

ROYSONS CORPORATION

ENVIRONMENTAL MANAGEMENT SYSTEM MANUAL

Created and Maintained by:

Hope Ritchie
Environmental and Safety Coordinator
Revised June 2018

4.0 Environmental Management System Manual Approval

Roysons Corporation is highly committed to a policy of environmental protection through strategic environmental resource management. All members of our Roysons team are aware of, dedicated to and responsible for carrying out the policies set forth in this document. These policies allow this company to increase our level of commitment to the environment beyond permit compliance and other applicable legal requirements.

The following information has been prepared as an aid to assist facility personnel and third party auditors in reviewing the environmental management system designed for Roysons Corporation.

The intent of this manual is to document the structured environmental management framework that is integrated with overall management activity for the organization. This system has been designed to achieve environmental and economic goals of Roysons Corporation.

This manual is organized in the format of the ANSI/ISO 14001-2004 Environmental management systems-Specification with guidance for use, approved as an American National Standard by: American Society for Quality Control; American Society for Testing & Materials; and, NSF International. To assist third party auditing, this manual is numbered in the same manner as the standard.

Roysons Corporation Environmental Management System is documented, implemented and maintained by Hope Ritchie, Environmental Coordinator. The EMS Manual is available to the public at all times at www.roysons.com.

Roy Ritchie, President

Hope Ritchie, Environmental Coordinator

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DISTRIBUTION LIST

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1. Shared Network Drive
2. www.roysons.com
3. Roy Ritchie, Sr., CEO
4. Roy Ritchie, Jr, President
5. William Reilly, COO
6. Peter Cohan, CFO
7. Howard Levy, Plant Manager
8. Jim Greene, Plant Operations Manager
9. Purchasing and Finance

4.0 ENVIRONMENTAL MANAGEMENT SYSTEM INTRODUCTION

An EMS Team has been established at the corporate level to ensure that interfaces continue to be adequately addressed through identification of policies, standards and procedures throughout the organization. With input of the EMS Team and all employees, Hope Ritchie will be responsible for overseeing the program. Employees may report ideas or proposed changes to any member of the EMS team for review.

The Roysons Corporation Environmental Management System Team:

Hope Ritchie, Environmental Coordinator

Roy Ritchie, Sr., CEO

Roy Ritchie, Jr, President

William Reilly, COO

Peter Cohan, CFO

Howard Levy, Plant Manager

Jim Greene, Plant Operations Manager

4.1 General Requirements

The environmental policy was formulated with consideration given to legislative requirements, significant plant processes with potential environmental impacts, and the role of Roysons Corporation as a leader within the community. The team has reviewed the existing plant operations and has determined those processes that can be controlled and influenced by systems established within this program and by employees in the company.

4.2 Environmental Policy

It is the policy of Roysons Corporation to ensure that the activities, products, and services carried out here will be appropriate toward maintaining compliance with relevant environmental legislation and regulations and other requirements to which it subscribes. We will work toward continuous improvement and pollution prevention. We will also set and review environmental objectives and targets within the framework of a documented, implemented and effectively communicated program. The program is available to employees and the public for review. The EMS Manual is available at www.roysons.com.

4.3 Planning

Hope Ritchie, Environmental Coordinator, will be responsible for regularly reviewing and updating the EMS to adapt to changing situations in the facility. The EMS Team will receive feedback from all employees and meet to review and revise the program. The EMS

Team will organize efforts to establish both short term and long-term goals. Meetings will be scheduled at regular intervals to ensure that the program remains dynamic. Audits will be performed at least annually.

4.3.1 Environmental Aspects

This management system includes review of the environmental aspects of activities, products and services of the facility. Operations are reviewed by a cross section of employees throughout the company. Hourly and salaried employees are invited to comment and propose new ideas for the advancement of this program. The team determines those aspects that they could be reasonably expected to control or influence to reduce its impact to the community and the environment. The information collected is used to determine those processes having potential significant impacts on the environment. The aspects related to the significant impacts are considered in the process of setting the environmental objectives. Any new activities, products, or services will be reviewed in a similar manner and included in the objectives and targets of the organization as appropriate. This activity will be conducted as part of the planning meetings established regarding the introduction of any new activities, products, or services, including process changes or product changes. This system of review will also be examined annually to ensure that it continues to be appropriate for this facility and the organizations with which it works.

4.3.2 Legal and other requirements

Because of the continuously increasing number of legal compliance requirements, multiple mechanisms are used to ensure continuing knowledge of existing and new regulations, and also those currently being newly considered. Regulatory updates are accomplished through a six (6)-tier system.

Tier I Review:

Training

Tier II Review:

Environmental periodical subscriptions review

Tier III Review:

Consultation with Avogadro Environmental Services for professional advice and services

Tier IV Review:

Active participation in and /or meetings with industry organization or regulatory agencies

Tier V Review:

If any new or revised regulations are identified, other sources will be used to obtain further information for evaluation.

Tier VI Implementation:

Consultation with Bodnar Engineering Services will determine regulation compliance requirements. Strategies to achieve compliance, and where possible, exceed compliance are presented and reviewed by the senior management team during scheduled staff meetings.

While EMS personnel are the primary resource, Sales, Purchasing, R&D, Quality, Maintenance, and other functions can become the conduit for identification of regulations or legislative activity. Through this cross-functional team approach, the resources for discovery, review, and compliance determination can reach all levels within the organization.

4.3.3 Objectives and Targets

In establishing the objectives and targets for Roysons Corporation, the EMS Team will consider:

- legal and other requirements
- significant environmental aspects
- technological options
- financial, operational and business requirements
- the views of interested parties

4.3.4 Environmental Management Program

The Environmental Management Program works in conjunction with the Roysons Corporation Pollution Prevention Plan maintained by Hope Ritchie. Each program has been developed in order to identify and target all aspects of business that may be targeted for improvement. Both programs are examined and amended at least annually to ensure that they continue to be relevant and appropriate for Roysons Corporation. Environmental Aspects are first identified and then targeted for reform. Once completed, they are documented as Completed Projects in this manual.

4.4 Implementation and Operation

All Roysons Corporation employees will assist in the implementation and operation of the established goals in this manual.

4.4.1 Structure and Responsibility

Hope Ritchie of Roysons Corporation is responsible for ensuring that the policy, objectives for, and the commitment to the environmental management system are documented.

The Roysons Corporation Environmental Management System Team will meet to ensure that all objectives of the EMS are understood, implemented, and maintained at all levels in the organization. The EMS Team will maintain verification of EMS objectives including inspection, monitoring, auditing and corrective action. The EMS team will discuss each

objective individually to determine the best course of action to distribute the information and training related to the objective to the relative employees.

EMS Team will distribute any resources necessary to implement the objectives outlined in the EMS to the department handling the objective.

At least one annual EMS Team review is conducted annually with mandatory attendance of the senior management from Roysons Corporation. At this meeting, measurables pertinent to Roysons Corporation are reviewed. The reviews include but are not limited to: internal audits, non-conformances and corrective actions, objectives and targets. Action items are documented in the meeting with follow-up and closure of each action item. Personnel both in the department and those that are independent of having direct responsibility for the work performed conduct design reviews and audits of the environmental program.

4.4.2 Training, Awareness, and Competence

Training will be provided to all employees as part of their regularly scheduled training. All employees will be informed and updated of Environmental Management System practices that have been targeted by the EMS team. Employees working in the targeted areas will be informed of the importance of their role in maintaining proper EMS standards.

Competence to participate in programs of the EMS will be determined by the employees' supervisor and will be discussed and reviewed at the time of annual employee review. All training documentation is maintained in the Roysons Corporation Training Manual. All of the following are included in training:

- Personnel are qualified based on appropriate education, training, and experience.
- Records of training shall be maintained.
- Management personnel are included in the training process.
- Training is viewed as a strategic issue and its effectiveness shall be periodically evaluated.
- Procedures and training are established specifically for employees whose work may create a significant impact upon the environment.
- Procedures are established and maintained at relevant functions to convey the importance of conformance with the environmental policy and procedures and with the EMS.
- Training includes raising relevant function employee awareness of the significant environmental impacts of their work activities, and the environmental benefits of improved personal performance.
- Roles and responsibilities are defined to provide the means necessary to achieve conformance with the environmental policy and procedures and the requirements of the EMS including emergency preparedness and response.
- Consequences of departure from specified operating procedures are identified and discussed during training.

4.4.3 Communication

Hope Ritchie is responsible for establishing and maintaining procedures for handling communication within the Roysons Corporation. All information pertinent to the targeted objective of the EMS will be discussed at staff meetings.

Internal communication between the various levels and functions of the organization has been established and will take place during regular meetings. Receiving, documenting and responding to relevant communication from external interested parties will be overseen by Hope Ritchie. Roysons Corporation will document its decision on whether to communicate significant environmental aspects to external parties.

4.4.4 Environmental Management System Documentation

This manual has been written to describe the core elements of the Roysons Corporation EMS. Hope Ritchie will establish and maintain information relating to the Environmental Management System.

The EMS Manual will be available for review in both paper and electronic form.

Training documents related to the EMS will be maintained and updated by Hope Ritchie and are available for review in the Training Documents Manual established by Hope Ritchie.

4.4.5 Document Control

Hope Ritchie will establish document control. All supporting documents relating to the EMS will be filed and stored by Hope Ritchie. All internal environmental procedures, instructions, forms and manuals are controlled by document control. The EMS Manual can be located on the Company website and training manuals can be found in the office of Roy Ritchie.

4.4.6 Operational Control

Each EMS Objective will be in place as standard operating procedure at all times. A procedure will be established and maintained to cover situations where their absence could lead to deviations from the environmental policy and the objectives and targets. All employees will be trained in situations where key employees are absent so that the practices are in place at all times. Regular maintenance will ensure the plan of activities for each EMS objective will continue.

4.4.7 Emergency Preparedness and Response

All Roysons plant personnel have been trained for Emergency Preparedness and Response. Training documents are located in the office of Roy Ritchie. The Environmental

Emergency Response Company, Clean Harbors, will be contacted for immediate response should any environmental emergency occur at Roysons Corporation. The NJDEP will be contacted through the Emergency Hotline as well. The hotline number is posted in the Maintenance Department above the telephone. The maintenance department has been trained in procedure for Emergency Response and is tested periodically when practical.

4.5 Checking and Corrective Action

The EMS is periodically reviewed and tested for efficacy by Roysons personnel. Results are discussed at EMS Team meetings and action is taken when necessary.

4.5.1 Monitoring and Measurement

The EMS Team has established and maintains procedures to monitor and measure, on a regular basis, the key characteristics of its operation and activities that can have a significant impact on the environment.

Hope Ritchie will periodically meet with consultants from Bodnar Engineering to review and evaluate compliance with relevant environmental legislation and regulations.

4.5.2 Nonconformance and Corrective and Preventative Action

The Roysons Corporation EMS Team is responsible for establishing, documenting and maintaining procedures for corrective and preventative action. The EMS Team will use this program to address corrective and preventative action within the environmental application as appropriate as determined by staff. When applicable, corrective actions and controls implemented to eliminate the cause of a non-conformity are applied to similar processes and/or other environmental system elements.

The EMS Team will identify the cause of nonconforming objectives and the action needed to prevent recurrence; analyze processes, work operations, records to detect and eliminate potential problems; initiate preventative actions; apply controls to ensure corrective actions are taken and effective; record changes in procedure; review and follow up all actions.

4.5.3 Records

Hope Ritchie is responsible for identification, maintenance and disposition of environmental records, including audits. All training records are filed in the Training Manual located in Roy Ritchie's office. Environmental records are filed and maintained by Hope Ritchie. All documents required by NJDEP are filed appropriately and maintained as necessary to comply with all local, state and federal requirements. Records are maintained onsite indefinitely as the EMS Team often consults historical data to create a superior EMS.

4.5.4 Environmental Management System Audit

Roysons Corporation is responsible for ensuring that products, services and activities throughout the facility conform to environmental standards and regulations required by legislation. Daily activities and processing must conform to documented instructions. Internal EMS audits are conducted at a minimum of annually and shall be utilized to monitor and assess conformance and effectiveness. Audits are scheduled on the basis of importance and occur naturally as part of a regular working day. Results of audits are brought to the attention of the EMS Team and are discussed at management reviews. Personnel independent of those having direct responsibility for the activity being audited carry out audits.

4.6 Management Review

The top management of Roysons Corporation, also part of the EMS Team, will meet at least once per year to review the EMS to ensure its continuing suitability, adequacy and effectiveness. All changes and decisions will be documented. The review will address, but will not be limited to, the following:

1. The possible need for changes to the policy, objectives or other elements of the EMS.
2. EMS audit results/Internal auditing
3. Changing circumstances
4. Commitment to continual improvement
5. The Environmental Policy
6. Targets and Objectives
7. Corrective/Preventative Action
8. Overall Status of EMS

5.0 Roysons Corporation Aspects

Priority of Aspect as Objective, 1 being the lowest and 5 the highest

ACTIVITY	TASK	ASPECT	IMPACT	PRIORITY
Solvent Storage	Spill Response	Containment of solvent	Release to air	3
Hazardous Waste Reduction	Use less solvent for cleaning	Release	Reduce delivery and exposure to roadways	5
Purchasing of Inks	Resource Management	Resource Waste	Reduce storage	3
Inventory control	Resource Management	Resource Waste	Reduce Storage	3
Job Planning	Plan jobs to reduce waste	Resource Waste	Reduce idle time and energy	4
Quality Control	Increase QC	Product Waste	Reduce Waste	3
Ink storage	Resource Management	Reuse all inventory	Reduce Waste and Storage	3
Cardboard Purchasing	Reduce Inventory	Use all inventory	Reduce Storage	2
Raw Materials Purchase	Reduce Inventory	Use all inventory	Reduce Storage	2
Inhouse product	Reduce Inventory	Use all inventory	Reduce Storage	1
Consolidate shipments from suppliers	Reduce travel resources	Fuel consumption	Reduced fuel use	2
Receive more resources from one supplier	Reduce shipments	Fuel consumption	Reduced fuel use	2
Consolidate UPS shipments	Reduce pickups	Fuel consumption	Reduced fuel use	2
Administrative tasks	Document disposal	Solid waste generation	Recycling	4
Single Stream Recycling	Recycling	Solid waste Generation	Recycling	4
Cardboard Recycling	Recycling	Solid Waste Generation	Recycling	4
Collection of used fiber products	Recycling	Solid Waste Generation	Recycling	4
Vinyl Recycling	Selling	Solid Waste	Recycling	3

ACTIVITY	TASK	ASPECT	IMPACT	PRIORITY
	Scrap Vinyl	Generation		
Light bulb Disposal	Disposal of used bulbs	Solid Waste Generation	Universal Waste Program	2
Reclamation Program	Reclaim and recycle product	Solid Waste Generation	Recycling	4
Regular Maintenance	Improve factory performance	Keep machines running smoothly without down time	Reduce Waste and Resources	5
Unnecessary appliances	Remove appliances	Energy Use	Energy Conservation	3
Reduce Office Thermostats	Reduce Office Temperature	Energy Use	Energy conservation	2
Truck Idling	Stop Truck Idling	Reduce fuel usage	Fuel Conservation	1
Office Paper	Reduce use	Solid Waste Generation	Recycling	3
LED lights	Replace old lightbulbs	Energy use	Energy conservation	5
HVAC System	Redesign office system	Energy Use	Energy conservation	5

6.0 OBJECTIVES

I. Hazardous Materials Waste Reduction

Since 2000, Roysons has changed our status from a Large Quantity Generator (LQG) of Hazardous Waste to a Conditionally Exempt Small Quantity Generator (CESQG). Reducing our Hazardous Waste from > 2200 lb. per month to < 220 lb per month by definition. This has been done by:

- A. Changing operation from a solvent printing to waterbased ink printing
- B. Decreased working loss through careful job planning
- C. Decreased inventory storage
- D. Switch to waterbased topcoats
- E. Increased digital printing

Data collected from NJDEP RPPR and the TRI Form R in the Years 2000 - 2010

YEARS	Amount (in pounds) of Hazardous Waste Generated and Removed from Roysons	Amount of Reportable Substances in the Waste (in pounds)
2000	20,478	11,513
2001	13,404	2,013
2002	14,727	7,259
2003	8,074	3,980
2004	2,600	1,214
2005	4,000	2,120
2006	545	207
2007	400	152
2008	400	152
2009	800	280
2010	400	66

- **Each 55 gallon container weighs approximately 400 pounds. The Hazardous Waste transporter is called when the 55 gallon container is full.**

II. Purchasing

The Director of Purchasing has put forth a strong effort to control purchasing of resources to improve several aspects including:

- A. Reduced Inventory
- B. Consolidating shipments from suppliers to reduce fuel usage in transit
- C. Receive more resources from one supplier reducing number of deliveries
- D. Decrease cardboard purchasing as reusing of cardboard increases

III. Vinyl Recycling

To reduce solid waste generation, vinyl is baled and recycled at Roysons. The recycled vinyl is collected in the form of:

- A. Working loss vinyl off the machines
- B. Vinyl products that did not pass QC testing
- C. Products rejected or returned by customers
- D. Old inventory

The vinyl is picked up regularly by two different independent contractors, Lakeland Polymers and Weehawken Waste. Both companies resell the vinyl to recyclers who melt the vinyl down and convert it to other products. Lakeland Polymers has the vinyl converted into vinyl flooring. The vinyl handled by Weehawken Waste is ultimately recycled into garden hoses.

IV. Job Planning

Managers have placed a large amount of time into planning jobs for printing, laminating and embossing. Jobs are carefully planned to reduce idle time, maximize output and decrease resource usage. This management technique has been implemented mainly for economic reasons and as a result resources have been reduced. This is an ongoing process.

V. Quality Control

Quality Control checks are done more frequently to reduce chance of waste. QC checks are performed to ensure that high quality products are being printed. This reduces the amount of waste products that get printed.

VI. Maintenance

Regular maintenance is performed by an inhouse staff to ensure that the facility is operating at peak performance. Resources are not being wasted as a result of poor manufacturing performance.

VII. WA Sustainability – Product Design

Roysons has incorporated sustainable design into the development of new products that it intends to bring to market. The development of new products at Roysons will consider environmental design criterion from the onset of the product development process.

VIII. LED Lighting throughout the facility

All lighting systems in the plant and the office space are being replaced with LED lighting to conserve and reduce light bulb recycling waste.

IX. HVAC system in offices

HVAC System is currently in three zones. The system will be looped together to contain the recycled air in the system. This will reduce warm air entering system and increasing the energy required to cool down.

X. Damper on Compressor Exhaust

Dampers installed on Compressors in the plant to capture the hot air. The warm air will be recycled through the building to help heat the plant resulting in energy savings.

XI. New Energy Efficient Windows in the Office

All office windows will be replaced with energy efficient windows to improve insulation and conserve energy.

7.0 SUCCESSFULLY COMPLETED PROJECTS

I. Solvent Removal

Roysons Corporation was converted to a waterbased printing facility.

II. Light bulb Recycling

A light bulb recycling program has been established to properly dispose of fluorescent light bulbs.

III. Reduce Office Thermostats

Office thermostats have been set one degree colder this winter to conserve resources.

IV. Unnecessary Appliances

All unnecessary appliances brought into the building by employees have been removed from the factory floor. Employees may use the microwaves and refrigerator in the lunch room only. Removal of these small appliances will decrease energy usage.

V. Truck Idling

All delivery trucks have been informed that idling is not allowed outside the building. Truck drivers are informed that their vehicles must be turned off to reduce fuel usage and emissions around the building.

VI. Reclamation Program

A Reclamation Program has been initiated for our fabric backed vinyl products and our Green Terralon and Nolar products. Customers may return products that have either been stripped off the wall or were ready to be discarded as waste. The rebate program gives the customer a monetary incentive to recycle the product rather than increasing solid waste generation. The detailed program can be located on our website. It is titled, *Roysons Reclamation Program*.

The reclaimed products are being recycled with the other scrap vinyl products and being picked up by Lakeland Polymers. This vinyl is converted to flooring and garden hoses. In the future, we hope to find a way to use the reclaimed waste in our wallcovering line.

VII. Cardboard Recycling

A separate 40 ton cardboard recycling container has been placed in Truck Bay 6 in the rear of the building to increase recycling of fiber products. Waste Management provides a rebate for full containers increasing the incentive to remove all fiber products from the waste stream and place them in the cardboard container for recycling.

VIII. Recycling

Recycling at Roysons has increased in the Wood, Metal, Single Stream and Cardboard Recycling Programs. Recycling has decreased our Solid Waste Generation. All cans, bottles, etc are remove by Waste Management in a Single Stream Recycling container. All fiber products are collected and placed in a 40 ton cardboard recycling container, which is removed by waste Management when it is full. Metal and Wood containers are also picked up on a regular basis by Waste Management.

IX. New Building Lighting System

A new lighting system has been installed in the entire facility with “on-demand” lighting. Lights will only come on in any area if the movement sensor has been triggered. Lights will turn off automatically if motion is no longer detected. This reduces electricity use while it allows employees to move from area to area without switching on and off switches.

X. Removal of Underground Storage Tanks

The Underground Storage Tanks were removed on August 2, 2012. These tanks were used for storage of the solvents MIBK and MEK. As the facility is transforming into a solvent free facility these tanks were no longer required and were removed. The removal was overseen by NJDEP and all NJDEP and EPA guidelines were followed and documented. The tank removal reduces all possibility of air and soil contamination by either leak or spill.

XI. Switch to Waterbased Printing facility completed

Roysons Corporation became a waterbased printing facility in 2013.

A. Removal of Title V Operating Permit

Roysons Corporation has completely converted operations to a waterbased printing facility. We no longer operate under a Title V Operating permit. Roysons Corporation has General Permits from NJDEP for printing and lamination operations and a General Permit for three small boilers.

B. Ink Storage

Solvent Inks are no longer be stored at the facility.

C. Hazardous Waste Generation

Roysons Corporation no longer generates hazardous waste from printing operations.

D. Coating Operations

All coating operations, printing, adhesive and topcoating are waterbased.

XII. Thermal Oxidizer (RTO) Shutdown and Removal

Following the conversion to a waterbased facility, The RTO was removed from operation.

XIII. New Roof Installed

A new roof was installed on the building. This sealed leaks, gaps and holes that have allowed heat to escape the building.

XIV. Building received new siding and repair

Brick face has been repaired and improved with new insulated foam and concrete face. This improves insulation, prevents crumbling bricks from causing damage and improves the appearance of the facility. Increased insulation should improve energy conservation.

XV. 55 gallon drum of MEK replaced with 5 gallon containers

The 55 gallon drum of MEK was replaced with 5 gallon containers to reduce evaporation each time the big drum was opened and reduce waste. Smaller amounts may be dispensed from the 5 gallon containers reducing waste and pollution.