

ENVIRONMENTAL MANAGEMENT POLICY MANUAL

PALM BAY OPERATIONS

INTRODUCTION:

This manual describes the Environmental Management System (EMS) policy directives to fulfill requirements as stated in the Environmental Policy and to ISO 14001:2015. The manual also describes the policy, objectives and responsibilities applicable to Renesas Electronics America Inc., Palm Bay, FL Manufacturing Operations (hereafter referred to as REA Palm Bay.)

PURPOSE:

- **Formally document the policy, objectives and organization for the EMS in Palm Bay in order to facilitate its understanding, implementation and maintenance.**
- **Clearly define the roles, responsibilities and authorities for environmental control for all relevant functions and levels.**
- **Provide an overview of the systematic approach and framework of environment management to achieve intended outcomes and contribute to environmental sustainability.**

Intended Outcomes:

- Protect the environment by preventing or mitigating adverse environmental risks and impacts
- Mitigate the potential adverse effect of environmental conditions
- Assist in the fulfillment of compliance obligations
- Enhance environmental performance
- Control or influence environmental impacts from life cycle perspective
- Achieve financial and operational benefits from implementing environmental activities
- Communicate environmental information to relevant interested parties.
- Achieve our environmental objectives

ENVIRONMENTAL MANAGEMENT SYSTEM OUTCOMES

Three key intended outcomes of the Palm Bay Environmental Management System are as follows:

- 1) enhancement of environmental performance;
- 2) fulfillment of compliance obligations;
- 3) achievement of environmental objectives



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SITE OVERVIEW

COMPANY NAME: RENESAS ELECTRONICS AMERICA INC.
1650 ROBERT J. CONLAN BLVD.,
PALM BAY, FL 32905 USA

AREA: LAND: 119 ACRES
DEVELOPED: 60 ACRES

LOCATION: LONGITUDE: 80°36'10"W
LATITUDE: 28°02'05"N

PRODUCTION SHIFTS: FAB: 4 – 12 HR. SHIFTS (A,B,C,D)
ENGINEERING SUPPORT M-F (8-5)

PAT: 3 – 8 HR. SHIFTS (1ST, 2ND, 3RD)
ENGINEERING SUPPORT M-F (8-5)

ADMINISTRATIVE ACTIVITIES: M – F, STANDARD WORKDAY

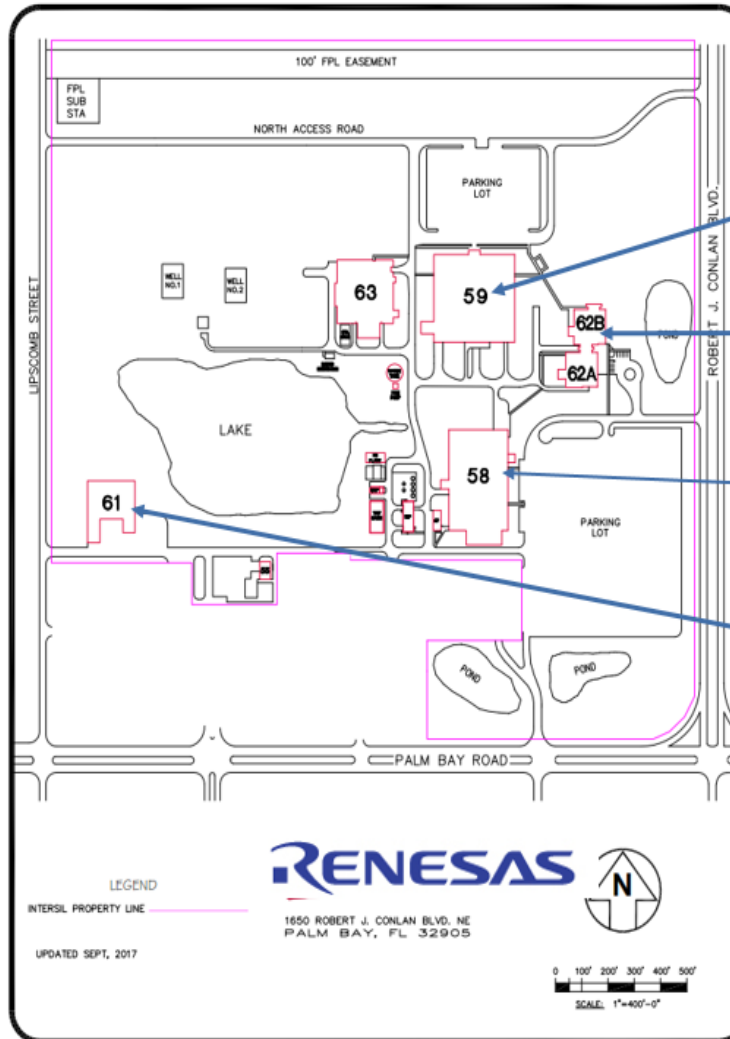
PRODUCTS: SEMICONDUCTORS DEVICES

STANDARD INDUSTRY CODE (SIC): 3674

ISO 14001 CERTIFICATE NUMBER: CERT-03115-2004-AE-HOU-ANAB
INITIAL CERTIFICATION DATE: 31 JANUARY, 2001

PALM BAY SITE - LAYOUT

- 119 Acre Site
- 8 Buildings
- 534 K Square Feet Space
- 503 K Square Feet manufacturing support areas and offices
- Peak Electric Load ~7000 KW
- 1.8 MGD Waste Water Treatment Plant Capacity (Actual usage 300K GPD)
- 21K GPD City water use
 - 13.5K GPD Recycled water use
- DI Water Plant Capacity 300K GPD (actual usage 120K GPD)
- 1 Cafeteria
- 1,700 Parking Spaces



Fab 59-31k Sq Ft clean room

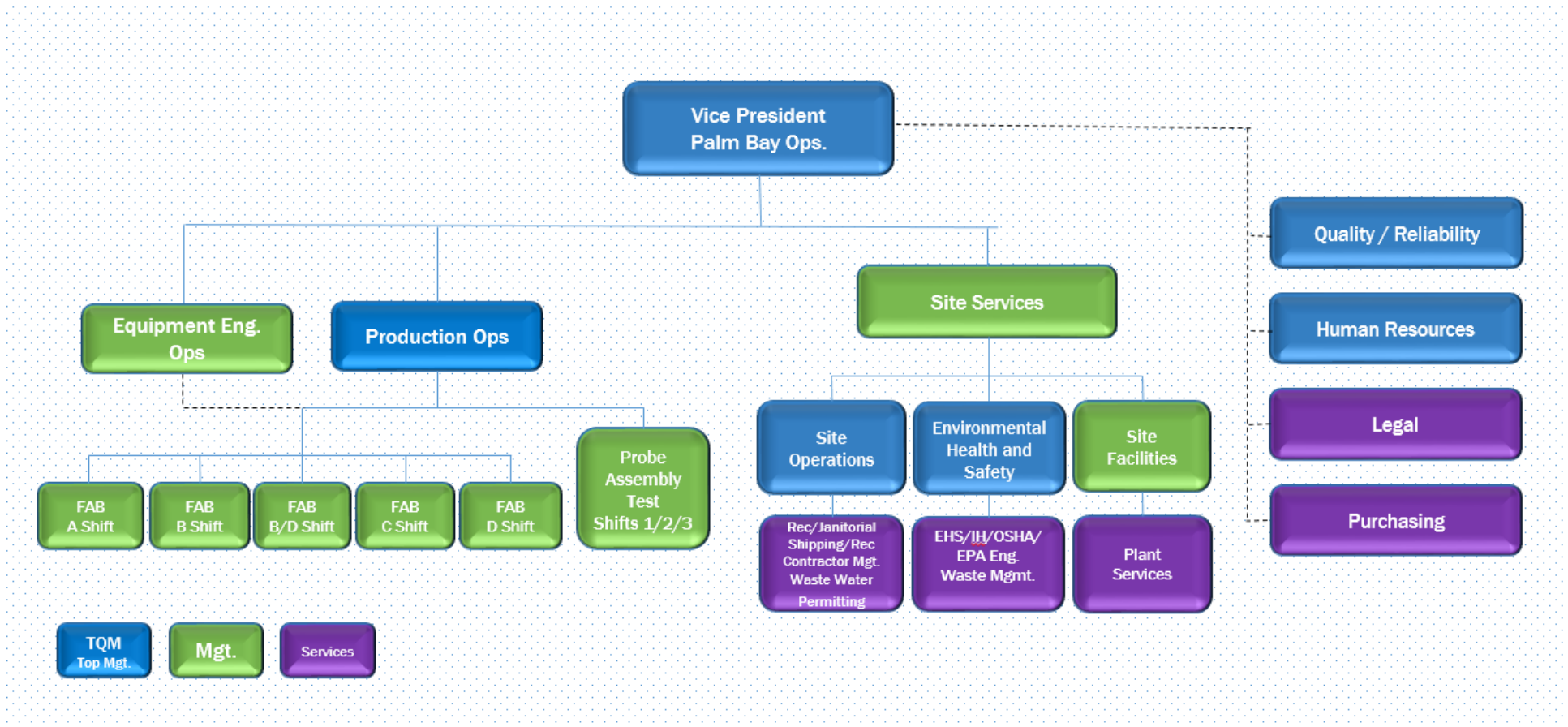
62A/B – General offices
Engineering
IT

58-Probe-20k Sq Ft
58-Assembly-12k Sq Ft

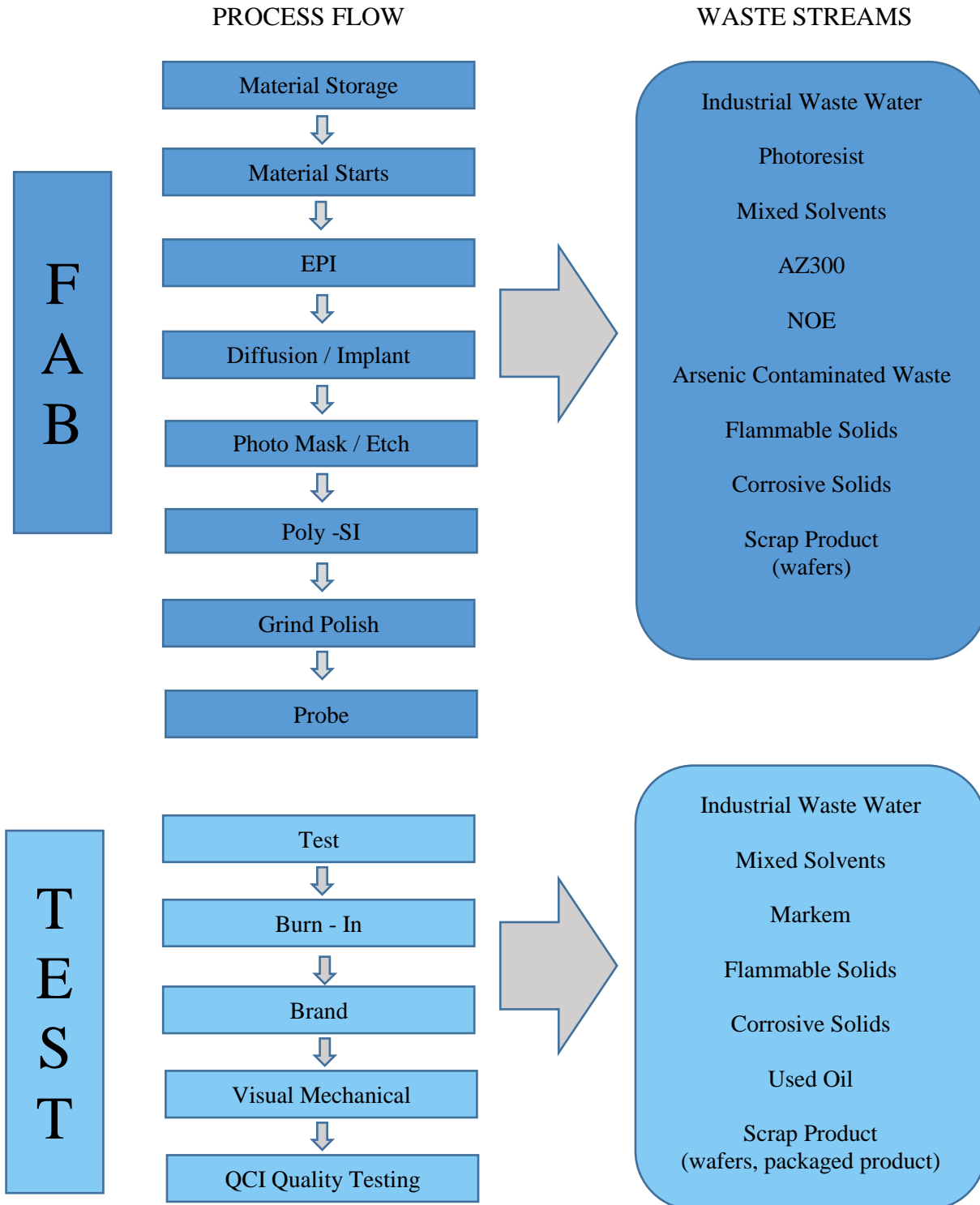
61-Receiving

PALM BAY SITE ORGANIZATION

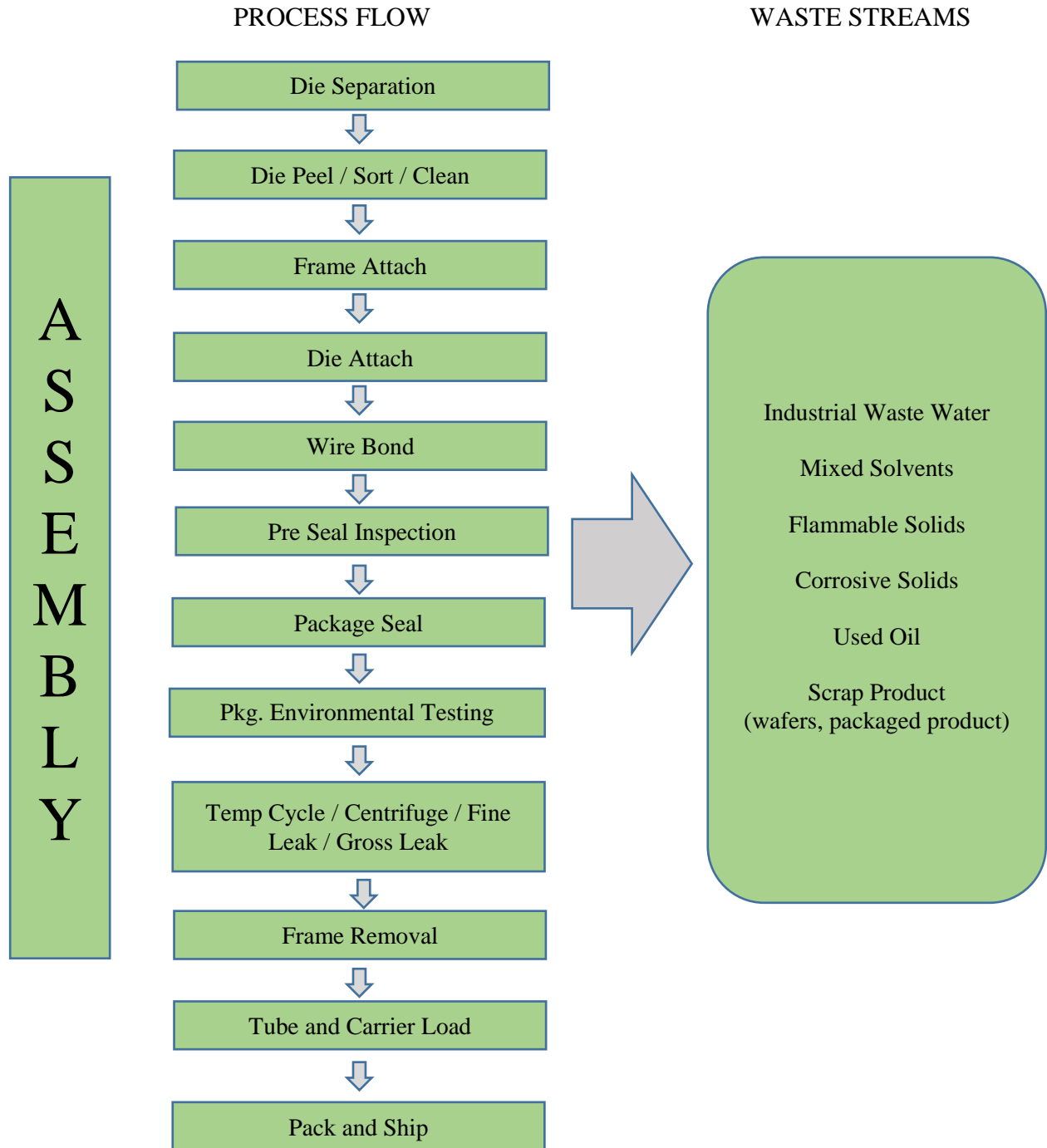
(As of 16, Mar, 2018)



PALM BAY OPERATIONS PROCESS FLOW WITH WASTE STREAMS



PALM BAY OPERATIONS PROCESS FLOW WITH WASTE STREAMS Cont.



Note: Process flow excludes universal waste and, recyclable materials collected from support functions

Environmental Management Systems Model

Plan Do Check Act (PDCA Model)

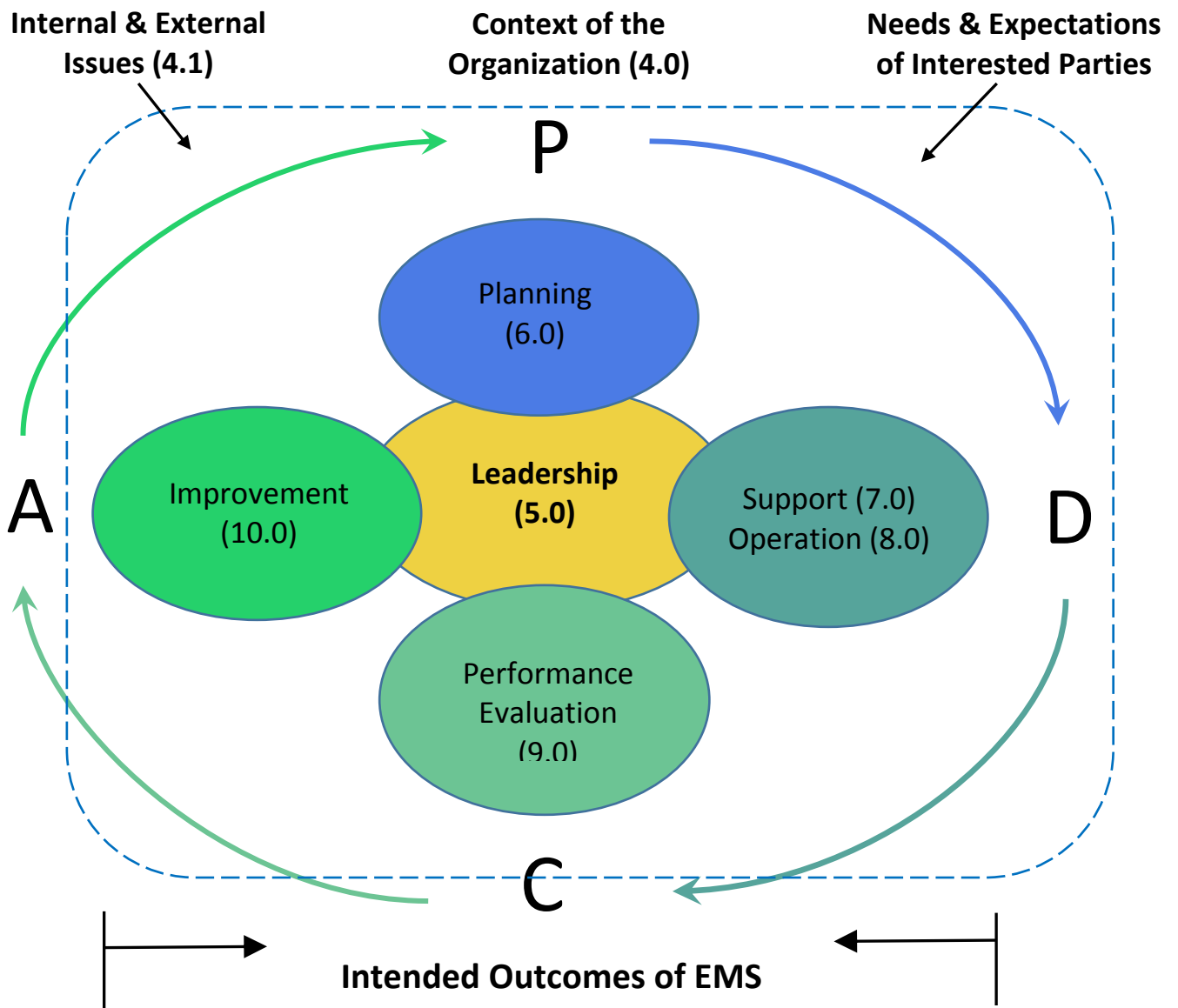
REA Palm Bay utilizes the PDCA model below in our Environmental Management System.

Plan (P): Establish environmental objectives and processes necessary to deliver results in accordance with site environmental policy.

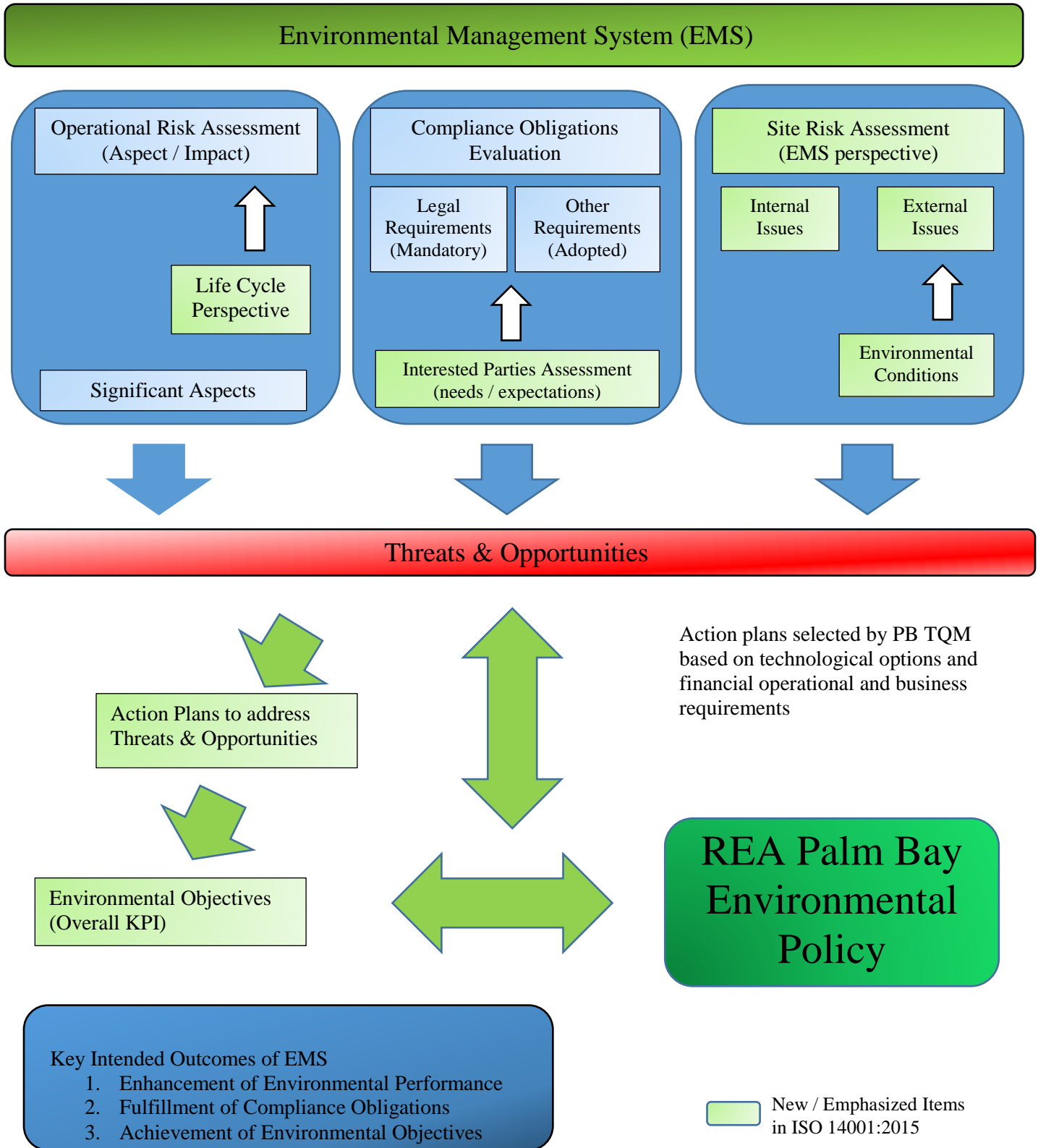
Do (D): Implement the processes planned.

Check (C): Monitor and measure processes against policy, objectives and operating criteria and report the results.

Act (A): Take actions to continually improve.



Overview of REA Palm Bay Environmental Management System



Action plans selected by PB TQM based on technological options and financial operational and business requirements

1.0 SCOPE

This Environmental Management Policy Manual specifies the requirements of our environmental management system and is designed to comply with requirements of ISO 14001:2015 and to align with the REA Palm Bay site environmental policy.

1.1 Boundaries of Our EMS

This Environmental Management System applies to the REA manufacturing facility located in Palm Bay, Florida where power management and high performance analog integrated circuits are designed and manufactured. This manual has taken into consideration the extent of control or influence our organization can exert over all associated activities, products and services and is designed to address internal and external issues, compliance obligations, organizational activities and functions and the site infrastructure and grounds that may influence our environmental performance, as defined within this manual.



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2.0 REFERENCE DOCUMENTS

ISO 14001:2015 Environmental management systems – Requirements with guidance for use
 PB4-02 Palm Bay Manufacturing Environmental Policy
 QOP-REA-001 Quality Systems Manual

ISO 14001:2015 Cross Reference

ISO 14001:2015 Element	Description	Applicable Documents Palm Bay
<u>4.1</u>	Understanding the organization and its context	<u>PB-TQM-001, QOP-REA-001, 999074-BPR</u>
<u>4.2</u>	Understanding the needs and expectations of interested parties	<u>PB-TQM-001, QOP-REA-001, 999074-BPR, 897035, 897036</u>
<u>4.3</u>	Determining the scope of the environmental management system	<u>PB-TQM-001, QOP-REA-001, 897035, 897036, 897039</u>
<u>4.4</u>	Environmental management system	<u>PB-TQM-001, 897XXX</u>
<u>5.1</u>	Leadership and commitment	<u>PB-TQM-001</u>
<u>5.2</u>	Environmental policy	<u>PB-TQM-001</u>
<u>5.3</u>	Organizational roles, responsibilities and authorities	<u>EMPM-PB-001 – Chart A, PB-TQM-001</u>
<u>6.1.1</u>	General actions to address risks and opportunities	<u>897039, 897036, 880041, 880041-001</u>
<u>6.1.2</u>	Environmental aspects	<u>897039, SUB-GREEN, 880041, 880041-001, 897035, 897036</u>
<u>6.1.3</u>	Compliance obligations	<u>897035, 897036,</u>
<u>6.1.4</u>	Planning action to address risks and opportunities	<u>897035, 897036, 897039, 240113</u>
<u>6.2.1</u>	Environmental objectives	<u>PB-TQM-001, 897039, 897036</u>
<u>6.2.2</u>	Planning to achieve environmental objectives	<u>PB-TQM-001, 897039, 897035</u>
<u>7.1</u>	Resources	<u>PB-TQM-001</u>
<u>7.2</u>	Competence	<u>880012-NEW-HIRE, Job Descriptions, Training Specifications,</u>
<u>7.3</u>	Awareness	<u>PB-TQM-001, EMPM-PB-001, 897029, 897033, 897034, 897035, 897038, 897040, 897041</u>
<u>7.4.1</u>	General communication	<u>EMPM-PB-001 Appendix C</u>
<u>7.4.2</u>	Internal communication	<u>EMPM-PB-001, 880041, 880041-001</u>
<u>7.4.3</u>	External communication	<u>EMPM-PB-001, 897039, 897036, 897035,</u>
<u>7.5.1</u>	General documented information	<u>EMPM-PB-001, PB-TQM-001</u>
<u>7.5.2</u>	Creating and updating documentation	<u>DOC-PROC-ALL</u>
<u>7.5.3</u>	Control of documented information	<u>DOC-PROC-ALL, 880037</u>
<u>8.1</u>	Operational planning and control	<u>897035, 897036, 897039, 999056-XXX</u>
<u>8.2</u>	Emergency preparedness and response	<u>880041, 880041-001, 897029, 897033, 897034, 897035, 897038, 897040, 897041</u>
<u>9.1.1</u>	Monitoring, measurement, analysis and evaluation	<u>897035, 897036, 897037, 897039, 897029</u>
<u>9.1.2</u>	Evaluation of compliance	<u>240113, 897035, 897036, 897037</u>
<u>9.2.1</u>	Internal audit	<u>240113</u>
<u>9.2.2</u>	Internal audit program	<u>240113</u>
<u>9.3</u>	Management review	<u>PB-TQM-001</u>
<u>10.1</u>	Improvement	<u>999074-BPR, PB-TQM-001, EMPM-PB-001, 897039</u>
<u>10.2</u>	Nonconformity and corrective action	<u>240113, 990032</u>
<u>10.3</u>	Continual improvement	<u>999074-BPR, PB-TQM-001, EMPM-PB-001</u>

* Area specific record requirements are included in the applicable process procedure.

3.0 TERMS AND DEFINITIONS

3.1 For the purposes of this Environmental Manual, the terms and definitions given in ISO 14001:2015 apply. Terms defined in ISO 14001 are shown in Table 3 at the back of this document

4.0 CONTEXT OF THE ORGANIZATION

4.1 Understanding the organization and its context

Renesas Electronics America Inc., Palm Bay has determined external and internal issues that are relevant to our purpose and that affect our ability to achieve the intended outcomes of our environmental management system. Such issues include environmental conditions that affect or have the capability to affect our organization.

4.1.1 External and internal issues are monitored and reviewed on an ongoing basis, and, necessary changes are implemented in the EMS as required.

Relevant Internal / External Issues may include:

- a) Environmental conditions that affect our purpose or be affected by its aspects
- b) External factors and competitive circumstances
- c) Internal characteristics

REFERENCE DOCUMENT:

PB-TQM-001 Palm Bay Total Quality Management

4.2 Understanding the needs and expectations of interested parties

Our organization has:

- a) determined the interested parties that are relevant to our environmental management system;
- b) reviewed the relevant needs and expectations (i.e. requirements) of these interested parties;
- c) identified which of these needs and expectations become our compliance obligations.

4.2.1 Due to their effect or potential effect on our ability to consistently provide products that meet customer and applicable statutory and regulatory requirements, REA Palm Bay has identified internal and external interested parties that are relevant to the EMS, their requirements and the associated processes needed to meet their expectations. Interested parties are monitored and reviewed on an ongoing basis, and, when appropriate, changes are implemented in the EMS.

REFERENCE DOCUMENT: (Listing of Interested Parties)

PB-TQM-001 "Interested Parties" (located in Intrepid on the properties Page)

4.3 Determining the scope of the environmental management system

REA Palm Bay has determined the boundaries and applicability of the environmental management system to establish its scope by considering:

- a) the external and internal issues referred to in 4.1;
- b) the compliance obligations referred to in 4.2;
- c) its organizational units, functions and physical boundaries;
- d) its activities, product and services;
- e) its authority and ability to exercise control and influence

All REA Palm Bay activities, products and services defined within the scope have been included in the environmental management system.

4.3.1 The scope of our environmental management system has been established based on the elements in 4.3 and endorsed by Palm Bay Top Management at Management Review. Our scope is maintained as documented information within this manual and may be communicated to interested parties upon request.

REFERENCE DOCUMENT:

PB-TQM-001 Palm Bay Total Quality Management

4.4 Environmental management system

To achieve the intended outcomes, including enhancing its environmental performance, REA Palm Bay has established, implemented, is maintaining and continually improving the environmental management system, including the processes needed and their interactions, in accordance with the requirements of the ISO 14001:2015 standard.

4.4.1 Our organization uses the PDCA model and documented information, page 8 to establish, maintain and continually improve our Environmental Management System.

The assessment for Clause 4.1 Understanding the organization and its context & 4.2 Understanding the needs and expectations of interested parties shall be reviewed twice per year during Management Review to determine if changes to the EMS are warranted.

Reference overview of REA Palm Bay Environmental Management System diagram, page 9.

Exclusions - The following table gives a list of items excluded from the scope of our EMS.

No.	Items Excluded	Reason for Exclusion
1	None	

REFERENCE DOCUMENT:

PB-TQM-001 Palm Bay Total Quality Management

5.0 LEADERSHIP

5.1 Leadership and commitment

Top management of our organization demonstrates leadership and commitment with respect to the environmental management system by:

- a) taking accountability for the effectiveness of the environmental management system;
- b) ensuring that the environmental policy and environmental objectives are established and are compatible with the strategic direction and the context of the organization;
- c) ensuring the integration of the environmental management system requirements into the organization's business processes;
- d) ensuring that the resources needed for the environmental management system are available;
- e) communicating the importance of effective environmental management and of conforming to the environmental management system requirements;
- f) ensuring that the environmental management system achieves its intended outcomes;
- g) directing and supporting persons to contribute to the effectiveness of the environmental management system;
- h) promoting continual improvement;
- i) supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

5.1.1 Top Management is defined as the REA Palm Bay TQM Steering Committee (hereafter referred to as PB TQM) as identified in our Organization Chart, page 5. The VP of Palm Bay Operations provides active leadership to the TQM and is ultimately responsible for the strategic direction and effectiveness of our EMS. The TQM has taken actions to instill a culture of environmental awareness with focus on continuous improvement of environmental performance, to delegate environmental responsibilities and to promote the integration of EMS requirements into standard business processes where appropriate.

The TQM may delegate responsibility for above actions to others but retains accountability for ensuring the actions are performed according to procedures.

REFERENCE DOCUMENT:

PB-TQM-001 Palm Bay Total Quality Management

5.2 Environmental policy

Top Management has established, implemented and is responsible for maintaining an environmental policy that has been adopted by the Palm Bay facility that, within the defined scope of our environmental management system:

- a) is appropriate to the purpose and context of the organization, including the nature, scale and environmental impacts of its activities, products and services;
- b) provides a framework for setting environmental objectives;
- c) includes a commitment to the protection of the environment, including prevention of pollution and other specific commitment(s) relevant to the context of the organization;
- d) includes a commitment to fulfil its compliance obligations;
- e) includes a commitment to continual improvement of the environmental management system to enhance environmental performance.

5.2.1 The Palm Bay Environmental Policy has been endorsed by the sites Top Management, is reviewed twice per year by the PB TQM, is maintained as documented information within this manual, is communicated within the organization, and is posted to REA website to be made available to interested parties.

[Link to Renesas External Environmental Data and Support Web Page](#)

PALM BAY OPERATIONS ENVIRONMENTAL POLICY

Our policy is to conduct business operations in a manner consistent with the principles of environmental stewardship. This includes pollution prevention, conservative management of scarce resources, and appropriate disposition of waste materials, emphasizing reuse and recycling. We believe that taking an active part in health & safety and protecting the environment is our responsibility to our employees, our customers, and the communities in which we operate. Renesas and its employees are committed to ensuring that the company's operations comply with both the letter and intent of all applicable environmental laws and regulations.

Administration Guidelines:

Palm Bay Operations will implement this policy by establishing and maintaining an environmental management system, which will ensure that:

- Our environmental policy takes into account the context of our organization; and covers the entire scope of the organization.
- Our site operations comply with mandatory national, state and local environmental laws and regulations.
- The relevant needs and expectations of interested parties are included in our compliance obligations.
- Necessary training is conducted to inform employees of this policy and their respective responsibilities for environmental compliance and management.
- Environmental considerations are integrated into business planning and decision making and in planning new operations.
- Meaningful and measurable goals for environmental performance are established and progress toward these goals is tracked through the Management by Objectives (MBO) and PB TQM review process.
- Our environmental management systems and environmental performance will pursue continuous improvements through such practices as risk management, review of non-conformances, pollution prevention and efficient use of resources.
- Periodic audits and self-evaluations of our compliance and environmental management systems are conducted and the results are reviewed with the TQM Steering Committee.

Responsibilities:

All employees are expected to act as stewards of the environment by understanding and taking responsibility for resource conservation, for the appropriate disposition of waste materials, and for meeting environmental compliance and management requirements. All employees must comply with the intent of this policy and the environmental laws and regulations relevant to their respective jobs.

EMS Key Policy Objectives:

- I - **Improve environmental performance:** minimize the impact to our environment by managing resources and by emphasizing reuse and recycling.
- P - **Prevent Pollution:** protect our environment through prevention of pollution and from harm and degradation.
- O - **Obey the Law:** comply with all local, regional, state, and federal environmental laws & regulations.

5.3 **Organizational roles, responsibilities and authorities**

Top management ensures that the responsibilities and authorities for relevant roles are assigned, communicated and understood in accordance Appendix_A, “Palm Bay EMS Responsibilities and Authorities”, located in Intrepid on the properties page of this manual.

Top management has assign the responsibility and authority for:

- a) ensuring that the environmental management system conforms to the requirements of this International Standard;
- b) reporting on the performance of the environmental management system, including environmental performance, to top management.

5.3.1 The PB TQM has established the requirements and responsibility for the Environmental Management Systems by setting policy directives and defining authority, responsibility, interactions, and assigning resources.

All personnel who manage, perform, and verify work that significantly affects the environment have the responsibility and authority to:

- Ensure all operations are carried out in accordance with specified procedures.
- Understand the Environmental policy (5.2) and objectives (6.2) and key commitments (5.2).
- Initiate action to prevent non-conformity or non-compliance to environmental policy.
- Report environmental related issues to EHS.
- Initiate, recommend, or provide solutions through designated channels.
- Verify the implementation of solutions.
- Control the processing, delivery or use of non-conforming material until the non-conforming condition has been corrected.

5.3.1.1 The principles of employee involvement and continuous improvement have resulted in an empowered work force where any employee can identify EMS problems, identify solutions, and recommend corrective actions.

5.3.1.2 Appendix A, “Palm Bay EMS Responsibilities and Authorities” matrix and the Environmental Management Policy Manual document responsibility and authority assignments and outline interrelation of personnel who manage, perform, and verify this work.

5.3.2 **ISO 14001:2015 SITE EMS MANAGEMENT REPRESENTATIVE**

Top management has appointed **Steve Browne** as the site EMS Representative responsible for ensuring that the REA Palm Bay environmental management system, established within this manual, conforms to ISO 14001:2015 requirements and that these requirements are implemented and maintained. Steve can be reached at 321-724-7605. The PB TQM Steering Committee has designated this responsibility.

5.3.2.1 The site EMS Representative is responsible for reporting on the performance and effectiveness of the environmental management system, to the PB TQM Steering Committee.

6.0 PLANNING

6.1 Actions to address risks and opportunities

6.1.1 General

Our organization has planned, established, implemented and actively maintains the processes needed to meet the external and internal issues that are relevant to our purpose and that affect our ability to achieve the intended outcomes of our environmental management system. Our environmental management system takes into consideration the scope of our organization as well as the relevant needs and expectations of interested parties.

We have determined the risks and opportunities, related to Palm Bay environmental aspects, compliance obligations as well as other issues and requirements that need to be addressed to:

- give assurance that the environmental management system can achieve its intended outcomes;
- prevent or reduce undesired effects, including the potential for external environmental conditions to affect the organization;
- achieve continual improvement.

Within the defined scope of our environmental management system, our organization has determined potential emergency situations, including those that can have an environmental impact.

REA Palm Bay maintains documented information of our:

- risks and opportunities that need to be addressed;
- processes needed in 6.1.1 to 6.1.4, to the extent necessary to have confidence they are carried out as planned.

6.1.1.1 The process to determine and document context, interested party expectations and scope has been executed based on the following reference documents.

REFERENCE DOCUMENT:

<u>PB-TQM-001</u>	“Appendix A” (located in Intrepid on the properties Page)
<u>999074-BPR</u>	Business Planning and Review Process Including Goal Alignment

6.1.1.2 Procedures have been documented to determine the risks and opportunities related to Palm Bay site.

REFERENCE DOCUMENTS:

897039 Environmental Aspects Analysis Procedures

897035 Plant Services/Facilities/EHS Environmental Management System Specification

6.1.2 Environmental aspects

Within the defined scope of the environmental management system, our organization determines the environmental aspects of its activities, products and services that it can control and those that it can influence, and their associated environmental impacts, considering a life cycle perspective.

When determining environmental aspects, Palm Bay takes into account:

- a) change, including planned or new developments, and new or modified activities, products and services;
- b) abnormal conditions and reasonably foreseeable emergency situations.

REA Palm Bay has an ongoing process for analyzing the environmental aspects and their impacts and identifying those that are significant based on defined criteria.

The Site ISO 14001 Management Rep. is responsible for communicating significant environmental aspects among the various levels and functions of the organization, as appropriate.

Our organization maintains documented information of our:

- environmental aspects and associated environmental impacts;
- criteria used to determine its significant environmental aspects;
- significant environmental aspects.

6.1.2.1 The Palm Bay site maintains procedures that include documented criteria to identify the environmental aspects of our activities, products or services within the scope of our EMS.

Procedures address:

1. New and modified activities that have a significant impact and that we can control, and over which we expect to have an influence.
2. Consideration of life cycle perspective when determining environmental aspects within the scope of our EMS.
3. Abnormal conditions and reasonably foreseeable emergency conditions including natural events.
4. Communication of significant aspects to internal relevant parties, as applicable.

- 6.1.2.2 The Aspects Analysis information is reviewed at minimum, once per year, after significant planned or unplanned changes affecting the EMS or after significant events that impact or had the potential to impact the environment. A list of significant impacts is maintained as an official record (6.1.1).

REFERENCE DOCUMENT:

897039 Environmental Aspects Analysis Procedures

6.1.3 Compliance obligations

The REA Palm Bay organization has an ongoing system in place to:

- a) determine and have access to the compliance obligations related to its environmental aspects;
- b) determine how these compliance obligations apply to the organization;
- c) take these compliance obligations into account when establishing, implementing, maintaining and continually improving its environmental management system.

Our organization maintains documented information of its compliance obligations.

- 6.1.3.1 Palm Bay Operations maintains a procedure to identify and have access to legal requirements, requirements of interested parties and other voluntary commitments to which the organization subscribes, that are applicable to the environmental aspects of its activities, products and services. This includes but is not limited to online Internet access to all EHS regulatory standards, and notification or participation on Semiconductor Industry Association environmental initiatives. Legal requirements are taken into account in establishing, implementing and maintaining the Environmental Management System.

REFERENCE DOCUMENTS:

897035 Plant Services/Facilities/EHS Environmental Management System Specification;
897036 EMS Operation Controls Summary;

6.1.4 Planning action

REA Palm Bay environmental management system requires planning to:

- a) take actions to address our:
 - 1) significant environmental aspects;
 - 2) compliance obligations;
 - 3) risks and opportunities identified in 6.1.1;
- b) how to:
 - 1) integrate and implement the actions into its environmental management system processes (see 6.2, Clause 7, Clause 8 and 9.1), or other business processes;
 - 2) evaluate the effectiveness of these actions (see 9.1).

6.1.4.1 Plans to address significant aspects, compliance obligations, risk and opportunities have been integrated into REA Palm Bay Environmental Management System processes and are reviewed annually and updated when applicable with consideration to our technological options, financial position, operational activities and business requirements. Effectiveness of our Environmental Management System is reviewed by the site TQM Steering Committee twice per year.

REFERENCE DOCUMENT:

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>897035</u>	Plant Services/Facilities/EHS EMS Specification
<u>897039</u>	Environmental Aspects Analysis Procedures
<u>880041</u>	Site Emergency Plan
<u>880041-001</u>	Hurricane Site Plan

6.2 Environmental objectives and planning to achieve them

6.2.1 Environmental objectives

Our organization has taken actions to establish environmental objectives at relevant functions and levels, taking into account our significant environmental aspects and associated compliance obligations, and considering its risks and opportunities.

The environmental objectives are:

- a) consistent with the environmental policy;
- b) measurable (if practicable);
- c) monitored;
- d) communicated;
- e) updated as appropriate.

6.2.1.1 Environmental objectives are established and maintained by site TQM Steering Committee and EHS using our Environmental Policy as a framework. These objectives which are consistent with our environmental policy take into account the legal and other requirements, significant environmental aspects, technological options and financial, operational and business requirements, and the views of the interested parties. When the PB TQM selects objectives, consideration is given to practicality of measuring performance. Environmental objectives are monitored by EHS, reviewed annually by the PB TQM, updated when appropriate, and are communicated to relevant interested parties.

REFERENCE DOCUMENTS:

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>897039</u>	Environmental Aspects Analysis Procedures
<u>897036</u>	EMS Operational Controls Summary

6.2.2 Planning actions to achieve environmental objectives

When planning how to achieve our environmental objectives, we shall determine:

- a) what will be done;
- b) what resources will be required;
- c) who will be responsible;
- d) when it will be completed;
- e) how the results will be evaluated, including indicators for monitoring progress toward achievement of its measurable environmental objectives (see 9.1.1).

REA Palm Bay takes into consideration how actions to achieve our environmental objectives can be integrated into business processes.

6.2.2.1 Programs defining actions for achieving Palm Bay Operations environmental objectives and targets are established and maintained and integrated into business process when appropriate. Programs include the designation of responsibility for major activities and the means and time frame by which they are to be achieved and how results will be evaluated. These programs have the flexibility to be amended at all times and are applied to new projects. Reference Environmental Aspect Analysis Procedure, 897039, for requirements. Environmental objectives performance will be reviewed semi-annually by the PB TQM.

6.2.2.2 Change Control

The Capital Request (CR) system, including the Facilities Checklist, is used to document expenditures and facilities work that may impact the EMS Program. In addition, Equipment / Process Change Forms are required to be completed and routed to / approved by EHS representative. Equipment / Process Change Forms are located on the Shared (S:) drive in the FORMS folder.

REFERENCE DOCUMENTS

<u>897033</u>	FAB Environmental Management System
<u>897034</u>	PAT Environmental Management System
<u>897035</u>	Plant Services/Facilities/EHS Environmental Management System
<u>897038</u>	Environmental Management System Purchasing Department
<u>897040</u>	Plant Services Environmental Management
<u>897041</u>	Environmental Management System On-Site Labs
AFE System / Facilities Checklist	

7.0 SUPPORT

7.1 Resources

The PB TQM determines and provides for the resources need for the establishment, implementation, maintenance and continual improvement of our environmental management system.

- 7.1.1 The environmental management system is reviewed by the PB TQM at a planned six month interval to ensure its continual improvement, suitability, adequacy and effectiveness. Implementation and control of the Environmental Management System is shared by cross functional organizations, including but not limited to EHS, Manufacturing, Quality, Human Resources, and Purchasing. The TQM Steering Committee ensures that resources are available to maintain our EMS and to support improvement projects as defined.

REFERENCE DOCUMENT:

Appendix A	Responsibility and Authority (located on the properties page)
<u>PB-TQM-001</u>	Palm Bay Total Quality Management

7.2 Competence

REA, Palm Bay has systems in place that ensure that all persons under the control of the organization are competent or receive the appropriate level of training based on their job assignment to meet our environmental objectives. As an organization we:

- a) determine the necessary competence of person(s) doing work under its control that affects its environmental performance and its ability to fulfil its compliance obligations;
- b) ensure that these persons are competent on the basis of appropriate education, training or experience;
- c) determine training needs associated with its environmental aspects and its environmental management system;
- d) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken.

Our organization retains appropriate documented information as evidence of competence.

- 7.2.1 Internal systems are maintained for the identification, evaluation, recording and fulfillment of competency requirements related to our EMS. Our systems ensure that all persons on site, including contract employees and service workers whose work may affect our environmental performance or our ability to fulfill compliance obligations, have the appropriate education training or experience.

- 7.2.1.1 Competence of any employee being considered for a position of significant responsibility that relates to the EMS (i.e., EHS/Plant Services Engineering / Management) will be evaluated by Human Resources and the hiring supervisor. Any additional training, education or skills needed will be addressed and documented by the employee's supervisor using the Management By Objectives (MBO) system which is updated annually at a minimum.



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- 7.2.1.2 All Palm Bay Operations employees receive EMS and regulatory training pertinent to their job function per the applicable documents reference below. Subcontractors that could potentially have a significant impact on the environment also receive training on REA Palm Bay requirements in addition to the mandated state regulation requirements for licenses.

REFERENCE DOCUMENTS:

Job Descriptions maintained by Human Resources

880012-NEW-HIRE HR New Hire Orientation and Training Procedures

880012-EXEMPT Training and Certification for Exempt Employees

880012 Manufacturing/Quality Training and Certification Specification

880012-PAT Manufacturing and Training for P.A.T.

880012-PBFABS Manufacturing Training and Certification for Palm Bay Fab

880012-PLANT SERVICES Plant Services Training and Certification

880012-PBFABS Manufacturing Training and Certification for Palm Bay Fab

897029 Contractor EMS Specification

7.3 Awareness

The PB TQM Steering Committee is responsible for ensuring that persons doing work under our organization's control are aware of:

- a) the environmental policy;
- b) the significant environmental aspects and related actual or potential environmental impacts associated with their work;
- c) their contribution to the effectiveness of the environmental management system, including the benefits of enhanced environmental performance;
- d) the implications of not conforming to the environmental management system requirements, including not fulfilling the organization's compliance obligations.

- 7.3.1 Management ensures that all persons on site are made aware of our environmental policy, its purpose and their role in achieving our environmental objectives and commitments, including how their work can affect our ability to fulfill compliance obligations.

- 7.3.1.1 Employee environmental awareness is accomplished through multiple channels such as New Hire Orientation, area specific environmental training for personnel that could directly affect environmental performance, posting of the environmental policy and significant aspects on site bulletin boards and on the intranet, issuance of policy badges and through site wide communications.

- 7.3.1.2 On site contractors, subcontractors and service personnel whose work has the potential to affect our environmental performance or our ability to fulfill compliance obligations are made aware of site environmental procedures.

REFERENCE DOCUMENTS:

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>897029</u>	Contractor EMS Specification
<u>897033</u>	FAB Environmental Management System
<u>897034</u>	PAT Environmental Management System
<u>897035</u>	Plant Services/Facilities/EHS Environmental Management System
<u>897038</u>	Environmental Management System Purchasing Department
<u>897040</u>	Plant Services Environmental Management
<u>897041</u>	Environmental Management System On-Site Labs

7.4 Communication

7.4.1 General

Our organization has established, implemented and maintains the processes needed for internal and external communications relevant to the environmental management system, including:

- a) on what it will communicate;
- b) when to communicate;
- c) with whom to communicate;
- d) how to communicate.

When establishing its communication processes, our organization has:

- take into account its compliance obligations;
- ensure that environmental information communicated is consistent with information generated within the environmental management system, and is reliable.

Our organization responds to relevant communications on its environmental management system and retains documented information as evidence of its communications, as appropriate.

- 7.4.1.1 A summary of major internal and external communications related to EMS activities may be found in Appendix C, "EMS Internal and External Communications", located in Intrepid on the properties page of this manual.

7.4.2 Internal communication

Our organization:

- a) internally communicates information relevant to the environmental management system among the various levels and functions of the organization, including changes to the environmental management system, as appropriate;
- b) ensure its communication processes enable(s) persons doing work under the organization's control to contribute to continual improvement.

7.4.2.1 Relevant environmental management system information is promoted by the PB TQM and communicated to all levels and functions of the organization by:

- 1) ensuring that the Environmental Management Policy Manual is maintained in the electronic document control system and posted on the web page for viewing;
- 2) promoting the environmental policy and EMS manual through communications;
- 3) directing all employees to refer internal and external inquires to the site EMS Representative.

7.4.2.1.1 Internal communications may be conducted via the method determined appropriate for the occasion. Any relevant change to the EMS will be communicated using established appropriate methods.

Available methods of communications include but are not limited to:

- specification updates requiring training;
- newsletters;
- electronic mail;
- routine employee meetings;
- promotions;
- bulletin boards;
- videos, etc.

7.4.2.2 Employees may report any recommendations for continuous improvement to the Environmental Management System as well as environmental concerns through direct management, contacting EHS directly or contacting the Facilities Helpdesk (x5550) if anonymity is desired.

7.4.3 External communication

REA Palm Bay communicates information relevant to the environment management system is communicated to external parties through established communication processes and as required by our compliance obligations.

- 7.4.3.1 Communication procedures include:
- 1) Procedures for communications with external interested parties including public authorities regarding emergency planning and other relevant issues are addressed within the EMS manual, Site Emergency Response Plan, Operational Controls Summary or other applicable EMS specification. Posting of environmental aspects, goals and accomplishments results will be posted for the previous year on the intranet web page, EHS, ISO14001 awareness. Request from interested parties to review significant aspects or objectives will be reviewed on a case by case basis.
 - 2) The Environmental Health & Safety Engineer and site EMS Representative are responsible for:
 - a) Receiving, documenting, and responding to relevant communication requests from internal and external sources, including communications associated with compliance obligations. Records of relevant information will be retained.
 - b) Communicating general EMS information to employees, contractors, suppliers, customers and the community when appropriate.
 - c) Utilizing appropriate resources to respond to communication request, i.e. Legal, Public Relations, Human Resources.
 - d) A communication system for providing information to all applicable employees for the following:
 - ISO 14001 Awareness including Environmental Policy and Objectives.
 - Site Emergency / Hurricane Plan
 - Environmental issues

REFERENCE DOCUMENTS:

Web Page (extranet): Environnemental Web Site;

iShare Web Page (intranet): Environmental, Health & Safety;

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>897035</u>	EHS EMS Specification
<u>897039</u>	Environmental Aspects Analysis Specification
<u>897036</u>	Operational Controls Summary
<u>880041</u>	Site Emergency Plan
<u>880041-001</u>	Site Hurricane Plan

7.5 Documented information

7.5.1 General

REA Palm Bay's environmental management system includes:

- a) documented information required by this International Standard;
- b) documented information determined by the organization as being necessary for the effectiveness of the environmental management system.

7.5.2 Creating and updating

When creating and updating documented information, our organization ensure appropriate:

- a) identification and description (e.g. a title, date, author, or reference number);
- b) format (e.g. language, software version, graphics) and media (e.g. paper, electronic);
- c) review and approval for suitability and adequacy.

7.5.3 Control of documented information

Documented information required by the environmental management system and by this International Standard is controlled to ensure:

- a) it is available and suitable for use, where and when it is needed;
- b) it is adequately protected (e.g. from loss of confidentiality, improper use, or loss of integrity).

For the control of documented information, our organization addresses the following activities as applicable:

- distribution, access, retrieval and use;
- storage and preservation, including preservation of legibility; control of changes (e.g. version control);
- retention and disposition.

Documented information of external origin determined by our organization to be necessary for the planning and operation of the environmental management system is identified, as appropriate, and controlled.

7.5.4 REA Palm Bay creates, updates and controls documents consistent with requirements of ISO 9001 and ISO 14001 elements by ensuring:

- 1) Essential documentation affecting environmental issues is protected, appropriately identified, reviewed for adequacy and approved by authorized personnel before its release. Changes to documents are reviewed and approved by the same functions that performed the original review.
- 2) Documentation control procedures are established to preclude the use of non-applicable specifications or reference material and to ensure that the current issues are readily available in all areas where and when needed.
- 3) Changes to documentation mentioned above are documented and maintained by the appropriate function. Process and control specifications are controlled by the document control system for change and approval history.

REFERENCE DOCUMENTS

<u>DOC-PROC-ALL</u>	Procedures Specification
<u>DOC-APPROVAL-AUTHORIZATION</u>	Approval Authority Listing
<u>880037</u>	Environmental Document Retention Guidelines
<u>999011</u>	Control of Reference Standards
<u>999053</u>	Intrepid Application
<u>990031</u>	PMs and Procedures (Plant Services) System
<u>897035</u>	EHS EMS Specification
<u>897036</u>	Operational Control Summary
<u>240114</u>	Contract Review

8.0 OPERATION

8.1 Operational planning and control

Our organization has established, implemented, controls and maintains the processes needed to meet environmental management system requirements, and to implement the actions identified in 6.1 and 6.2, by:

- establishing operating criteria for the processes;
- implementing control of the processes, in accordance with the operating criteria.

Our organization has a process to control planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

Our organization has a process to ensure that outsourced processes are controlled or influenced. The type and extent of control or influence to be applied to the processes is defined within the environmental management system.

Consistent with a life cycle perspective, our organization has:

- a) establish controls, as appropriate, to ensure that its environmental requirement(s) is (are) addressed in the design and development process for the product or service, considering each life cycle stage;
- b) determine its environmental requirement(s) for the procurement of products and services, as appropriate;
- c) communicate its relevant environmental requirement(s) to external providers, including contractors;
- d) consider the need to provide information about potential significant environmental impacts associated with the transportation or delivery, use, end-of-life treatment and final disposal of its products and services.

Our organization maintains documented information to the extent necessary to have confidence that the processes have been carried out as planned.

- 8.1.1 REA Palm Bay has established, implemented, controls and maintains the processes needed to meet environmental management system requirements and has implemented actions to address threats/opportunities and environmental objectives by implementing the following:
- 8.1.1.1 Procedures require that planned changes are controlled and the consequence of unintentional changes are reviewed, taking into account action to mitigate any adverse effects. All changes are reviewed by the P.B. Change Review Boards. As part of the review process, EHS must review any changes to materials, equipment or equipment layout for potential impact to the EMS.
- 8.1.1.1.1 When developing new processes and procedures, the following methods are considered, individually or in combination:
- 1) process design to prevent error and ensure consistency;
 - 2) use of technology to control the process (engineering control);
 - 3) use of competent personnel;
 - 4) perform the process in a specific way;
 - 5) monitor or measure the process to check results;
 - 6) determine the use and amount of documented information necessary;
- 8.1.1.2 Outsourced processes and external providers are controlled within the extent of our business process based on the following factors
- 1) the competence of the outsource party to meet our environmental system requirements and objectives;
 - 2) the impact to the intended outcome of our environmental system intended outcome;
 - 3) the extent to which control of the process is shared;
 - 4) availability of improvement activities
- 8.1.1.2.1 All outsourced processes or external providers must operate and be:
- 1) within the scope of our environmental management system;
 - 2) integral to REA Palm Bay functioning;
 - 3) liable for conforming to EMS requirements;
 - 4) perceived as being carried out by REA Palm Bay by interested parties.
- 8.1.1.2.2 When determining controls for external providers, REA Palm Bay considers environmental aspects and impacts, threats and opportunities and our compliance obligations.
- 8.1.1.2.3 Required information is provided to outsourced processes and external providers, on site or at their own premise, to prevent and mitigate adverse environmental impacts

- 8.1.1.3 Our organization has adopted the following consistent with life cycle perspective when establishing controls:
- 1) controls established at the design/introduction phase as appropriate;
 - 2) determine environmental requirements for procurement of products and services;
 - 3) communicate our requirements to external providers;
 - 4) consider the need to provide information on impact during transport, use, end of life and disposal for products, waste materials and consumables based on identified areas of influence as identified in the Life Cycle perspective, Table 1 located on page 37 of this manual.

REFERENCE DOCUMENTS:

<u>897029</u>	Contractor EMS Specification
<u>897033</u>	FAB Environmental Management System
<u>897034</u>	PAT Environmental Management System
<u>897035</u>	Plant Services/Facilities/EHS Environmental Management System
<u>897036</u>	Operational Control Summary
<u>897037</u>	Contract Service Laboratories for EMS
<u>897038</u>	Environmental Management System Purchasing Department
<u>897039</u>	Environmental Aspects Analysis Procedures
<u>897040</u>	Plant Services Environmental Management
<u>897041</u>	Environmental Management System On-Site Labs
<u>990031</u>	PMs and Procedures (Plant Services) Systems
<u>990056-FAB</u>	Process Review Board for Wafer Fabrication
<u>990056-PAT</u>	Process Review Board (PCRB) PAT

8.2 Emergency preparedness and response

Our organization has established, implemented and maintains the process needed to prepare for and respond to potential emergency situations identified by the organization.

Procedures in place require the following actions:

- a) prepare to respond by planning actions to prevent or mitigate adverse environmental impacts from emergency situations;
- b) respond to actual emergency situations;
- c) take action to prevent or mitigate the consequences of emergency situations, appropriate to the magnitude of the emergency and the potential environmental impact;
- d) periodically test the planned response actions, where practicable;
- e) periodically review and revise the processes and planned response actions, in particular after the occurrence of emergency situations or tests;
- f) provide relevant information and training related to emergency preparedness and response, as appropriate, to relevant interested parties, including persons working under its control.

Documented information is maintained to the extent necessary to have confidence that our processes are carried out as planned.

- 8.2.1 Procedures are established and maintained that identify the potential for and response to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated. Our organization reviews and revises, where necessary, its emergency and preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations. Procedures are periodically tested where applicable.

REFERENCE DOCUMENTS

<u>880041</u>	Site Emergency Response Plan
<u>880041-001</u>	Site Hurricane Plan
<u>897029</u>	Contractor EMS Specification
<u>897033</u>	FAB Environmental Management System
<u>897034</u>	PAT Environmental Management System
<u>897035</u>	Plant Services/Facilities/EHS Environmental Management System
<u>897038</u>	Environmental Management System Purchasing Department
<u>897040</u>	Plant Services Environmental Management
<u>897041</u>	Environmental Management System On-Site Labs
<u>PB4-03</u>	Environmental Accident Reporting

9.0 PERFORMANCE EVALUATION

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

REA Palm Bay monitors, measures, analyse and evaluate our organization's environmental performance and have determined:

- a) what needs to be monitored and measured;
- b) the methods for monitoring, measurement, analysis and evaluation, as applicable, to ensure valid results;
- c) the criteria against which the organization will evaluate its environmental performance, and appropriate indicators;
- d) when the monitoring and measuring shall be performed;
- e) when the results from monitoring and measurement shall be analyzed and evaluated

Procedures are in place which ensure that calibrated or verified monitoring and measuring equipment is used and maintained, as appropriate.

The site EMS Representative reports relevant environmental performance and the effectiveness of the environmental management system internally to PB TQM and externally as required by compliance and interested party obligations.

Appropriate documented information is retained as evidence of the monitoring, measurement, analysis and evaluation results.

9.1.1.1 Procedures have been implemented for the monitoring, measurement, analysis and evaluation of key characteristics of our operations and activities that can affect our environmental aspects.

- 1) Environment monitoring equipment is calibrated against reference standards whose calibration is certified as being traceable to nationally recognized standards. Internal used equipment is registered and managed with the support of calibration lab.
- 2) Measurement methods selected are based on ability to ensure valid results.
- 3) Aspects are evaluated to determine criteria for monitoring and monitoring schedules as applicable.
- 4) Outside Analytical Laboratory services may be engaged for monitoring and measurement. The performance of sub-contracted analytical labs are assessed as appropriate.
- 5) Documented procedures are maintained for periodically evaluating compliance with relevant environmental legislation and regulations.
- 6) Environmental performance results and progress to continual improvement plans as identified per the environmental aspects analysis results are present at the PB TQM Managements Review twice per year.
- 7) Environmental performance results shall be communicated to external interested parties as required by compliance obligations and to internal parties as applicable.
- 8) Records of monitoring, measurement, analysis and evaluation results are maintained.



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REFERENCE DOCUMENTS

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>897035</u>	EHS EMS Specifications
<u>897036</u>	Operational Control Summary
<u>897037</u>	Contract Service Laboratories for EMS
<u>990031</u>	PMs and Procedures (Plant Services) Systems
<u>897039</u>	Environmental Aspect Analysis Procedure
<u>895729</u>	Calibration Procedures

9.1.2 Evaluation of compliance

Our organization has established, implemented and maintains the processes needed to evaluate fulfillment of its compliance obligations and retains documentation information as evidence of the compliance evaluation results and actions taken to resolve any noncompliance.

Within our process, we:

- a) determine the frequency that compliance will be evaluated;
- b) evaluate compliance and take action if needed;
- c) maintain knowledge and understanding of its compliance status.

- 9.1.2.1 REA Palm Bay EHS Team conducts a comprehensive site audit/self-assessment annually for relevant compliance obligations and customer and interested party requirements for environmental impact.
- 9.1.2.2 Performance to environmental compliance obligations is monitored continuously and appropriate action is taken for any non-compliance.
- 9.1.2.3 A summary of environmental compliance performance is reviewed by PB TQM twice per year at Management Review.

REFERENCE DOCUMENTS

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>240113</u>	Internal Audit Procedures
<u>897035</u>	Environmental Management System
<u>897036</u>	Operational Control Summary
<u>880037</u>	Environmental Document Retention Guidelines

9.2 Internal audit

9.2.1 General

Internal audits are conducted at planned intervals to provide information on whether the environmental management system:

- a) conforms to:
 - 1) the organization's own requirements for its environmental management system;
 - 2) the requirements of this International Standard;
- b) is effectively implemented and maintained.

9.2.2 Internal audit program

REA Palm Bay has, implement and actively maintains an internal audit program that includes the frequency, methods, responsibilities, planning requirements and reporting of its internal audits.

When establishing the internal audit program, our organization takes into consideration the environmental importance of the processes concerned, changes affecting the organization and the results of previous audits. Our audit program:

- a) define the audit criteria and scope for each audit;
- b) select auditors and conduct audits to ensure objectivity and the impartiality of the audit process;
- c) ensure that the results of the audits are reported to relevant management.

Our audit program requires documented information to be retained as evidence of the implementation of the audit program and the audit results.

- 9.2.2.1 REA Palm Bay maintains a program and for periodic Environmental Management System audits to determine the EMS compliance to ISO14001:2015 and to legal requirements. Audits are periodically and systematically scheduled and reviewed by qualified personnel to ensure their effectiveness and continued suitability in meeting the requirements of our EMS. Audits are the responsibility of the Quality Internal Audit organization and results of these audits are reported to the TQM Steering Committee at Management Review.

- 9.2.2.2 Planning for our audit program takes into consideration the environmental importance of the process concerned, changes affecting the organization and the results of previous audits.
- 9.2.2.3
- a) Auditors must be competent and independent of the activity being audited where practical and act in manner free from bias and conflict of interest.
 - b) The following is to be considered with reference to previous audits:
 - 1) previously identified non-conformities and effectiveness of action taken;
 - 2) results of internal and external audits.
 - c) Each audit conducted has defined scope and criteria.
 - d) Audit results are appropriately documented and reported to relevant parties including process owner, management and PB TQM
 - e) Appropriate corrective action will be completed and tracked for all non-conformities identified during audit.

REFERENCE DOCUMENTS:

<u>PB-TQM-001</u>	Palm Bay Total Quality Management
<u>240113</u>	Internal Quality Audit Procedure
<u>897035</u>	EHS/EMS Specification

9.3 Management review

Our organization reviews the environmental management system, at planned intervals, to ensure its continuing suitability, adequacy and effectiveness. Management review includes the following considerations:

- a) the status of actions from previous management reviews;
- b) changes in:
 - 1) external and internal issues that are relevant to the environmental management system;
 - 2) the needs and expectations of interested parties, including compliance obligations;
 - 3) its significant environmental aspects;
 - 4) risks and opportunities;
- c) the extent to which environmental objectives have been achieved;
- d) information on the organization's environmental performance, including trends in:
 - 1) nonconformities and corrective actions;
 - 2) monitoring and measurement results;
 - 3) fulfilment of its compliance obligations;
 - 4) audit results;
- e) adequacy of resources;
- f) relevant communication(s) from interested parties, including complaints;
- g) opportunities for continual improvement.

Outputs of management review:

- conclusions on the continuing suitability, adequacy and effectiveness of the environmental management system;
- decisions related to continual improvement opportunities;
- decisions related to any need for changes to the environmental management system, including resources;
- actions, if needed, when environmental objectives have not been achieved;
- opportunities to improve integration of the environmental management system with other business processes, if needed;
- any implications for the strategic direction of the organization.

Documented information is retained as evidence of the results of management review.

9.3.1 REA Palm Bay has established and maintains procedures for TQM Management Review which defines the interval and criteria for review of our Environmental Management System to ensure continuing suitability, adequacy and effectiveness of our processes to meet the requirements of ISO: 14001:2015 and our environmental objectives.

9.3.1.1 **Inputs for Management Review include:**

- 1) Status of actions from previous management reviews
- 2) Changes in:
 - external and internal issues relevant to our EMS
 - needs and expectations of interested parties including compliance obligations
 - significant environmental aspects
 - threats and opportunities
- 3) The extent to which environmental objectives have been achieved.
- 4) Information on our environmental performance including trends in:
 - non-conformities and corrective actions
 - monitoring and measurement results
 - fulfillment of compliance obligations
 - audit results
- 5) Adequacy of resources
- 6) Relevant communication from interested parties
- 7) Opportunities for continual improvement

9.3.1.2 **Outputs for the Management Review**

- 1) Conclusions on the continuing suitability, adequacy and effectiveness of the EMS
- 2) Decisions related to continual improvement activities
- 3) Actions if needed, when environmental objectives has not been achieved
- 4) Opportunities to improve integration of the EMS with other business processes if needed
- 5) Any implications for the strategic direction of REA Palm Bay Operations

REFERENCE DOCUMENTS:

PB-TQM-001 Palm Bay Total Quality Management

10.0 IMPROVEMENT

10.1 General

REA Palm Bay has procedures for determining opportunities for improvement and for implementing necessary actions to achieve the intended outcomes of our environmental management system.

REFERENCE DOCUMENTS:

999074-BPR Business Planning and Review Process Including Goal Alignment

PB-TQM-001 Palm Bay Total Quality Management

897039 Environmental Aspect Analysis Procedure

10.2 Nonconformance and corrective action

When a nonconformity occurs, our organization will:

- a) react to the nonconformity and, as applicable:
 - 1) take action to control and correct it;
 - 2) deal with the consequences, including mitigating adverse environmental impacts;
- b) evaluate the need for action to eliminate the causes of the nonconformity, in order that it does not recur or occur elsewhere, by:
 - 1) reviewing the nonconformity;
 - 2) determining the causes of the nonconformity;
 - 3) determining if similar nonconformities exist, or could potentially occur;
- c) implement any action needed;
- d) review the effectiveness of any corrective action taken;
- e) Make changes to the environmental management system, if necessary.

Corrective action will be reviewed by EHS personnel and determined to be appropriate to the significance of the effects of the nonconformities encountered, including the environmental impact(s).

10.2.1 REA Palm Bay has established and maintains procedures for defining the responsibilities and authorities for handling and investigating nonconformities, taking action to mitigate any environmental impacts and for initiating and completing/documenting corrective actions to prevent reoccurrence or similar nonconformities.

As part of our procedures we will:

- a) When a non-conformity occurs, we will take immediate action to control the situation and deal with the consequences.
- b) Non-conformities will be evaluated by reviewing the details, determining the cause and if similar non-conformities exist or if actions are needed to prevent the potential for similar non conformities.
- c) Corrective actions will be implemented that are appropriate to the significance of the effects of the non-conformance encountered including the environmental impact.
- d) Effectiveness of corrective actions will be reviewed and;
- e) Changes will be made to our EMS when necessary.
- f) Retain documented information as evidence of the nature of non-conformities, actions taken and results of corrective actions.

REFERENCE DOCUMENTS

<u>240113</u>	Internal Quality Audit Procedures
<u>990032</u>	Plant Services Corrective and Preventive Action Procedures

10.3 Continual improvement

Our organization shall continually improve the suitability, adequacy and effectiveness of our environmental performance

10.3.1 REA Palm Bay is committed to continually improving the effectiveness of our environmental management system through the execution of our environmental policy and environmental objectives, analysis of data, audit results, corrective and preventative actions and management endorsement.

10.3.2 The rate, extent and timescale of actions that support continual improvement as a whole or one or more elements of our EMS shall be determined by the Palm Bay TQM and will be based on the significance of these improvements to the intended outcomes of our EMS.

REFERENCE DOCUMENTS:

<u>999074-BPR</u>	Business Planning and Review Process Including Goal Alignment
<u>PB-TQM-001</u>	Palm Bay Total Quality Management



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TABLE 1
LIFE CYCLE PERSPECTIVE

Product Life Cycle Stages	REA PB Full Control	REA PB Can Influence	No Influence
Product design		X	
Raw material acquisition		X	
Production activities at Palm Bay		X	
Production activities at external provider		X	
Production outsourced		X	
On Site Finished goods	X		
Waste Disposal	X		
Use of products by customer			X
End of life treatment by customer			X
Final disposal of product by customer			X

Risk Assessment Consideration

REA PB Full Control: All aspects/impacts and risk issues shall be identified and assessed

REA PB Can Influence: Aspects/impact and risk issues related shall be identified and assessed (Reference: Control of Outsourced Process & External Providers)

Corporate Control: Not considered

Definition of Outsourced Process / External Providers

The following definition shall apply from EMS perspective

Outsourced Process: Direct manufacturing process done by external parties at REA PB or at own premise.

External Providers (Vendors / Contractors)

Vendor: Parties supplying parts and materials to REA Palm Bay
 Contractors: Parties providing manpower and service job with or without parts/materials for direct/indirect job at manufacturing/other process, construction/maintenance, monitoring and measurement, waste handling/disposal, etc.

In-House Contractors: Contractors engaged full time at REA Palm Bay
 Other Contractors: Contractors performing job at REA Palm Bay per contract frequency or as required.



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TABLE 2
Control of Outsourced Processes & External Providers

		SERVICES	CONTROLS
OUTSOURCED PROCESS		Implant Services	SUB-I-APPROVAL SUB-I-QUAL-SUBCON-LIST
OUTSOURCED PROCESS		Assembly Services	SUB-I-APPROVAL SUB-I-QUAL-SUBCON-LIST
EXTERNAL PROVIDERS	Vendors	Supplier of EMS related items (e.g. chemicals, gas, materials)	235823 – Supplier Qualification Procedure MGEN /MTSP Spec Series
	Contractors In-House	Calibration Services	QAP0018 - Approved Supplier List 897029 - Contractor EMS Specification
		Housekeeping	897029 - Contractor EMS Specification
		Food Service	897029 - Contractor EMS Specification
	Contractors Other	Logistics	897029 - Contractor EMS Specification
		Fire System Maintenance	897029 - Contractor EMS Specification
Construction/Maintenance		897029 - Contractor EMS Specification	
Environmental services		897029 - Contractor EMS Specification	
Grounds Keepers		897029 - Contractor EMS Specification	



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TABLE 3
ISO 14001 Terms and Definitions

Terms	Definitions
audit	systematic, independent and documented process (3.3.5) for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled
competence	ability to apply knowledge and skills to achieve intended results
compliance obligations	legal requirements (3.2.8) that an organization (3.1.4) has to comply with and other requirements that an organization has to or chooses to comply with
conformity	fulfilment of a requirement (3.2.8)
continual improvement	recurring activity to enhance performance (3.4.10)
corrective action	action to eliminate the cause of a nonconformity (3.4.3) and to prevent recurrence
documented information	information required to be controlled and maintained by an organization (3.1.4) and the medium on which it is contained
effectiveness	extent to which planned activities are realized and planned results achieved
environment	surroundings in which an organization (3.1.4) operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships
environmental aspect	element of an organization's (3.1.4) activities or products or services that interacts or can interact with the environment (3.2.1)
environmental condition	state or characteristic of the environment (3.2.1) as determined at a certain point in time
environmental impact	change to the environment (3.2.1), whether adverse or beneficial, wholly or partially resulting from an organization's (3.1.4) environmental aspects (3.2.2)
environmental management system	part of the management system (3.1.1) used to manage environmental aspects (3.2.2) fulfil compliance obligations (3.2.9) and address risks and opportunities (3.2.11)
environmental objective	objective (3.2.5) set by the organization (3.1.4) consistent with its environmental policy (3.1.3)
environmental performance	performance (3.4.10) related to the management of environmental aspects (3.2.2)
environmental policy	intentions and direction of an organization (3.1.4) related to environmental performance (3.4.11), as formally expressed by its top management (3.1.5)
indicator	measurable representation of the condition or status of operations, management or conditions
interested party	person or organization (3.1.4) that can affect, be affected by, or perceive itself to be affected by a decision or activity
life cycle	consecutive and interlinked stages of a product (or service) system, from raw material acquisition or generation from natural resources to final disposal
management system	Set of interrelated or interacting elements of an organization (3.1.4) to establish policies and objectives (3.2.5) and processes (3.3.5) to achieve those objectives
measurement	process (3.3.5) to determine a value
monitoring	determining the status of a system, a process (3.3.5) or an activity
nonconformity	non-fulfilment of a requirement (3.2.8)
objective	Result to be achieved
organization	person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives (3.2.5)
outsource	make an arrangement where an external organization (3.1.4) performs part of an organization's function or process (3.3.5)



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Terms	Definitions
performance	Measurable results
prevention of pollution	use of processes (3.3.5), practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse environmental impacts (3.2.4)
process	set of interrelated or interacting activities which transforms inputs into outputs
requirement	need or expectation that is stated, generally implied or obligatory
risk	effect of uncertainty
risks and opportunities	potential adverse effects (threats) and potential beneficial effects (opportunities)
top management	person or group of people who directs and controls an organization (3.1.4) at the highest level