BioMarker Solutions
Group

Stakeholders Guiding Principles

BMSG is a global supplier of materials, reagents and services targeting the health care sector at various points. We support the patient management flow from screening through to late-stage disease with diagnostics, patient support, consultancy, and advisory roles; and interact with authorities, physicians, public and private health-care systems, academia and the general public. We are also active in R&D within these sectors relating to devices, IT, reagents, and consumables.
We are committed to providing high-quality products and services that satisfy a diverse range of customer needs and applications. With facilities on 2 continents and products and services reaching approximately 20 countries, we strive to meet and exceed our customers' expectations. BMSG, together with our suppliers, will provide products and services that meet our commitment of delivering high-quality, safe and responsible products (and services) to our customers.

To meet these commitments, we will select suppliers which adhere to the principles of:

- Ethical and socially acceptable operational and safety standards
- Documented, auditable and transparent quality and safety management programs
- Sustainable and responsible processes, products, and services.

1. Introduction

The principles detailed in this document are designed to assist current and potential stakeholders in supporting our commitments. Our stakeholders are expected to provide goods and services of consistent high quality and safety; with responsible business conduct being of utmost importance. The principles in this document are BMSG's expectations for our stakeholders that will be used for evaluating and auditing our vendors as part of BMSG's vendor management program. These principles are a global standard for BMSG and are based on international standards such as ISO 9001, ISO 26000, national laws and regulations, and UN treaties and conventions.

BMSG expects stakeholders to have full visibility of their supply chain to ensure the necessary hygienic conditions are in place for producing products that are safe and suitable for our intended use. This begins with understanding primary source of packaging and raw materials and continues through incoming and outgoing transportation, manufacturing, and storage or warehousing prior to delivery and acceptance at a BMSE facility. It is expected that stakeholders are current on technical issues and regulatory changes to ensure all applicable standards are met. It is the responsibility of the supplier to educate and train the employees, so they are prepared to comply with all applicable regulations and BMSG's principles.

All BMSG's facilities comply with and/or are certified against a standard benchmarked relative to their activities, and our global ISO9001:2015, and associated ISO accreditations. We expect that all of our raw material and contract manufacturing suppliers will participate in a 3rd party audit program when necessary. Likewise, we will favour stakeholders which adhere to our commitments on corporate social responsibility.

We are pleased that you have accepted the opportunity to become a stakeholder with BMSG. By fully complying with the principles, you will assist us in maintaining our quality reputation and thereby our mutual business success.

If you have any questions or require assistance, please contact your designated BMSG contact.

2. Corporate Social Responsibility

BMSG is committed to being accountable to all of our stakeholders. We strive to be good members of society by actively assuring a sustainable development and respecting all local and international regulations and/or legislation.

We expect that our stakeholders will contribute to this effort by adhering to the following principles:

Human rights

Respect the protection of human rights. Additionally, no employees are to be harassed, punished, or discriminated.

Forced labour

Ensure that all employees work out of their own free will.

Any kind of forced or compulsory labour shall not be tolerated.

Employees shall be free to leave employment after reasonable notice.

Laws and regulations

Respect and comply with applicable local, national, and international laws, rules, and regulations.

Child labour

Not use or permit the use of child labour as stipulated in local and national laws. Should support the efforts of the International Labour Organization (ILO) concerning the minimum age of admission for employment and concerning prohibition and immediate action for elimination of the worst forms of child labour.

Working time and remuneration

Comply with applicable laws, industry standards and any collective agreements on working hours, including overtime and fair remuneration.

Freedom of association and collective bargaining

Respect freedom of association and the right to engage in collective bargaining in accordance with local laws and international conventions.

Health and Safety

Comply with applicable laws regarding health and safety.

Provide a safe and healthy work environment to prevent accidents and injuries, and to minimize the causes of hazards.

Environment

Comply with all applicable environmental laws and regulations, including the upholding of applicable permits and authorizations.

Continuously strive to improve environmental performance.

Business integrity

Have zero tolerance for any violation of competition, fraud, racketeering, money laundering, terrorism, and support anti-trust and anti-corruption laws.

3. Management Responsibility

The stakeholder's executive management shall document, support and maintain functioning Safety and Quality Management systems to ensure safety, quality, and compliance with regulatory requirements and BMSG principles. Support of these systems shall be evident through appropriate staffing, education, and training with routine assessment for effectiveness, and continuous improvement initiatives. There must be a process in place to communicate the stakeholder's quality and safety policy throughout the organization.

Management Review

Stakeholders shall conduct management reviews to analyse their safety and quality management systems to ensure the effectiveness of the programs and to identify opportunities for continuous improvement. The management review should include a review of all activities that may impact quality or safety.

Employee Awareness

Education and Training

Stakeholders shall have employee training and competency assessment programs in place which support the manufacture of safe, quality products to be used as BMSG raw materials, packaging materials and finished goods. Employee training must include quality and safety topics such as good manufacturing practices (GMPs), good laboratory practices (GLPs), and personnel health and hygiene. Stakeholders should ensure all permanent, temporary and contract employees are trained, qualified, and empowered to perform their assigned responsibilities. All training should be documented.

Personal Hygiene/ Illness and Injury

Stakeholders must take appropriate measures to ensure that products are not contaminated during handling. Adequate hand washing facilities shall be provided in rest rooms, break rooms and at entry points into production areas. Work attire shall be suitable, adequate, and clean; company provided uniforms should be worn, where possible. Stakeholders shall maintain adequate control of employee illness, injury and communicable disease that may result in pathogen transmission through products or services.

Notification Requirements

Stakeholders are required to notify BMSG under the circumstances outlined below:

Regulatory Non-Compliance

In the event of an incident that requires communication to regulatory authorities regarding any product supplied to BMSG, the stakeholder must notify BMSG concurrent with any communication given to the regulatory authorities. Copies of any documents or product samples given to regulatory authorities concerning products delivered to BMSG must be made accessible to BMSG if needed.

Changes in Manufacturing Process, Formulation, Specification, or Supply Chains.

Any change to the product specification or manufacturing process that may have an adverse impact on environment, employee health, product quality, or safety must be communicated to BMSE as soon as reasonably possible. Any change of the manufacturing site or interruption or alteration of product supply must also be communicated to BMSE in a timely manner.

4. Good Manufacturing Practices

Stakeholders shall be able to demonstrate effective control of safety and quality, including compliance with regulatory and industry-specific standards such as sanitary design and Good Manufacturing Practices (GMP).

Infrastructure

Facilities and equipment used to manufacture, handle or store materials must be appropriately designed, suitable for their intended use and permit adequate cleaning. Floors shall be constructed to allow adequate drainage to prevent standing water and to allow for cleaning. Production sites must have established programs for the handling and use of water, lighting, boilers, steam, gas, compressed air, etc.
The program shall include monitoring, maintenance, and documentation.

Manufacturing Environment

Waste Management

Stakeholders shall establish a program to manage waste collection and disposal to prevent product contamination, pest attraction and hazards to public health. Waste material containers shall be clearly identified for their intended purpose and remain covered when not in use.

Chemical Control

Stakeholders shall have a chemical control program in place including approved chemical list, Safety Data Sheets (SDS), inventory control and procedures for preparation and use.

Pest Control

Stakeholders shall have a pest control program in place to effectively manage pest activity in the facility and/or surrounding environment. The program must include control procedures and frequency of methods by target areas. Pest control activities must be performed by a licensed pest control operator (or national equivalent) or internal personnel with comparable qualification. Use of all insecticides, fungicides or rodenticides must be in accordance with current local laws and regulations.

Cleaning and Sanitation

Stakeholders shall have a cleaning and sanitation program in place that meets all regulatory requirements and ensures cleanliness. The program must also ensure that all raw materials, packaging, in-process component and finished goods storage areas, and shipping containers are clean and pest-free. A system for verifying and documenting the effectiveness of the cleaning and sanitation program shall be in place.

Plant Traffic Controls and Product Segregation

Traffic patterns of people, machines, and materials shall be controlled to prevent contamination. Products, processes and plant areas shall be adequately segregated to prevent cross-contamination. In facilities handling sensitive materials, the plant structure shall provide adequate physical separation to prevent contamination. For construction activities an effective plan shall be in place to address segregation and containment to prevent contamination. The plan shall include enhanced environmental monitoring in and around construction areas.

Maintenance Practices

Preventive/Corrective Maintenance Program

Stakeholders shall have programs in place to provide for the effective and preventive maintenance of the facility, equipment, and tools. Special attention shall be given to all product-related equipment that may have an impact on quality or safety. The program must be established for interior and exterior maintenance of the building at a predetermined frequency based on the facility age and environmental conditions. Facility inspections shall be conducted per a prearranged schedule and all corrective actions should be documented.

Calibration

Equipment that measures or monitors quality or safety related processes or activities must have a documented calibration program. The calibration program should ensure traceability to applicable national or international standards and include procedures for monitoring the performance of processing and testing equipment to ensure that the equipment continues to perform between calibrations. In case of deviation, a documented program must be in place to ensure that any product produced while equipment has been out of calibration is investigated and evaluated for compliance.

5. Safety Programs

Hazard Analysis Critical Control Point (HACCP)

Each stakeholder location must have a safety program for each producing line and product type that is based upon the 7 commonly accepted principles of HACCP including:

1. Documented hazard analysis detailing chemical (including allergens), physical and biological hazards
2. Identification of Critical Control Points (CCPs)
3. Established critical limits for CCPs
4. Monitoring procedures for CCPs
5. Defined corrective action procedures when Critical Limits are not met
6. Ongoing verification procedures that demonstrate the HACCP system is working
7. Established record-keeping and documentation procedures

The safety program shall be supported by a multi-disciplinary HACCP Team that meets on a regular basis, with minimum annual review and prior to any significant changes. The HACCP team must perform risk assessments that include identification of hazards from raw materials, production processes and customer application. It is preferred that the risk assessment is started at the design level. The HACCP plan shall be validated initially and concurrent to any significant changes such as new constructions, new equipment, and major process changes.

Microbiological Control and Environmental Monitoring

An environmental monitoring program including critical acceptance levels for pathogenic microorganisms must be in place as appropriate for the wellbeing of all employees and any stakeholders that they come into contact. Additionally, a procedure shall be in place to respond to adverse events or GMP breaches of the facility, such as roof leaks and drain backups. Positive results must be immediately investigated, and corrective actions taken to prevent reoccurrence. Potential impact on safety must be evaluated for any products produced since the last time the environment was under control.

Supply Management

Stakeholders shall have controls in place to ensure that purchased materials and services comply with specifications and applicable laws and regulations. Programs shall be implemented to ensure the control of procurement, processing, transportation, storage and preservation of all raw materials and product contact packaging materials throughout their supply chain.

Raw Material and Stakeholder Approval

Stakeholders shall have programs in place to approve raw materials and suppliers of raw and packaging materials. The program must include identification of primary source of raw materials including country of origin, primary and intermediary processing sites, transportation, storage, and warehousing prior to delivery to a BMSG designated facility. The program shall also include documented risk assessments for raw materials and a method for monitoring and evaluating all suppliers. For any BMSG owned formula, changes in raw materials or suppliers must be approved by the appropriate BMSG Quality contact prior to the change.

Control of Incoming Raw Materials and Packaging

Prior to accepting incoming materials, the stakeholder must verify that delivery vehicles have preserved the quality and safety of the materials during transit. Verification activities must include inspection

of internal cleanliness, structural integrity, verification of seals, evidence of pest activity, and verification of temperature for refrigerated or frozen items. Inbound loads suspected of any type of tampering shall be investigated by the stakeholder. The shipment shall be rejected if tampering cannot be excluded.
Stakeholders shall have a program for receipt of materials that ensures that material specifications are met through visual inspection, Certificates of Analysis (CoA) review, and/or product testing. Primary packaging materials shall have a current Certificate of Compliance (CoC) with each shipment or on file. Lot or batch numbers must be recorded for all incoming raw materials and primary packaging materials to ensure traceability.

Warehousing and Distribution

Stakeholders shall have programs in place for the handling of raw materials, intermediate products and finished products throughout their supply chain to maintain product quality, integrity, safety and shelf-life. The stakeholder shall use designated storage areas or stock rooms to prevent damage to, deterioration of or tampering with materials. Storage facilities shall be neat and orderly.
When required the stakeholder shall ensure that products are properly temperature always controlled during storage and transportation. Products not meeting these requirements are subject to rejection by BMSG personnel. If the stakeholder uses third party warehouses to store raw materials, packaging materials, semi-finished or finished products, they shall conduct periodic assessments to ensure that the above principles are met.

6. Quality Controls and Documentation

Document Control and Recordkeeping

Systems shall be in place for developing, deploying and controlling all paper and electronic documentation, records, and data. Records must be maintained, legible, readily identifiable, and retrievable. Procedures, work instructions and forms should be reviewed at predetermined frequencies. All controllable documentation shall be dated and signed or electronically approved by authorized personnel. Stakeholders shall have a document retention policy that includes retention times for paper and electronic records and a system for purging expired documents.

Internal Audit

Periodic audits of the complete quality and safety system should be conducted by the stakeholder to verify the system's effectiveness as well as to identify opportunities for improvement. Audits must be completed on a routine schedule and corrective actions must be implemented on a timely basis.

Hold and Release

Stakeholders shall have a written Hold and Release control program in place for identification, segregation, control, and disposition of all non-conforming raw materials, intermediate products, packaging materials and finished products. The program shall also apply to materials pending QC release. The Hold and Release program shall apply to all materials on the stakeholder's premises or in second party facilities used by the stakeholder. Materials that are on Hold must be controlled by a defined and effective system which is intended to prevent inadvertent use and/or movement. Inventory reconciliation must occur to verify quantities of quarantined materials.

Lot Code and Date of Manufacture

All production runs shall be identified with code dates or batch identification/ lot numbers which enable the supplier to trace raw materials, product contact packaging materials and finished goods one step back and one step forward in the supply chain.

Product Traceability and Mock Recall

Stakeholders must have written recall and traceability procedures in place to record and trace the receipt and usage of raw materials, packaging materials, rework, intermediate and finished products. Procedures shall include up to date 24-hour emergency contact information. Stakeholders must follow all applicable regulatory reporting requirements. Mock recalls shall be conducted at least once per year to validate the effectiveness of the traceability program. Appropriate corrective actions shall be taken when deficiencies or other opportunities for improvement are identified.

Conformance to Specifications

Raw materials, packaging materials and finished products shall be evaluated and confirmed to meet BMSG's specifications as defined by the contract and/or purchase order. A procedure shall be in place for reviewing and accepting BMSG orders and specifications.

Good Laboratory Practices

All plant and contract laboratories and laboratory personnel shall observe Good Laboratory Practice (GLP) principles based upon common industry standards. In the absence of such standards, use Good Laboratory Practice, current European Union Good Laboratory Practices Guidelines, or ISO 17025 as a reference.
Testing laboratories shall use published, recognized, and validated testing methods. Where published test methods are not available, internally developed methods may be used but should be validated for their intended use consistent with GLP requirements. The way the lab is equipped, arranged and managed shall ensure test results are consistent and reliable.

Customer Service

Stakeholders shall have an effective program in place for receiving, evaluating, and responding to customer complaints and inquiries. Complaints should be logged, investigated and trends evaluated as part of the supplier's continuous improvement program.

Non-Conformance, Corrective and Preventive Action (Continuous Improvement)

Stakeholders shall have a continuous improvement program to routinely detect, analyse and correct quality and safety issues that cause non-conformance and to maintain compliance with updates/changes in regulations. The program shall include a documented non-conformance process, including root cause analysis and corrective and preventative action planning. The program should be evaluated periodically to drive continuous improvement, and corrective actions that are taken as a result of the program shall be reviewed to ensure effectiveness.

Facility, Storage and Transportation Security

Security measures shall be in place to control access to storage and production facilities to minimize potential contamination and/or tampering. Stakeholders shall implement systems and procedures to identify people who are regularly on site (e.g. employees and contractors) as well as to restrict access to sensitive areas to authorized people only. The documented facility security program should include routine security checks of the premises, new hire background checks, fencing or other perimeter protection, and secure entrances and exits. Actions to take in the event of a security breach or product tampering incident shall be included in a crisis management procedure.
Security measures shall be in place to control access to transportation loading facilities and vehicles to minimize potential contamination and tampering; this includes inter-company transport and storage as well as owned, leased or contracted conveyances for external transport via road, rail, water, or air. The supplier shall take deliberate steps and implement procedures to monitor and verify the integrity of incoming and outgoing shipments. Records to verify chain of custody shall be maintained. Raw materials, packaging and finished goods must be supplied in suitable tamper-evident packaging or in appropriately security-sealed bulk containers/conveyances. Security seal procedures shall be implemented for all incoming loads of raw materials and packaging material and all outgoing shipments of finished goods.

7. Regulatory Compliance

License to Operate

The stakeholder shall maintain registration and/or authorization for manufacturing of all relevant materials and services as per local regulations. This also includes any relevant local permits for environment and occupational health and safety. The stakeholder shall maintain at the facility records of all regulatory inspections and

contacts, including any reports issued by inspectors, facility response, and corrective actions taken, for a period according to local regulatory requirements.

Labelling Information Approval

Stakeholders shall ensure that labels are correctly and consistently applied to materials supplied to BMSG, and that labels meet applicable regulatory requirements and BMSG specifications. In particular, the supplier shall verify the accuracy of labels for raw material information, net quantity, hazards, and dangerous goods. The supplier shall provide valid Safety Data Sheets (SDS) in the local language of the delivered BMSG unit.