Document Element 9 - Operational Control		Title:	Document Identifier: 126561206
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1. PURPOSE

The Mosaic Operational Control Element establishes the minimum requirements to identify, implement, manage, and assess the effectiveness of operational controls in order to achieve an acceptable level of risk. Operational control is achieved by a variety of methods as administrative controls that includes EHS standards, programs and procedures, manual engineering and automated engineering.

2. SCOPE

The requirements of the Mosaic Management System (MMS) apply to all of Mosaic, with limited exceptions of mergers and acquisitions that are not yet operated by Mosaic.

3. ROLES AND RESPONSIBILITIES

3.1 Senior Leadership

3.1.1 Provide necessary resources to support the development and implementation of operational controls to manage Environment, Health, and Safety (EHS) risks.

3.2 EHS Services

3.2.1 Update Hierarchy of Controls, as needed and communicate to internal and external stakeholders as needed**.**

3.3 Business Unit

3.3.1 Provide necessary resources to support the development and implementation of operational controls to manage EHS risks.
3.3.2 Establish and implement a formal review process for the Business Uni (BU) operational controls.
3.3.3 Participate in the development of new operational controls.

3.4 Site

3.4.1 Provide and request the resources needed from the Business Unit Leadership to implement operational controls as required.
3.4.2 Appoint a Cross-Functional Team (CFT) for the purpose of selecting appropriate operational controls to prioritize the hierarchy of controls to eliminate or mitigate the risk.
3.4.3 Provide necessary training for operational controls.
3.4.4 Participate in the development of new operational controls.
3.4.5 Assign individuals from the site to assume overall responsibility for managing site implementation and compliance with this Element as Element Sponsor and Element Owner.

3.5 Element Sponsor

3.5.1 Champion the implementation, maturity, and improvement of this Element at the site-level.
3.5.2 Monitor the self-assessment and operational control review process.
3.5.3 Facilitate resolution of identified issues and barriers to effective implementation of operational controls.
3.5.4 Communicates operational control system performance, resource requirements, operational impacts, and status of corrective actions to the organization.

3.6 Element Owner

3.6.1 Facilitate integration of element requirements into operations and business practices.
3.6.2 Ensure operational controls are established, communicated, and monitored for priority EHS risks.
3.6.3 Develop and implement a review method and schedule for self-assessment of all operational controls and procedures.
3.6.4 Integrates operational control standard requirements into management of change, document control, and training systems.
3.6.5 Provide routine feedback to Element Sponsor and other Element Owners affected by the operational control process.

3.7 Workers

3.7.1 Follow established operational controls.
3.7.2 Notify management when operational controls are believed to be ineffective or inadequate.

4. SITE REQUIREMENTS

4.1 Implementing Controls

4.1.1 At a minimum, operational controls must meet the following criteria:

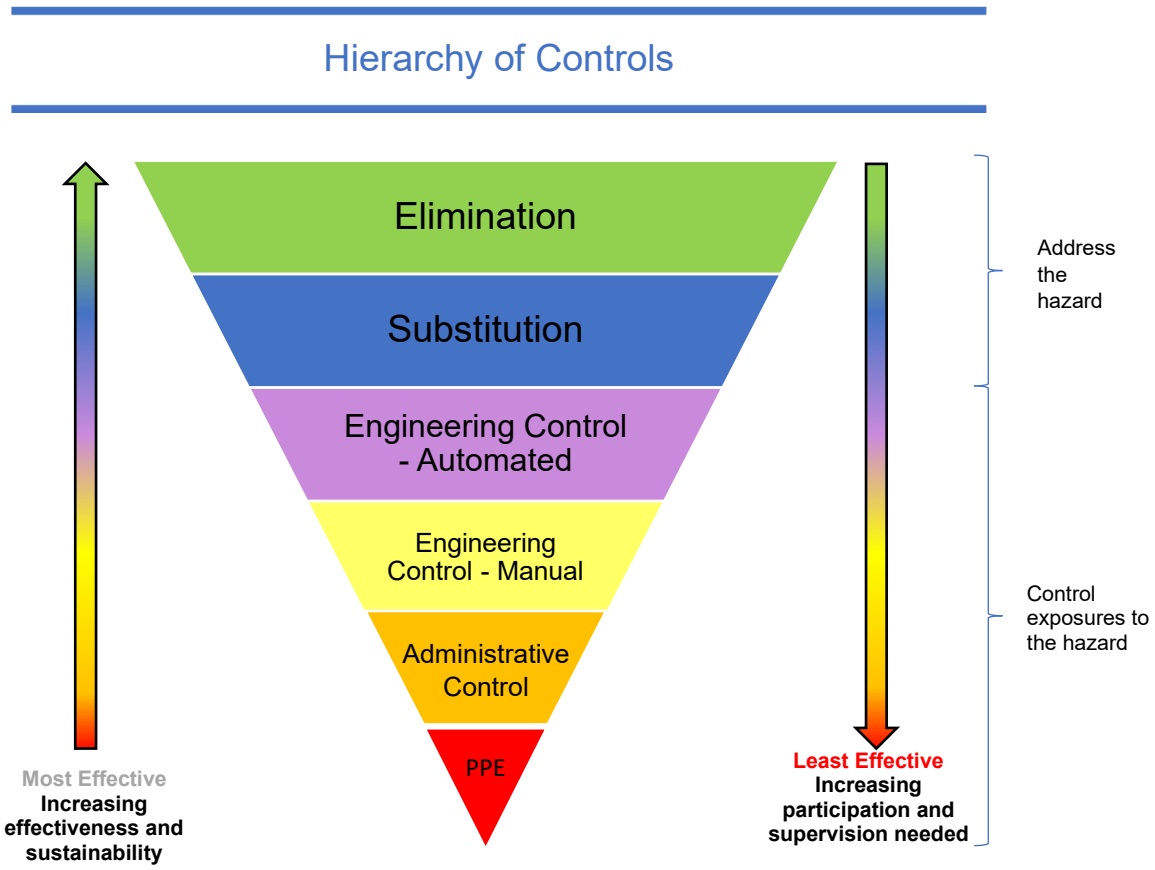
- Operational controls shall be established to meet the organization's objectives, targets, and EHS Policy.
- Procedures must include assignment of responsibility to the individual(s) that have authority and responsibility for the operation, activity, or risk to be controlled.
- Designed so they are effectively communicated, easily available and clearly understood by affected departments and individuals.
- Where training is used as an operational control, it must conform to the requirements of Element 6 – Training and Competency.
- Include a method to detect changes that have the potential to introduce new requirements, hazards or risks to the organization and update controls as necessary.
- Include a method and schedule for review and update all operational controls.
- Incorporated into the organization's self-assessment program and conform to the requirements of Element 13 – Assurance.

4.1.2 A Cross-Functional Team (CFT) shall be appointed for the purpose of selecting appropriate operational controls for the assessed risks.
4.1.3 Appropriate operational controls shall be implemented to reduce EHS risks based on the nature of the operations, the identified EHS risks and opportunities, and the applicable LOR.
4.1.4 Identified EHS risks shall be prioritized with controls implemented to eliminate or reduce risk to acceptable levels.
4.1.5 The required operational controls must be implemented prior to a process starting operation.
4.1.6 A process must be in place to identify the controls required for new and non-routine tasks.
4.1.7 Determine EHS requirements for the procurement of products and services as appropriate and implement controls to eliminate or reduce EHS risk to acceptable levels.
4.1.8 Controls shall be established based on the following hierarchy of controls:

- Elimination,

- Substitution,
- Automated engineering controls,
- Manual engineering controls,
- Administrative controls, and
- Personal protective equipment.

Refer to the following image of the Hierarchy of Controls as it pertains to effectiveness:



4.1.9 The application of the hierarchy of controls shall take into account:

- The nature and extent of the EHS risks being controlled;
- The degree of the EHS risk reduction required;
- The requirements of applicable standards, programs, and regulations;
- Recognized best practices in industry and recognized and generally accepted good engineering practices;
- Available technology; and
- Cost-effectiveness.

4.1.10 A combination of multiple operational controls may be required to attain acceptable residual risk.

4.1.11 EHS critical devices are the engineering operational controls related to equipment designed to prevent operational deviations that may result in EHS incidents such as, but not only, fire, explosions, chemical releases, and other life threating EHS incidents. Examples of critical devices includes, but are not limited to:

- Pressure relief devices
- Emergency stop cables for conveyor belts
- Fire protection devices
- Interlocks process where failure would result in critical EHS incidents

4.2 Managing Controls

4.2.1 Performance and effectiveness of controls shall be monitored with respect to compliance with established parameters.

- Engineering controls shall be evaluated to verify adherence to safe operating parameters.
- Administrative controls shall be evaluated to verify workers adequately understanding and workers can reasonably carry out requirements.

4.2.2 Review and re-evaluate the residual risk considering the implementation of the control and verify the risk level is reduced and maintained at an acceptable level.

4.2.3 Communicate findings or insights on the effectiveness of controls to other sites or BUs as appropriate to support continual improvement and knowledge sharing.

4.2.4 Develop a program to provide guidance on EHS critical devices that includes at the minimum:

- Ensuring that EHS critical devices are installed.
- Updated EHS critical devices inventory.
- Frequency schedule for tests and preventive maintenance.

4.2.5 Communicate and ensure availability of operational controls and requirements to affected personnel.

4.2.6 Integrate into planning operational controls for EHS risks into Element 5 – Objectives and Goals.

4.2.7 Maintain preventive and predictive maintenance programs and procedures to ensure effective operation of EHS monitoring and control equipment, production equipment and site utilities which present potentially significant EHS risk.

4.2.8 Identify and document operational control training requirements and ensure integration in accordance with Element 6 – Training and Competency.

4.2.9 Ensure change which impacts operational control effectiveness is managed in accordance with Element 10 – Management of Change.

4.2.10 Develop a documented review process and schedule for inspections of critical. At a minimum, critical devices shall be reviewed:

- Following the Preventive Maintenance (PM) plan schedule;
- Following the operational inspection plan of the devices, as applicable;
- Upon introduction of regulatory or process change; and
- As warranted by operational change or introduction of new risk.

4.2.11 At minimum, operational controls shall be reviewed:

- Upon introduction of regulatory or process change; and
- As warranted by operational change or introduction of new risk.

5. TRAINING

All employees will receive training on operational controls as appropriate to their duties/tasks. Refresher training will be provided in the event the MMS is modified or otherwise revised.

6. REVIEW

The Operational Controls Element will be reviewed on an annual basis by Corporate EHS and updated as needed. Appropriate communication will occur, as needed, to ensure all employees and contractors are aware of the changes.

7. REFERENCES

- BU Risk Assessment Procedure
- Element 5 - Objectives and Goals
- Element 6 - Training and Competency
- Element 7 - Communication, Participation, and Consultation
- Element 8 - Document and Record Control
- Element 10 - Management of Change
- Element 11 – Emergency Planning and Response
- Element 13 - Assurance

8. DOCUMENT CONTROL

All MMS documents will be controlled in the Mosaic document management system. Any printed documents must be date stamped with the date printed to monitor that the most current version is reviewed.

All documents and records must be retained per the requirements of Element 8 – Document and Record Control and local retention schedules.

9. REVISION HISTORY

Revision Date	Revision Number	Description of Change
04/05/2024	1	1. The purpose has been reviewed to reinforce that manual and automated engineering are also operational controls. 3.6.5. Changed “System Sponsor” to “Element Sponsor” and changed “Standard Owners” to “Element Owners” 4.1.11. Requirement reviewed since it’s already covered on 4.2.11. 4.1.11. Included the definition of Critical Devices 4.2.4. Provided minimum content required for creating a critical device program.

		4.2.10 The requirements of this item have been modified from critical operational controls to critical device and the annual frequency has been reviewed to “Follow the Preventive Maintenance Schedule”. 4.2.11. was added At minimum, operational controls shall be reviewed: Upon introduction of regulatory or process change; and As warranted by operational change or introduction of new risk.