



**VOEGLIN POWER TECHNOLOGIES  
HEALTH, SAFETY &  
ENVIRONMENTAL  
(HSE)  
MANAGEMENT  
SYSTEM**

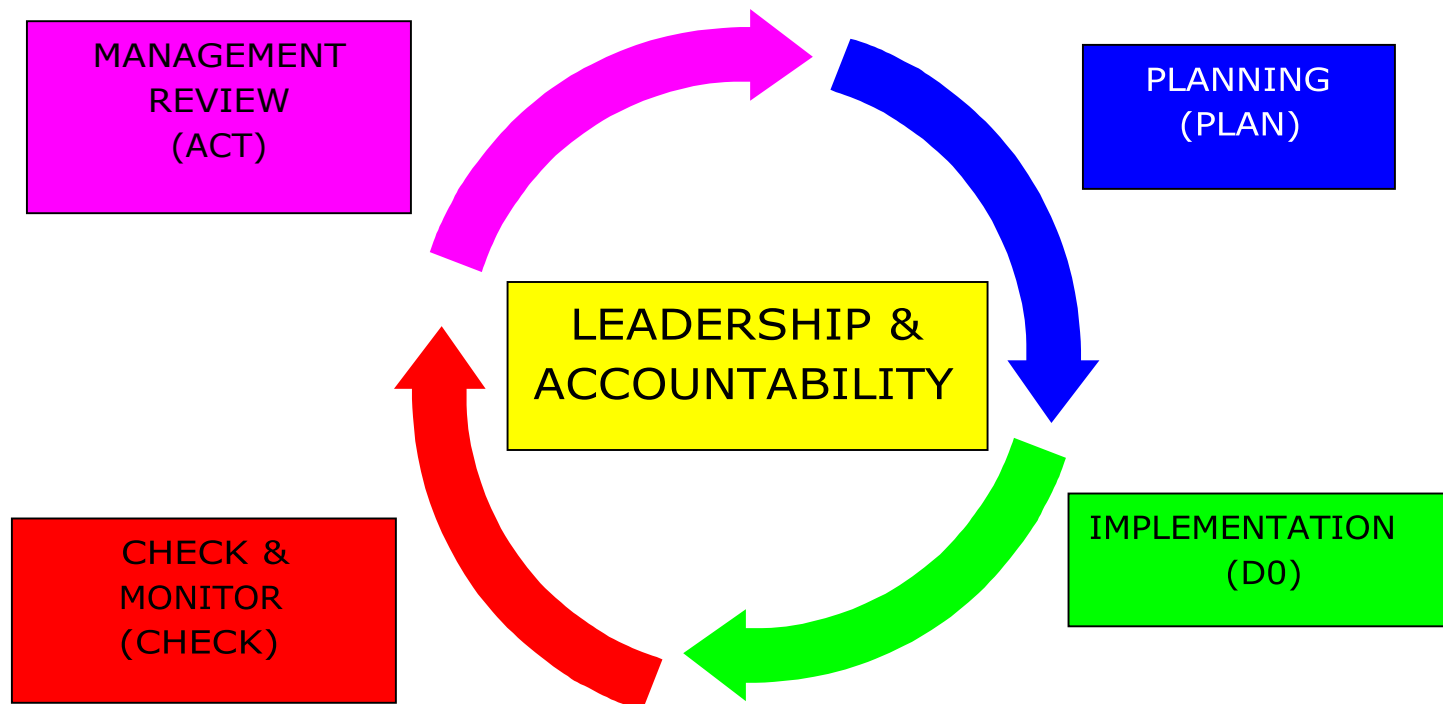


## A. INTRODUCTION

VPT is committed to the highest standard of responsibility in every activity it undertakes to protect the environment, public health and employee safety and to comply fully with all applicable laws and regulations.

Our commitment to protecting the environment and the health and safety of our employees and the communities we serve worldwide represents a critical part of the core values that guide our corporation. As part of that commitment, all VPT employees actively support these values and strive to achieve continual and measurable improvement of all our processes and products.

### *HSE MANAGEMENT SYSTEM*





## B. SCOPE

This Worldwide HSE Management System applies to all VPT businesses, including joint ventures in which VPT holds more than fifty percent share or has operational responsibility or both.

## C. HSE MANAGEMENT SYSTEM ELEMENTS (REQUIREMENTS)

### Leadership & Accountability

#### 1. Management Commitment & Direction

The objective of a clear, written statement of HSE policy serves to establish the standard of expected performance, become a guide whenever a conflict arises between HSE and expediency, and establish a foundation for the HSEMS, plus behavioral and cultural change.

In order for these objectives to be achieved, employee input and buy-in is essential. This can be accomplished through periodic reviews and discussions with all employees, and subsequent follow-up actions to support the policy statement. The HSE policy should be available to employees, dated, signed and issued by top management, and displayed throughout the work area.

Line management will actively demonstrate commitment to protecting the health and safety of employees, the public and the environment through adherence to policy, allocation of resources, visible leadership and the establishment of accountability and communication systems. Continual improvement of HSE performance will be an integral part of every business.

The HSE process must be considered in all aspects of the business (production, cost, quality, engineering, outsourcing, product, etc.) and be tied to objectives and Major Responsibility Areas (MRA's). Structured HSE committees and sub-committees must be chartered and meeting minutes documented. Management must help develop and encourage HSE



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work practices through procedures that establish expectations for all employees, visitors and contractors to follow.

## **2. Employee Roles & Responsibility**

Employee involvement and active participation in the HSE process is critical to identifying and controlling risks. Employees are encouraged to participate in the development of allocation of resources, policy and procedures, correcting unsafe conditions and behaviors, reinforcing safe behaviors, providing solutions for solving problems, action plans, and being responsible for their own safety and that of their fellow workers.

Additionally, each facility shall designate one person (s) in the organization to take full (or part-time) responsibility for the day-to-day administration of the HSE program. Part-time employees must devote enough time to the HSE management system to meet the HSE objectives and goals. The role of the HSE coordinator is to be an advisor and planner to the organization, make recommendations for addressing regulatory compliance issues and risks, serve as a liaison between Corporate HSE and the location, serve on HSE committees and facilitate new initiatives.

## **Planning (PLAN)**

### **3. Hazard Control and Risk Management**

#### **A. Risk Assessment**

Each site will identify the risks and hazards posed to VPT's facilities and operations. Each business shall endeavor to eliminate or manage risks and hazards through sound engineering design, well-executed installation and construction, and appropriate control systems.

Management will assure that new plant and equipment is designed and constructed to be protective of the environment and the health and safety of the workers and public. Each business will incorporate appropriate HSE considerations into facility planning and design, operation and maintenance, shutdown and decommissioning to minimize HSE impacts and liability and maximize the salvage value of company assets.



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Management will assure that plant and processes are operated and maintained in a manner to protect the environment and the health and safety of the workers and public. Critical procedures will be documented and management will assure the competence of the workers to safely operate and maintain facilities.

Provisions must be made for furnishing personal protective equipment (PPE) to employees at those operations where potential risks and/or exposures have not been completely eliminated or controlled through engineering design and revision. Whenever PPE are provided, procedures must be adopted to ensure that the equipment will be used as required and meets regulatory requirements. Local policies should be developed relating to the purchase of approved equipment only, and the maintenance of an adequate supply with replacement parts, whenever practical, with instructions on the issuance, use, care and replacement of such equipment.

Each facility will maintain an accurate and current list of the hazardous materials managed on site, waste streams, and emissions and discharges to air, land, and water. Site management will manage each facility to assure that these activities do not adversely affect the environment, the health of employees or the public.

#### **B. Industrial Hygiene Standards**

Each site shall establish a comprehensive industrial hygiene program to ensure that chemical and physical hazards are identified, evaluated and controlled in accordance with VPT standards on Industrial Hygiene and local/national regulations. Also up-to-date SDS s are to be maintained and readily available for employee review and reference when needed.

#### **C. Management of Change**

Each site shall have management of change procedures in place to ensure that all changes to products, processes, operations and procedures are first thoroughly and systematically evaluated to assure that HSE performance is maintained or enhanced. The evaluation will include experienced professionals in the appropriate HSE fields.

### **4. Documents, Records & Regulatory Compliance**



All documents and data needed to manage operations and demonstrate compliance with this management system and regulatory requirements will be maintained in accordance with VPT' records retention policy (See Financial Standards, Ref. No. G.270 Section L).

Each facility will assure that all personnel, as appropriate, understand and comply with all HSE laws, regulations and ordinances relevant to their operations and activities. Every business unit and facility will maintain all necessary permits, licenses and other approvals or registrations, in current and operative status. Each business unit and facility will maintain documentation of compliance with applicable HSE laws, regulations and permits.

## Implementation (D0)

### **5. Education & Training**

Education and training is a fundamental part of an HSE program, and an important factor in incident prevention. Management will assure that all employees (managers, technical, staff, office, temporary, field services, etc.) receive HSE training appropriate for their job duties. At a minimum, training will include VPT policies and standards, compliance requirements, and management of HSE risks.

All HSE professionals will have appropriate education, experience, and training sufficient to perform their duties. HSE tasks performed by non-HSE professionals will meet the same standards of performance as those performed by HSE professionals. Training shall be documented and verified through testing when appropriate.

All visitors and contractors on VPT facilities or job sites shall receive an orientation prior to beginning work.

### **6. HSE Communications**

Management will regularly communicate its commitment to the continual improvement of HSE performance, articulating the responsibilities of all employees in achieving the desired level of performance and sharing with employee progress in meeting those



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objectives. Each facility will maintain a positive relationship with its home community, including appropriate communications describing the nature of the operations and the hazardous materials manufactured or handled. Each facility will participate as appropriate with local agencies, authorities and the public to minimize the risk posed by our products and activities.

An online HSE information management system is used to track information and communicate with all levels of management. This form of the communication should support the organization by generating management reports, participating in staff meetings, developing internal HSE notifications and updates to help employees to stay aware, up-to-date and focused. In some cases there needs to be a system for sharing information with other sites, divisions and even the corporation when a serious incident occurred, or a milestone has been reached. To keep vigilance on HSE, sites can use banners, signs, and incentive programs to help communicate HSE.

HSE meetings shall be used to communicate HSE issues and train employees. The frequency of the meetings shall be based on the needs of the facility. The results of the meetings shall be documented.

## **7. Rules & Procedures**

HSE rules and procedures shall be established and made available to all employees. Also departmental rules and procedures shall be established based on the safe operation and handling of specific equipment, process jobs or machines. These rules and procedures should be developed based on site job requirements and any applicable regulatory requirements. All HSE rules and procedures should have significant employee input.

Specific procedures such as control of energy sources, hot work, confined space entry and hazard communication should be in place based on the applicability to the site.

## **8. Emergency Planning & Crisis Management**

Each facility shall have plans in place, as applicable, to address emergencies and crisis situations that may result from fire, serious injury, natural disaster, process upset, civil unrest, or environmental release. The plan shall include evacuation procedures, fire and rescue



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resources, training, disaster recovery, command center operation, facility lock-down, and periodic drills.

Sites that require the development of an Business Resumption /Business Continuity Plan ensures that the plan is up-to-date and tested every 24 months.

Employees must be trained in evacuation procedures and how to access information (e.g. – VPT Emergency Information Phone number and Intranet Site) following a shutdown of a facility during an event such as a hurricane, etc. Phone trees for communication to employees during and after an emergency shall be updated at least annually.

Local emergency resources must be given a periodic tour and a copy of the emergency plan. Facilities that have an Emergency Response Team (ERT) or Fire Brigade must ensure that the appropriate training has been given to their members before responding to fires, spills or other disasters. Key vendors and suppliers that will be needed during emergency or crisis situations shall be identified.

Emergency equipment shall be adequate for the facility and maintained in working order.

## **9. Health & Medical Programs**

Every facility shall establish and maintain pre-placement and periodic medical examination and testing programs appropriate for exposures or job functions reasonably expected in the workplace. Arrangements shall be made with a local physician/clinic to conduct medical examinations and provide treatment for occupational injuries and illnesses.

Every facility shall provide appropriate medical treatment for all work-related illnesses and injuries. Appropriate medical approval shall be required to return to work following an extended illness or injury. A light duty/return-to-work program shall be established at all sites.

Pre-employment, post incident and random substance abuse testing programs shall be established at all sites unless prohibited by law.

Each facility shall establish a program for addressing health issues for employees who travel to regions of the world where there is a risk of disease. The program shall include appropriate training and





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immunizations. For areas where malaria is a high risk, the VPT Malaria Control Procedure shall be followed.

Sites shall identify the leading causes of absenteeism and establish programs, such as wellness initiatives, to address these issues.

## **10. Contractor & Vendor (Supplier) Management**

Management will assure that all contract services performed for the company are suitably protective of the environment and of human health and safety. Contractors working on VPT sites will perform their tasks in accordance with VPT's HSE standards. Sites shall have a written procedure for managing contractors and vendors that meet the requirements of the VPT Contractor Procedure. Appropriate HSE information (i.e.-current and past HSE performance, programs, policies, etc.) shall be requested as part of the job bid package. Once the contractor has been selected and is on the job site, provisions shall be made for an HSE orientation.

VPT' employees working as contractors on customer sites will perform their duties in accordance to VPT HSE standards or their equivalent. Off-site contract services (toll or outsource manufacturing, trans-loading, warehousing, waste treatment) will be held to appropriately high standards of HSE performance.

Periodic audits of contractors and vendors shall be conducted, and results documented.

## **11. Product Safety**

Management will incorporate appropriate considerations for HSE into all stages of each product including design and development, manufacture/formulation/assembly, distribution, storage, end use and final disposal. These considerations will include the facilities and equipment used to manufacture, store and distribute VPT' s products.

## **12. Security & Travel Safety**

### **A. Security**

It is important to have a formalized security program in place that complies with corporate and in some cases government procedures. Each business and site will have in place



appropriate measures to protect its facilities and assets, business information, products, wastes and other materials from unauthorized personnel. These security efforts will be designed to prevent unauthorized personnel from putting the environment, human health or safety or VPT's ability to effectively conduct its business at risk.

The security force or other appropriate personnel should be trained in assessing risk and administering an orientation program to visitors. Also maintain day-to-day security activities which involve: entry/exiting, emergency response plan, badges, screening practices, theft (vandalism) and in some cases, decontamination procedures.

Standard programs and processes such as perimeter guarding, guard services, alarm systems, business resumption plans, workplace violence programs, background checks etc. are examples of measures to be considered to address security risks at facilities.

## **B. Travel Safety**

All employees who travel should take proper precautions to ensure their safety. As a minimum, the Corporate Security Web Page should be accessed to review travel safety guidelines, bans or advisories; country profiles if you are traveling internationally; and other important information. It is also advised that a contact person, including phone number, be obtained prior to visiting a site. Defensive driving safety training is recommended for those employees who drive vehicles during company business.

Prior to beginning a field service and installation job, emergency response and medical contact phone numbers should be obtained. Additionally, upon arrival at the site, an evaluation of the work area should be conducted to identify potential emergency situations, evacuation routes and any emergency procedures required by the customer. Employees who travel internationally should also carry SOS or equivalent medical cards, download the phone app, receive appropriate immunizations and carry first aid kits if medical services are not readily available.

Employees traveling to high risk countries are required to complete an EBTR (Essential Business Travel Request). The EBTR form is available on the corporate security site along with a list of countries considered to be high risk. Travel to high risk



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countries will only be granted if an employee submits and EBTR to the Corporate Director EHS & Security and approval is granted by the business unit's VP.

Registered company trips can be monitored through the ISOS travel tracking program. Information can be gathered to ensure the safety of travelers during business trips. Employees can be accounted for and communicated with if a risk is encountered during their trip.

## Checking & Monitoring (CHECK)

### **13 Audits & Inspections**

The effect that the site HSE management process is having on HSE performance can be monitored by a series of audits and inspections designed to identify and correct unsafe behavior and conditions. These programs shall be present at each site and involve all levels of the organization. For the purposes of this element of the HSEMS, **audits** are spot checks that are conducted of behavior, conditions, programs, etc. while **inspections** are detailed evaluations of equipment, work areas, procedures, regulations etc.

#### **a. Audits**

Each facility shall have an audit program specifically focusing on at-risk behavior and unsafe conditions. The audits should address all shifts, areas and employees and be conducted periodically by a cross section of the workforce. The behavioral audit program shall meet the criteria as specified by the Target Zero process.

#### **b. Inspections**

1. **Preventative Maintenance (PM)** – The equipment requirements for facilities will vary depending upon the layout, size and nature of the building or work site. Nearly all locations will have certain general requirements and facilities which require periodic inspections by engineering and maintenance personnel. The frequency of these inspections will vary to some extent depending on the equipment, its frequency of use and nature of conditions being disclosed as a result of experience. Each location will develop a written checklist for those items requiring periodic inspections. Appropriate personnel will be assigned to ensure that the inspections are conducted, results documented, and corrections made.



**2. General Inspections** – Each location shall implement a program to ensure that operating and fire/emergency equipment are regularly inspected as required by law, code or risk. Additionally general housekeeping inspections should be included.

The audit and inspection programs shall have a requirement for providing feedback and a tracking mechanism to ensure follow-up and closure of audit and inspection findings.

**3. Regulatory Inspections** – Each site shall implement a process for assessing compliance with appropriate regulatory requirements.

This entire process is reviewed periodically by our internal Corporate HSE Audit process. Major lines of business of VPT are visited by a cross functional internal audit team.

## **14. Incident Reporting & Investigation**

Each facility shall have a written procedure for reporting and investigating all incidents as required by the Corporate HSE standards.

Site management will investigate incidents and near misses that had (or might have had), significant consequences for employees, the local community, the environment or plant facilities. All investigations will be conducted promptly and will gather sufficient information to identify the direct and indirect (root causes) of each incident. The site will implement corrective action to prevent recurrence of the event as quickly as possible and will document such corrective action.

Annually an analysis of all incident investigations will be conducted to determine corrective action to address deficiencies relating to the HSEMS, environmental, unsafe conditions and at-risk behaviors.

## **15. Corporate Social Responsibility**

Thriving as a business by supporting the success and sustainability of our customers and our communities.

### **Inside**

#### **People**

- Empower our employees to contribute to CSR

#### **Processes**

- Minimize waste streams



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- Improve resource efficiency
  - Provide visibility and accountability for resource usage

### **Outside**

#### **Solutions**

- Understand our customers' CSR goals
- Continually improve efficiency of our product offerings
- Communicate successes to customers

#### **Communities**

- Give back to our communities
- Be responsible stewards and citizens

## **Management Review (ACT)**

### **16. Process Assessment & Improvement**

Business and site management will periodically assess its HSEMS, HSE performance, conformance with VPT HSE standards and compliance with all legal and regulatory requirements. This evaluation will be performed at least annually to drive continual improvement of HSE performance and will be formally documented in an HSE Improvement Plan.

