project's Krishi Jyoti, or "enlightened agriculture," initiative equips smallholder farmers with modern agricultural inputs and practices. Krishi Jyoti focuses its community-led transformation efforts through three primary drivers: agriculture, water and education. More information can be found on our website and sustainability report.

**Social Responsibility** – Mosaic's operating activities are intensive, and management of our impacts has benefits beyond compliance. By being good stewards of environmental and social resources, we have the potential to positively impact the public's perception of Mosaic and improve the communities we operate in. Through our EHS 2030 strategy work, this repeatedly came to the forefront as a topic of growing significance to our employees, our communities and Mosaic.

**Life Cycle Management** – Mosaic is on a journey of continuous improvement in our life cycle management. Mosaic reports our annual progress in waste management in our sustainability disclosure. Mosaic has also set sustainability targets related to energy and emissions. Mosaic's leadership is committed to advancing our progress.

"At Mosaic, we know that our ongoing commitment to sustainability is critical to our long-term business growth and improvement, and that it creates value for all of our stakeholders. Every action we take contributes to our ability to operate a responsible and competitive company over the long term, and Mosaic's employees play a leading role in reaching our goals."

– Joc O'Rourke, President and CEO



#### **SECTION IV: PERFORMANCE MEASUREMENTS & INFORMATION MANAGEMENT**

**Leading & Lagging Indicators:** All EHS incidents are evaluated. Incidents that are potentially serious (PSI) or recordable are communicated across the organization within 24 hours. Root cause analysis is conducted, and corrective actions are shared and tracked for completion. There is a process to evaluate the effectiveness of corrective actions and assign additional actions if the original actions did not achieve the desired effect. Number of PSI is tracked as one of our leading indicators and PSI events are included in our data analysis.

Mosaic compiles and shares a variety of both leading and lagging indicators to measure performance within the company and to align with the company's strategic priorities.

The shift in the past few years has been to focus on developing meaningful leading indicators and putting more emphasis on targets and goals that impact leading indicators and ultimately improve sustained EHS performance.

Also, utilizing the management system framework, business units and sites have been given some flexibility in establishing specific performance measurements to elevate focus areas for improvement. These additional business unit and site-specific performance measurements have proven to allow sectors and sites to respond to outcomes of activities (e.g., risk assessment and planning, self-assessment, and incident investigations) performed within the management system.

Key performance indicators that are currently used by Mosaic are briefly summarized below. This list is intended to provide key examples but is not an all-inclusive list.

**Lagging Indicators:** Community Complaints, Government Reportable Environmental Releases, Lost Time Injury Frequency Rate (LTIFR), Past Due EHS Corrective Actions, Recordable Injury Frequency Rate (RIFR), Regulatory Permit Exceedances, Total Recordable Injury/Illness Frequency Rate (TRIFR)

**Leading indicators:** Near Misses, Number of Management System Self-Assessments, OSHA and MSHA Annual

Training Compliance, Percentage of Higher Level Controls Implemented from the Hierarchy of Controls, Percentage of Environmental Compliance Tasks Completed on Time, PSIs, Risk Reduction Metric—number of qualifying projects completed

Continuous improvement is the cornerstone of the management system, so Mosaic evaluates ways to keep improving to advance to our goal of becoming an incident and injury free workplace. And, a key focus area is to optimize our use of EHS leading and lagging indicators to focus on improvement opportunities and risk reduction.

A combination of the indicators described above has resulted in significant EHS performance improvement.

In 2019 we delivered the best safety performance of Mosaic's 15-year history – achieving a 40% reduction in RIFR over 2018. We had more than 800 risk reduction projects completed across the organization. Companywide, our focus remains on proactive reduction of risks to our employees with a goal of ZERO harm to people and the environment.



The Risk Reduction Metric was introduced in 2019 as a new metric for the company's incentive plan and is based on the number of engineering, substitution or elimination controls implemented that reduce risk identified on the sites' Risk Registers. Adding this new metric is helping to operationalize the management system and focus on proactive work, instead of reactive work. This metric has proven to fully engage the frontline workers to a higher degree than any EHS program that Mosaic has previously tried.

**Measurement Quality & Data Evaluation:** Mosaic's core system for EHS Incident Management is RiskConsole, which is a risk management software. It is an integrated information management system for EHS incidents and risk management claims. It is also used to record and track incident investigation details and associated corrective actions. The RiskConsole application features an integrated robust reporting tool that delivers strong automated recurring reporting to sites, business units, support functions and corporate. These automated reports are intended to provide the sites with a consolidated view of the site's incidents and corrective action compliance. This helps with data quality and adherence to Mosaic standards and best practices.

Incidents are entered primarily by supervisors and area managers rather than frontline workers. This is intended to maintain data quality and supervisor ownership of incidents that occur in their areas of responsibility. Many types of EHS incidents are managed within RiskConsole and include: employee injury, near miss, property damage, environmental releases, government inspections, and permit exception or exceedance. Contractor incidents that occur on Mosaic property are tracked in the same manner as internal Mosaic incidents.

The EHS corporate team compiles global safety and environmental performance data for Mosaic employees and contractors working at our facilities around the world based on the RiskConsole incident information. EHS corporate compiles and distributes a weekly EHS report to the site's operations management team, EHS

management team and senior leadership team. The weekly EHS report is intended to provide a summary of the week's significant EHS incidents. The Potash business unit analysis revealed an increase in hand and finger incidents in 2018. A campaign to promote awareness and guidelines to reduce hand and finger incidents launched in 2019. In addition, increased internal assessments with a focus on hand and finger safety were performed. As a result, hand and finger incidents decreased by 33% in 2019.

In addition, our Predictive Solutions tool is tracking observation data and condition data. The tool is identifying high risk areas with an increased likelihood for an incident to occur. Behavior-based safety teams collect, with mobile device, and analyze observation data. Mosaic also collects and trends assessment data of pre-job hazard assessments. These analyses have resulted in targeted improvement areas or campaigns. For example, the Phosphate business unit completes an average of 1,400 internal inspections a month. The inspection data is analyzed by site, department and sub-department. In addition, inspection results are categorized and in 2019 almost 50% of observations noted were in relation to Walking Working Surfaces (WWS). Based on the data, a campaign for WWS was initiated.

Incidents related to driving a vehicle were a concern for our Fertilizantes business unit in 2018. In December 2018, one site in Brazil installed anti-fatigue monitoring devices in 45 mine vehicles. The camera-based system is monitoring for mobile device usage, speed, head and eye movement and other indicators. The system estimates driver alertness based on symptoms and alerts the driver if needed. The system automatically records the driver if eyes are off track for 3 seconds or more. Alert occurrences decreased almost 50% over the course of 2019. Other sites in Brazil and in our Phosphates business unit are implementing similar systems.

In 2018, the significant incidents (SI) and potentially serious incidents (PSI) within the phosphate business unit were reviewed and it was determined that 75% could have been prevented if existing safety policies and procedures were linked to lifesaving rules. So, with this insight, Mosaic launched a focused campaign to recommit to the existing rules.

Safety employees from around the globe meet monthly for an EHS business unit alignment meeting. The purpose of the meeting is to ensure a standard approach for classifying and categorizing potentially serious incidents (PSI) and standard communication for these incidents.

Also, corporate EHS compiles and distributes a comprehensive monthly report to a broader distribution list that includes each site's operations team, functional teams, EHS management team and senior leadership team. The monthly report provides target versus actual information for monthly, year-to-date and year-over-year information for RIFR, LTIFR, TRIFR and environmental incidents by business unit and site. Metrics and any lesson learned are then shared with all employees at the site. The Board of Directors receives metric information quarterly.

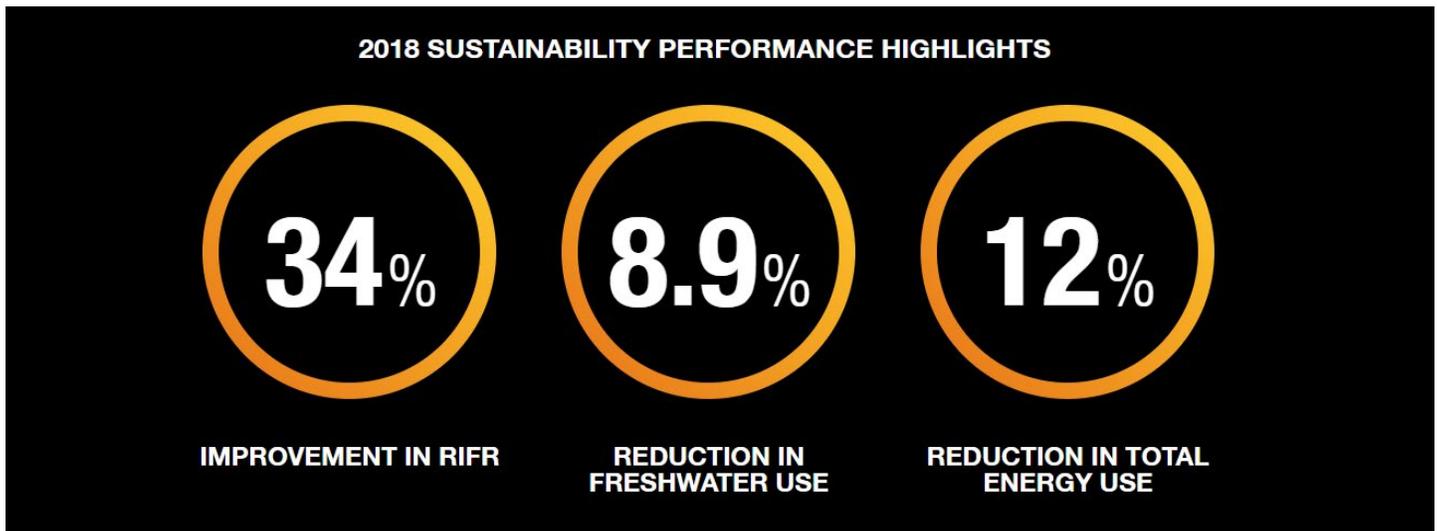
**Benchmarking & Transparency:** Mosaic understands the value benchmarking brings to strategic planning. Each year, we benchmark against our competitors, and benchmarking information is included in our strategy and priorities development.

Mosaic recognizes the importance of being active in industry associations and cross-sector business forums. These common platforms help advance cutting-edge scientific research and best management practices within our company and our industry. We consider the relevance of each engagement opportunity to our business strategies, and we pursue mutually beneficial partnerships. A full list of key organizations we engage with, the ways we engage with them and how we are involved is available in our [sustainability report](#).

Mosaic employees are actively participating in the following workgroups facilitated by the Campbell Institute:

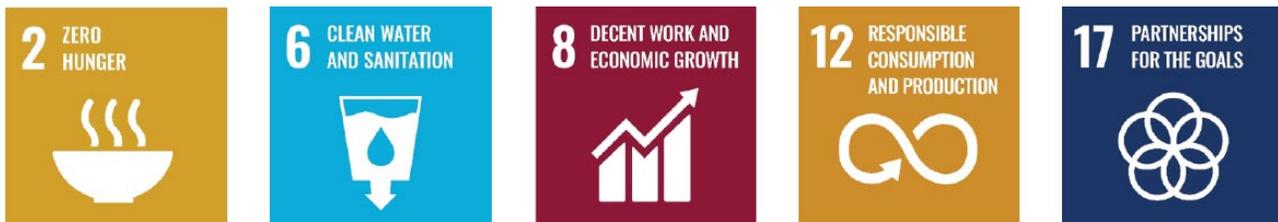
- EHS Leading Indicator
- Contractor Management
- SIF Prevention
- Environmental Sustainability
- Health Well-being
- EHS Communications

Topics and indicators that reflect Mosaic’s significant economic, environmental and social impacts or that would substantially influence the assessments and decisions of stakeholders are deemed by us to be “significant” for sustainability reporting purposes.



Continuous improvement is a cornerstone of our company culture, driving us forward. Our stakeholders—whether supportive or critical—voice concerns and provide suggestions that help us define and achieve our sustainability goals. Our goals and reporting will evolve as we refine our understanding and identify additional significant issues.

Our sustainability report lists Mosaic’s stakeholders, ways we engage with our stakeholders, how often we engage with our stakeholders and the topics of importance for our stakeholders.



As the world’s leading producer and marketer of concentrated phosphate and crop nutrient products, Mosaic has the opportunity—and responsibility—to contribute to the achievement of the United Nations’ Sustainable Development Goals (SDGs), and Mosaic specific information is listed [here](#).

There’s no denying that mining and fertilizer manufacturing are intensive endeavors. Resource extraction, consumption of materials, generation of emissions in operations, water use—these activities are all necessary to fulfilling our mission to help the world grow the food it needs. From mine to market, we are working to minimize our negative impacts and maximize the value we deliver to diverse stakeholders around the globe. Our journey is ongoing, and we are continuously evaluating what it means to be a good employer, supplier, neighbor and value creator. Our sustainability report highlights the many ways we are contributing to the SDGs.

## **SECTION V: LINKAGE BETWEEN EHS & BUSINESS PERFORMANCE**

**Integration of EHS & Business:** Integration of EHS into our business is evident in our business performance and strategy. Mosaic overall, business units and sites all set yearly goals. Goals include cost, productivity, engagement and EHS related targets and actions. EHS goals are not separate or only for the EHS departments.

EHS goals are part of all business goals and specific EHS goals for each business unit.

Examples show how EHS is integrated into our business processes and performance. One of our EHS goals is specific to risk reduction. This EHS goal drives how we select and prioritize projects, initiatives and capital projects. EHS must also participate in other business-related goals. For example, when our transformation initiative rolled out, the focus was not strictly on production. EHS was included in the analysis and almost 150 transformation initiatives in relation to EHS were identified. EHS collaborates with maintenance and reliability to proactively remedy housekeeping concerns and equipment life expectancy. In addition, operational goals often determine when we need to set goals around permit approvals, which focus on EHS.

Integration efforts of our Brazil sites had many moving parts. EHS was part of the integration project with synergy goals alongside all other goals. All our incentive plans include measures for cost, productivity and EHS.

EHS is integrated throughout our processes and linked to our business performance.

**Operational Performance through EHS:** Over the years, our evolving EHS initiatives affected overall operational performance since EHS and operational performance go together. Mid 2016, a focused campaign on incident reporting resulted in increased near miss reporting. The year over year near miss reporting increased by 5% in 2016 and 22% in 2017 over the 2015 baseline. Near miss reporting enabled us to trend and analyze incidents and implement improvements. When you get to a certain point in your safety journey it is important to focus on improving. After working with the Campbell Institute, we transitioned to utilizing leading indicators. In addition, we differentiate potentially serious incidents (PSI) and investigate each PSI, identify root causes and implement solutions. Each PSI root cause analysis involves operational employees. From 2015 to 2017, PSI incidents increased by 30% since a standardized approach was implemented to evaluate incidents across Mosaic. Since each PSI results in a full investigation, we can implement improvements to mitigate risks. Increased near miss reporting, standardizing PSI identification of incidents and investigating PSI incidents resulted in a decrease in the recordable injury count by 35% from 2017 to 2018.

Our focus on a strong management system means we focus on things like standard operating procedures, good controls, good housekeeping, high training standards and more. Our management system is important for EHS but just as important for operational excellence since less safety and environmental incidents lead to less downtime and a more engaged workforce.

Risk reduction focuses on more reliable equipment and higher levels of control. Risk reductions are directly linked to increased operational excellence.

Improvements in EHS and programs like our risk reduction incentive plan improved employee engagement and morale. These efforts are connected to operational excellence.

Safe operations, safe behaviors and safe equipment are the cornerstones of a successful organization and visible in operational and business excellence.

**Organizational Effectiveness:** A variety of EHS measures are described throughout the application. Our EHS leading and lagging indicators, internal assessments, external audits, risk reduction projects, sustainability metrics and others guide decisions for Mosaic's strategy, capital investment and goals. Mosaic's RIFR was a 1.90 in 2009. The need for a management system was inevitable and the implementation of a management system at all sites was included in the 2020 EHS vision. After the management system implementation, the need for assessments of the management system was identified and assessments were executed. With time, efficiency of the assessments increased, and self-assessments are performed now. Mosaic's RIFR rate was 0.30 in 2019. That is an 83% reduction over 10 years. The management system is the base for EHS and our organizational effectiveness.

EHS and the management system are embedded in day-to-day operations and measure the effectiveness of

our organization. In addition, our EHS processes, systems and culture align with other business factors such as continuous improvement and our NextGEN efforts. Our employees and contractors are held to the same standard and are measured accordingly.

Our environmental technology includes drone usage for aerial surveys and inspections and automated monitoring equipment is in place in underground mines and remote operations.

### Reducing Single-Use Plastics

	2018	2019
 Paper Cups	21,500	400
 Paper Plates	6,000	200
 Utensils	4,200 each	300 each
 Coffee Pods	5,000 +	0



All our sites, including business offices, are continuously looking for ways to reduce water, energy, emissions and waste. Sites have recycling efforts for paper, batteries, toners, glass and plastic. Last year, the Regina office committed to operating more sustainably by reducing the usage of disposable cups, plates and cutlery. Through this initiative, the office made significant strides in working towards zero single-plastics employee kitchens, including reducing plastics by 41,250 items, which saved over \$4,000.

Mosaic’s operations generate a variety of nonhazardous solid wastes, including domestic refuse, construction and demolition debris, and waste lubricants. Mosaic has placed an emphasis on reducing or eliminating waste, and our recycling program seeks to identify materials that can be diverted from landfills and recycled or reused. In 2018 Mosaic recycled nearly 50,000 tonnes of waste, including items like finished product, batteries, cardboard, plastic, metals and wood.

Specific to freshwater usage, in 2018 our companywide freshwater performance rebounded from 2017 performance, and we observed a reduction of 8.9% from 2012 baseline levels. This year-over-year improvement is thanks to companywide initiatives and reductions in operational requirements, primarily at our Florida phosphate mining facilities. We are optimistic about meeting our original target of accomplishing a 10% reduction of freshwater use per tonne of finished product by 2020.

We disclose sustainability information on 130 Global Reporting Initiative (GRI) indicators, in alignment with the G4 Core Sustainability Reporting Guidelines, which emphasize materiality. All report data has been assured, and our water, waste, energy and greenhouse gas emissions information is externally verified by third-party reviewers.

Our management system is aligned to ISO 14001, OHSAS 18001 and ANSI-Z10 and provides alignment and consistency across our sites. In addition, we use OSHA, MSHA and benchmarking data to measure the effectiveness of our organization.

**Continuous Performance Improvement & Sustainability:** At Mosaic, we are continually developing innovative ways of doing our work. These innovations increase our efficiency while demonstrating our respect for the Earth’s resources. And they enable us to continue driving toward our goal of an incident- and injury-free workplace. These efforts support our ability to deliver value to our employees, customers, shareholders and stakeholders around the world.

Our goal through our data analysis and management reviews is to continually look for ways to improve our

process and identify gaps that are leading to incidents. Cycle of review is an element of the management system and therefore is a requirement at least annually at the site, business unit and corporate levels. Some of our EHS improvements have led to cost reductions and productivity increases. Improvements result in cost competitiveness, and as we are in a commodity business, this is so important. Our environmental performance is linked to our ability to receive permits to continue mining.

Some of our improvement results and recognitions are listed below.

Additional information is available on our [website](#).

### Safety Results

- Reportable Injury Frequency Rate (RIFR) reduction from 1.90 in 2009 to 0.30 in 2019, an 83% reduction over ten years
- Decrease of recordable injury count by 35% from 2017 to 2018
- Reduction of Days Away, Restriction and Transfer (DART) rate from 0.55 in 2014 to 0.16 in 2019, a 70% reduction over five years
- Reduction of life-threatening/altering incidents or Serious Incidents (SI) rate from 0.06 in 2015 to 0.0 in 2019
- Reduction in Serious Incidents (SI) and Potentially Serious Incidents (PSI) rates from 0.67 in 2015 to 0.49 in 2019
- Increased implementation of high hierarchy of control by 11% from 2018 to 2019
- Potash business unit improved hand/finger recordable injuries by 11% from 2018 to 2019
- Improvements in SI/PSI categories from 2018 to 2019:
  - Vehicle travel improved by 67%
  - Energy isolation improved by 44%
  - Electrical contact improved by 38%

### Environmental Results

- Reduction in Serious Incidents (SI) and Potentially Serious Incidents (PSI) rates from 0.11 in 2015 to 0.03 in 2019
- Increased implementation of high hierarchy of control by 180% from 2018 to 2019.
- Increased on-time task completion percentage for compliance tasks from 74% in 2016 to 95% in 2019

### Sustainability Results - 2018

- Energy – 2.40 GJ per tonne of finished product, a 12.1% reduction from 2012 baseline
- Greenhouse Gas Emissions – 0.23 tonnes CO<sub>2</sub>e per tonne of finished product, a 13.9% reduction from 2012 baseline
- Freshwater – 4.52m<sup>3</sup> per tonne of finished product, an 8.9% reduction from 2012 baseline
- Cogeneration – Increased virtually greenhouse gas emissions-free electricity produced internally from 5.80 million GJ in 2014 to 6.48 million GJ in 2018
- Community – Contributed over \$12 million in community investments
- Potash business unit recycles 72% of its waste
- Over 900,000 trees planted in our acre-for-acre reclamation in our Phosphate business



## Recognition

Mosaic was recently named to Newsweek's 2020 list of America's Most Responsible Companies. Ranked 109 out of 300, Mosaic earned this recognition due to our sustainability disclosure practices and performance with key environmental, social and governance (ESG) indicators. The achievement is validation of Mosaic's commitments in the ESG space: managing environmental performance, investing in employees, partnering in communities, and being transparent about our impacts.

For ten consecutive years, Mosaic has been named on Corporate Responsibility Magazine's 100 Best Corporate Citizens list, regarded as one of the top corporate responsibility rankings and based on publicly available information. Mosaic's scores in seven categories, including climate change, employee relations, environment,

finance, governance, human rights and stakeholders, are in the top 75 of Russell 1000 Index companies which are evaluated for Corporate Responsibility Magazine's 100 list.

For two consecutive years, Mosaic was named to the FTSE4Good Index. The FTSE4Good Index Series measures the performance of companies demonstrating strong Environmental, Social and Governance (ESG) or sustainability practices. Mosaic earned an ESG score of 3.7 out of 5, which is in the 76th percentile among chemicals companies.

In 2017, Mosaic was named to CDP's Climate A List for our actions to reduce greenhouse gas emissions (GHGs). Mosaic was one of only 106 companies named to the A List, representing the top 5 percent of the thousands of companies worldwide that participate in CDP's climate change program. This is Mosaic's eighth disclosure to CDP.

In 2018, Mosaic Fertilizantes signed the UN Global Compact in Brazil. Members' 2019 water initiatives that support the clean water and sanitation goals were reviewed, and the top fifteen were selected as finalists for potential recognition at an event called the CEO Water Mandate. Mosaic Fertilizantes was nominated in two of four categories for its work in creating a program called Water Call for Bids. This water program awarded donations to the community projects that best reduced water use or reinforced responsible habits. Mosaic won in both categories for which it was nominated.

**Continuous improvement is a cornerstone of our company culture, driving us forward**

Our EHS performance is reviewed by investors and insurance underwriters. This became very important in 2019 with tailings dam disclosures.

Improvements are part of our daily activities at Mosaic since we have formal continuous improvement employees who focus on operations and EHS improvements. In addition, the plan, do, check, act methodology is part of our management system and continuous improvement.

## SECTION VI: LESSONS LEARNED

**Lessons Learned:** A key lesson that we learned through the development and implementation of an EHS management system was the importance of having the buy-in and clear understanding of the value proposition that a management system brings to frontline operations. During the initial implementation phase, we utilized a management system consultant to design our system for us. While the system was implemented and structured based on ISO guidelines, it was not well understood by our operations teams and was not viewed as a resource to assist them in managing the EHS risks faced in our operations. This led to a lack of ownership and drive to own, use and improve our system.

To improve this ownership, we chose to move away from potential external certification and instead focus on adapting the language and structure of our system to better align with common operating language. We created an assessment protocol that we used to internally assess how effectively facilities were utilizing their system. The assessments were completed by an audit team comprising external auditors, internal EHS professionals and senior operations leaders. Members of the audit team gained a much deeper understanding of the management system elements and how they all function together. We also created a scoring system for these assessments. The scores that became a leading indicator metric we linked to yearly improvement targets as part of our incentive plan program (replacing the previous lagging RIFR metric). As our assessment scores increased, our recordable injury rate continued to decrease at a >70% accelerated rate. We were also able to reduce the number of personnel assigned to full-time management system roles as processes became more integrated with regular operating processes and our culture of how we do our work.

At the site level, a significant focus was placed on educating the workforce on what the intent of each element is and how they can contribute. Site leadership teams took active ownership by assigning element owners responsible for improvement action plans and the effective use of each element. In 2019 we continued to enable ownership by transitioning to a self-assessment process where each facility assesses their 10 system elements (using standard protocol) and creating improvement plans.

The successful management system we currently use to guide our risk management and EHS processes is the direct result of shared ownership and an understanding of how it benefits our workers and our journey toward ZERO harm to people and the environment. It has now become the foundation for how we manage risk and set our future improvements—the foundation of our new 10-year EHS vision. This same structure is being expanded into operations areas outside of EHS, specifically our waste storage areas, mechanical integrity and reliability programs, security and wellness programs.

The management review process is used from the site level, up to the board level to review performance, report on improvement areas and determine future efforts. It also led to our latest leading indicator of risk reduction controls implemented and the inclusion of it in our incentive plan.

Mosaic has taken a system originally designed to bring organization and standardization to our EHS programs and developed it into a tool that defines our risk management and operating culture. It is not simply a structure of requirements we target to comply with. It has led us to grow and develop industry leading practices such as potentially serious incident evaluations for safety and environmental incidents and our risk reduction program. Our interactions with organizations such as the Campbell Institute and member companies greatly assisted with our journey, and we are dedicated to sharing our learnings to assist other companies on their journey.

**Forward Planning:** As mentioned previously, Mosaic created the first long-term EHS strategy in 2010. After achieving the goals in 2018, the next 10-year EHS vision had to be created. Teams spent two years preparing our 2030 EHS vision. The 2030 EHS vision is a result of internal and external research, preparing our own gap analysis, partnering with various departments/teams within Mosaic, involvement in benchmarking conferences and various memberships with organizations.

Over the last 15 years, Mosaic focused internally to build strong systems, processes and culture. As we move forward we want to further our continuous improvement journey of strengthening our management system internally with additional focus on technology, worker wellness and social responsibility both internally and externally. Collaborations with other organizations on what works well and what does not work well were instrumental in shaping our 2030 EHS goals and are key as we move forward. Everyone benefits from collaborative sharing with their EHS journey.

Organizations being presented the Robert W. Campbell award will be ambassadors for EHS and share ideas, innovations and new ways of addressing issues.

THIS PAGE IS INTENTIONALLY BLANK PAGE.

---