

## **READINESS OF LYCEUM OF THE PHILIPPINES UNIVERSITY-LAGUNA IN ISO 14001: ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION**

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### **ABSTRACT**

*This study focused on the readiness of Lyceum of the Philippines – Laguna in terms of the different aspects of the requirements of ISO 14001. However, this study would only assess the readiness of the institution and not its implementation; this will serve as basis and a useful measurement of an organization's sincerity about improving its environmental performance. The research design used was the descriptive survey type. The number of employees was 178 employees. The researchers used the Slovin's Formula to determine the number size of the respondents which resulted to 124 respondents. Majority of the respondents were college graduates, administrative staff who belong to the Maintenance department, Full time / Regular and their length of service was 1-3 years in the university. Results show that in the aspects of Environmental Policy, Planning, Implementation and Operation, Checking and Corrective Action, and Management Review, LPU-Laguna was in Slight Compliance with the requirements of ISO 14001: Environmental Management System. This study provides proposed action plan for the institution's prior implementation of ISO 14001.*

**Keywords:** Environmental Management System (EMS), Level of Agreement, Readiness.

### **INTRODUCTION**

An environmental management system (EMS) is a structured system designed to help organizations manage their environmental impacts and improve environmental

performance caused by their products, services and activities. An environmental management system provides structure to environmental management and covers areas such as training, record management, inspections, objectives and policies.

EMS is a management frameworks that incorporate a continuous improvement approach into an organization's policies, procedures, and programs that address how its activities impact the natural environment. These frameworks are generally based on the 'plan, do, check, act model' for coordination of organizational goals and programs. The goal of an EMS is to improve the organization's environmental performance by reducing or preventing pollution associated with its activities, whether in terms of its resource use, its production process, or the fate of its products after they are sold. Improvements in this performance are measured by environmental indicators.

Lyceum of the Philippines-Laguna (formerly Lyceum Institute of Technology) was incorporated on January 18, 2000. With Dr. Sotero H. Laurel, Chairman of Lyceum of the Philippines University and concurrently Chairman of Lyceum of Batangas; Mr. Feliciano L. Torres, President of Yazaki-Torres

Manufacturing, Inc.; Atty. Roberto P. Laurel, President of Lyceum of the Philippines University; Mrs. Sarah Laurel-Lopez, Vice President/Treasurer of the Lyceum of the Philippines University; Mr. Peter P. Laurel, President of Lyceum of Batangas as incorporators, plans for LPL began to unfold. As ISO 9001 certified the institution is looking forward to improve the services that was provided to all the students by considering the other standards like ISO 14001 to improve not only the image of the institution but also the employees' behavior towards the environment.

According to ISO 14001 EMS handbook, a guide line for the time interval between reviews is 3 to 6 months in the early stage so implementation followed by annual reviews once the system becomes more mature. In reality, the time intervals should be determined by events.

This research is aligned with the requirements of ISO 14001: Environmental Management System, in order for an organization to be certified. The researchers undertook this study not by the commission of the institution but with the researchers' own initiative to help the institution to determine the level of readiness of Lyceum of the Philippines-Laguna in the different aspect of the requirements of EMS. This study will provide proposed action plan for the institution's prior implementation of ISO 14001.

### ***Statement of the Problem***

The researchers analyzed the readiness of Lyceum of the Philippines – Laguna in ISO

14001; Environmental Management System.

Specifically, the study attempted to answer the readiness of Lyceum of the Philippines-Laguna in different aspect by answering the following questions:

1. What is the demographic profile of the respondents in terms of:
  - 1.1. Educational Attainment;
  - 1.2. Position in the Organization;
  - 1.3. Department;
  - 1.4. Type of Employment; and,
  - 1.5. Length of Service.
2. How do the respondents rate the level of agreement in terms of the requirements of Environmental Management System:
  - 2.1. Environmental Policy;
  - 2.2. Planning;
  - 2.3. Implementation and Operation;
  - 2.4. Checking and Corrective actions; and,
  - 2.5. Management Review
3. What are the action plans that can be recommended to the institution's prior implementation of ISO 14001: Environmental Management System?

## METHODOLOGY

### Theoretical Framework

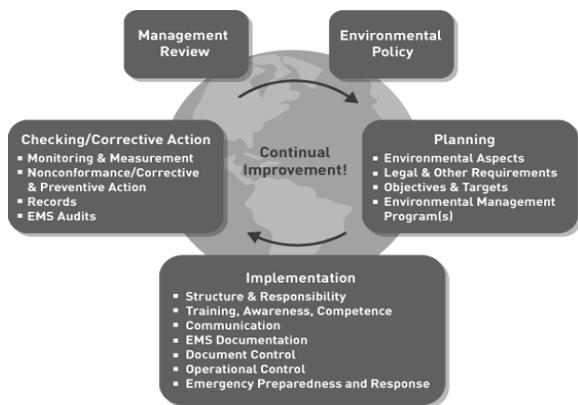


Figure above shows the EMS framework was adapted from the ISO 14001 Environmental Management Systems handbook. It encompasses several basic elements that were taken together to create a continuous cycle approach to managing day-to-day operations. The most common framework for an EMS was based upon the International Organization for Standardization (ISO) 14001 Standard, which allows an organization the option to be audited by a third-party and registered as compliant.

Environmental Policy, the intention of this requirement is to make the organization's environmental policy available to the public. The policy was intended to be the main 'driver' of the environmental management system and all other elements of the system would follow on naturally from it. The environmental policy should also be reviewed by top management. This was to ensure that the ultimate responsibility for and commitment to an EMS belongs to the highest level of management within the organization.

Under planning, there are four sub-clauses such as: (1) Environmental Aspects, the intent behind this sub-clause was to ensure that an organization had the capability and mechanisms to identify continually any environmental aspects it had, and then to attach a level of significance to those aspects in a structured and logical way. (2) Legal and other environmental requirements, this sub-clause requirement was included in the Standard because it was recognized by the authors of ISO14001 that an organization could fall down on its environmental performance if it did not possess sufficient knowledge of applicable environment allows, or codes of practice, within its industry sector. These codes of practice are the 'other environmental requirements'. (3) Objectives and targets, although the organizations have an environmental policy and have identified those aspects of its business which have a significant environmental impact. It needs to translate such findings into clear achievable objectives, measured by specific targets. (4) Environmental Management Program, the sub-clause goes on to say that programs are to be established and maintained; the purpose being to ensure that the organization has allocated responsibilities and resources and set time-scales for ensuring that the activities described in the preceding sub-clauses will happen as planned. To allow such a program to be monitored, it therefore makes sense for the organization to document and make visible and available, such a plan or program to all involved employees.

Implementation, this is the longest section in the Standard, has no less than seven sub-clauses. These sub-clauses are: (1) Structure

and Responsibility: This sub-clause was included to ensure that personnel are assigned specific responsibilities for apart, or parts, of the EMS and have a very clear-cut reporting structure (with no ambiguities). (2) Competence, Training and Awareness: this sub-clause was designed to enable an organization not only to identify training needs, as appropriate, but also to measure the success of that training. All individuals need some form of training to enable them to perform a new task. In the context of ISO1400, awareness was the product (or end result) of any training given. This enhanced knowledge should enable them to make more informed decisions when dealing with environmentally related issues. (3) Communication: it was believed by the authors of the Standard that means of communication: both internally and externally, are extremely important and that, if not formally addressed, may have negative effects on the success of the EMS. (4) EMS Documentation: for a system to be audited, there must be a minimum level of documentation (consistent with the requirements of the Standard). (5) Document Control: the purpose of document control in any management system was to ensure that when an employee follows a procedure, that procedure is the most up-to-date one available, and that an out-of-date procedure cannot be followed accidentally. (6) Operational Control: the purpose of operational control was to ensure that those environmental aspects that are deemed to be significant are controlled in such a way that the objectives and targets have a fair chance of being achieved. Thus, operational controls will tend to be prescriptive, and

depending on the nature of the process or operation they refer to, could be detailed work instructions or process flow diagrams or charts. Such controls generally address the day-to-day operations of the organization. (7) Emergency Preparedness and Response: the intent behind this sub-clause was that an organization must have in place all plans on how to react in an emergency situation. Waiting until an emergency occurs and then formulating a plan was plainly not a good idea. The emergency plans or procedures may not work in practice, and this failure may lead to an environmental incident.

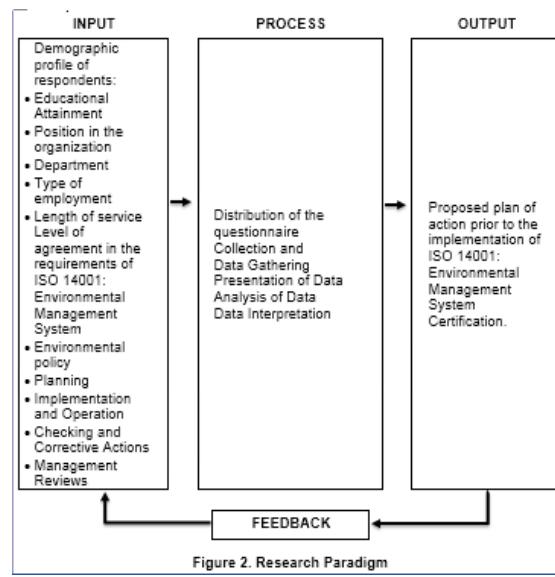
Under checking/corrective action, there are four sub-clauses such as; (1) Monitoring and Measurement: Monitoring, in the sense of ISO14001, means that the organization should check, review, inspect and observe its planned activities to ensure that they are occurring as intended. Measurement was required to show absolute amounts of waste being produced, or recycled; percentage improvements in energy reduction; readings of pH meters to ensure compliance with legislation and so on. (2) Non-conformity, Corrective and Preventive Actions: Non-conformances are the failure to meet targets, it must be recognized and acted upon. The root cause should be investigated and controls put in place to make sure the non-conformances do not happen again. (3) Records: the purpose of this clause was to ensure that the organization keeps records of its activities. (4) EMS Audit: The concept of self-policing was recognized as an improvement mechanism by organizations with any form of management system. The audits should be carried out not

only by checking compliance of the organization to the requirements of ISO14001, but also by checking compliance to the organization's own procedures.

Management Review: the purpose of this clause was to consider, in a structured and measured way, all of the preceding steps that have been taken by the organization, and to ask fundamental questions such as: was the organization doing and achieving what has been stated in the environmental policy? Are objectives and targets set for environmental performance achieved? , If objectives and targets are not achieved, why not? , Are appropriate corrective actions taking place? These questions, and more, should be asked by top management. The ideal vehicle for such an inward-looking review is a formalized management review with an itemized agenda, minutes being taken, and a reports being issued to all interested parties. Management commitment was usually exhibited if indeed such reviews are attended by the senior management- site directors and the like who are, in the Standard's terminology, 'top' management.

EMS is a cycle of continual improvement to bring the many environmental issues of concern expressed by stakeholders into day-to-day operations and development of long term work plans and program. It also improves the understanding amongst an organization's personnel of where operations interact with the natural environment and the role that various groups play.

### **Conceptual Framework**



The figure above shows the research paradigm that involves the beginning up to the end process of assessing the readiness of Lyceum of the Philippines-Laguna in ISO 14001: Environmental Management System.

The input consists of the demographic profile of respondents which includes the educational attainment, position in the organization, department where the respondents belong, type of employment and the length of service and the respondent's level of agreement in terms of the requirements of ISO 14001: Environmental Management System.

The process comprises the distribution of the questionnaires to the respondents. As for the retrieval of the questionnaire, the researchers gave the respondents two to three days to complete the questionnaire. After the retrieval, the researchers can start the tabulation of the result and analysis of the data

by the use of statistical treatment and by that the researchers can interpret the data.

The output would be a proposed plan of action for the institution's prior to the implementation of ISO 14001.

### **Research Methodology**

The researchers used a descriptive survey type of research as the principal instrument for data gathering, to determine the level of agreement in the requirements of Environmental Management System on the requirements of ISO 14001 such as; Environmental Policy, Planning, Implementation and Operation, Checking and Corrective Action, Management review.

This ISO 14001 EMS checklist was adapted from a complete ISO-14001 gap analysis questionnaire that can be easily customized to organization-specific requirements. Gap analysis report was automatically generated highlighting areas organization needs to focus on to successfully establish a complete EMS. This research presented the data gathered by the use of graphs and charts that will serve as a way of understanding the data to come up with the analysis and conclusion of the study.

### **Sample Size**

In order to determine the number size (n) of the respondents, the researchers used the Slovin's Formula. The researchers determined the number of respondents per department. A total of 124 respondents.

### **Sampling Design and Technique**

The researchers used stratified random sampling in which the employees of Lyceum of the Philippines-Laguna are the respondents. Stratified random sampling is a method of sampling that involves the division of a population into smaller groups. The strata were based on the number of employees per offices and department. Stratified sampling can provide greater precision than a simple random sampling in terms of the same size.

### **The Subject**

The study focused on the agreement of Lyceum of the Philippines - Laguna in terms of requirements of ISO 14001; Environmental Management System to enable the institution to have a basis before considering the implementation of ISO 14001.

The respondents of this study would be the 124 personnel of the Lyceum of the Philippines – Laguna because they are the ones who know the different policy that the institution is implementing and they are the ones who will be affected ones the institution decided to implement EMS.

### **Research Instrument**

The research instrument used by the researchers was adapted from the ISO 14001 EMS Checklist.

The questionnaire consists of two parts. Part I aimed to gather information on the respondent's personal data as his/her name, educational attainment if he/she was a High

School Graduate, a College Graduate, Masteral or Doctoral degree. Position in the organization was also needed if he/she belongs to the top management, middle or low management level. For the faculty, the college that his/her belongs was also needed. The type of employment was also asked, if he/she was a part-time or full-time employee of the Institution and also the length of service was also asked.

Part II composed of 30 questions which are all based on the requirements of the ISO 14001. The 30 questions are subdivided into different aspect such as Environmental Policy, Planning, Implementation and Operation, Checking and Corrective Actions and the Management Review.

The questions can be answered by the level of agreement using the scale which is as follow:

**Table.Rating Scale and Interpretation.**

Rate	Scale	Verbal Interpretation	Interpretation of the Result
4	3.50- 4.00	Strongly Agree	Compliance
3	2.50 - 3.49	Agree	Slight Compliance
2	1.50 - 2.49	Disagree	Less Compliance
1	1.00 - 1.49	Strongly Disagree	Non-compliance

#### **Validation of Research Instrument**

The survey questionnaire to be used was a set of ISO standard questions based in the checklist of Environmental Management System. Hence, the questionnaire can be considered already as a validated instrument.

For permission, the researchers asked Dr. Oscar Bautista, the Administrator of Lyceum of the Philippines-Laguna and presented the said survey questionnaires to Dr. MerlitaMedallion, the director of the research office in Lyceum of the Philippines – Laguna wherein the research was conducted. The researchers also asked the permission of Mr. George Atento, the director of Human Resources Department for the distribution of the survey questionnaires to the employees of the institution.

#### **Data Gathering Procedure**

The researchers asked an approval to the school administrators for the distribution of the survey questionnaire. The survey was created using suitable questions modified from the checklist of ISO 14001. The survey was comprised of 30 questions, which were related to the participant's perception regarding in the readiness of Lyceum of the Philippines Laguna in ISO 14001: Environmental Management System.

Respondents gave time to respond and then the researchers collected the survey questionnaires the next day. There were no incentives offered for participating in the research.

#### **Data Processing Method**

The data gathered were tabulated and graphed for further analysis dependent on their functional specifications.

### Statistical Treatment

The questions under study will be treated by using the following formula.

1. Percentage Formula was used to determine the percentage of the demographic profile. The formula is given below.

Formula:

$$\% = \frac{F}{N} (100)$$

Where: % - Percentage

F – Frequency

N – Number of Respondents

2. Weighted mean was used to determine the relative importance of each quantity on the average. Weightings are the equivalent of having that many like items with the same value involved in the average.

Formula:

$$\bar{x} = \frac{\sum w_i x_i}{\sum w_i}$$

Where:

$\bar{x}$  = is the weighted mean variable.

$x_i = x_1, x_2, x_3, \dots, x_n$  = is the observed value

And  $f_i = f_1, f_2, f_3, \dots, f_n$  = is the allocated weighted value.

### PRESENTATION AND ANALYSIS OF DATA

#### Demographic Profile of Respondents

##### 1.1 As for Educational Attainment

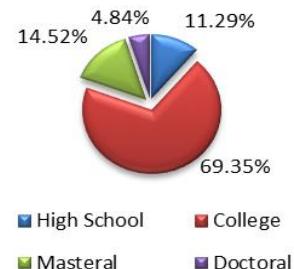


Figure above shows that the majority of the respondents belongs to the College Graduate which has a percentage of 69.35%, followed by 14.52% of those respondents attained theirs Master's Degree, 11.92% are High School Graduate and 4.84% attained their Doctor's Degree.

##### 1.2 As for Position in the Organization

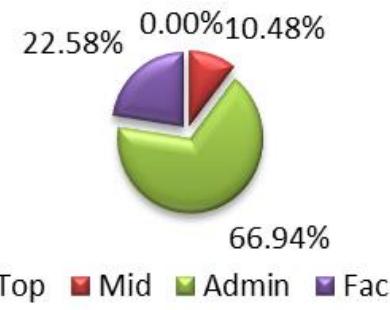


Figure above shows that the majority of the respondents are Administrative Staff which has a percentage of 66.94%, followed by 22.58% are Faculty from different colleges, 10.48% are from the Middle Management Level and 0.00% because there is no respondent from the top management level.

### 1.3 As Per Department

Most of the respondents in terms of department were maintenance with frequency of 15 with equivalent percentage of 12.10% and the respondents with lowest frequency in terms of department were ISRO, Property, Internal Audit, Research Office, Planning and SSO (student services office) with a frequency of 1 and the percentage of .81 %.

### 1.4 As for the Type of Employment



Figure above shows that the majority of the respondents are Full Time or a Regular Employee which has a percentage of 82.26% and the remaining 17.74% are the Part Timers or the Contractual Employees.

### 1.5 As of the Length of Service

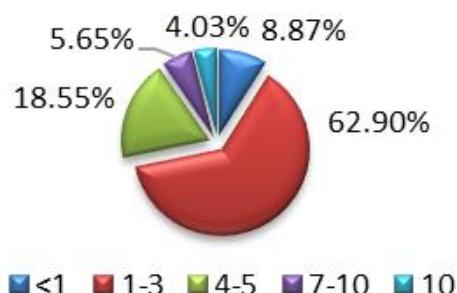


Figure above shows that the majority of the respondent have the length of service of 1-3

years with the percentage of 62.90%, followed by the 4-5 years with the percentage of 18.55%, next is those whose length of service is less than 1 year with the percentage of 8.87%, and then next is those who are in the institution for 7-10 years with the percentage of 5.65% and last is those whose length of service is 10 years onward with the percentage of 4.03%.

### 1. Level of Agreement in the requirements of ISO 14001: Environmental Management System.

#### As for Environmental Policy

Environmental Policy	Weighted Mean	Verbal Interpretation
The top management defines the institution's environmental policy.	2.98	Slight Compliance
The environmental policy is suitable to the nature, scale, and environmental impacts of the organization's activities and services.	2.99	Slight Compliance
The environmental policy includes a commitment to continual improvement and prevention of pollution.	3.03	Slight Compliance
The environmental policy is documented, implemented, and maintained and communicated to all employees.	2.96	Slight Compliance
The environmental policy is available to the students.	2.89	Slight Compliance
<b>Grand Weighted mean</b>	<b>2.97</b>	<b>Slight Compliance</b>

The table shows that under environmental policy there are five statements that needed to be complied with the institution as part of the requirements of ISO 14001, which has a grand weighted mean of 2.97 verbally interpreted as "Slight Compliance".

## As for Planning

PLANNING	Weighted Mean	Verbal Interpretation
<b>Environmental aspects</b>		
The organization established procedure(s) to identify the effect(s) of their activities and services.	2.9	Slight Compliance
The organization periodically updates all employees regarding its aspects and significant impacts to the environment.	2.8	Slight Compliance
<b>Legal Requirement</b>		
The organization established a procedure to identify and have access to legal and other requirements of the organization that are applicable to the environmental aspects of its activities or services.	2.94	Slight Compliance
<b>Objectives and targets</b>		
The organization established environmental objectives and targets, at each relevant function and level within the organization.	2.93	Slight Compliance
The organization considered the legal and other requirements, its significant environmental aspects, its technological options, financial, operational, and business requirements and the views of interested parties.	3.0	Slight Compliance
<b>Environmental management program(s)</b>		
The organization established environmental management program(s) for achieving its objectives and targets.	2.92	Slight Compliance
The environmental management program(s) assign a person who's responsible for achieving objectives and targets at each relevant function and level of the organization.	2.91	Slight Compliance
The environmental management program(s) define the means and timeframe by which they are to be achieved.	2.9	Slight Compliance
The environmental management program(s) reviewed and changed when new policy implemented in the organization.	2.9	Slight Compliance
<b>Grand Weighted Mean</b>	<b>2.91</b>	<b>Slight Compliance</b>

The table shows that under planning there are four-sub areas that needed to be comply by the institution as part of the requirements of ISO 14001. First and third area has two statements, second has one statement and fourth has four statements. Which has a grand weighted mean of 2.97 verbally interpreted as "Slight Compliance".

## As to Implementation and Operation

IMPLEMENTATION AND OPERATION	Weighted Mean	Verbal Interpretation
<b>Structure and responsibility</b>		
The management provided resources essential to the implementation and control the environmental management system. Resources include human resources and specialized skills, technology, and financial resources.	2.94	Slight Compliance
<b>Training, awareness and competence</b>		
The organization identified the training needs for all personnel whose work may create a significant impact upon the environment.	2.9	Slight Compliance
The organization established procedure to make it employees at each relevant function aware of the importance of conformance with the environmental policy and procedures and with the requirement of the environmental management system (EMS).	2.94	Slight Compliance
The organization established procedure to make it employees at each relevant function aware of the significant environmental impacts, actual or potential, of their work activities and the environmental benefits of improved personal performance.	2.98	Slight Compliance
The organization established and maintained procedure to make it employees at each relevant function aware of their roles and responsibilities in achieving conformance with the environmental policy and procedures and with the requirements of the EMS, including emergency preparedness and response requirements.	2.97	Slight Compliance
The organization established and maintained procedure to make it employees at each relevant function aware of the potential consequences of departure from specified operating procedure.	2.94	Slight Compliance
The organization ensures that personnel performing tasks which can cause significant environmental impacts are competent on the basis of appropriate education, training, and/or experience.	2.92	Slight Compliance
<b>Communication</b>		
Regarding its environmental aspects and environmental management system, the organization established and maintained procedures to ensure that the internal communication between the various levels and functions of the organization.	2.92	Slight Compliance
<b>Emergency preparedness and response</b>		
The organization established and maintained procedures to identify potential accidents and emergency situations to respond for, and for preventing and mitigating the environmental impacts that may be associated with them.	2.89	Slight Compliance
The organization reviewed and revised, where necessary, its emergency preparedness and response procedure, in particular, after the occurrence of accidents or emergency situations.	3.02	Slight Compliance
<b>Grand Weighted Mean</b>	<b>2.94</b>	<b>Slight Compliance</b>

The table shows that under implementation and operation, there are four-sub areas that needed to be complied by the institution as part of the requirements of ISO 14001. Under structure and responsibility and communication there is one statement, under Training, awareness and competence there are six statement and under Emergency preparedness and response there is one statements. Which has a grand weighted mean of 2.94 verbally interpreted as "Slight Compliance"

## CHECKING AND CORRECTIVE ACTIONS

CHECKING AND CORRECTIVE ACTIONS		Weighted Mean	Verbal Interpretation
<b>Monitoring and measurement</b>			
The organization established and maintained documented procedures to monitor and measure, on a regular basis, the activities that can have a significant impact on the environment like the disposal of chemicals in laboratories.		2.96	Slightly Compliant
The organization calibrates equipment and maintains records according to the organization's procedures.		2.94	Slightly Compliant
<b>Records</b>			
The organization established and maintained environmental records demonstrated conformance to the requirements of this International Standard.		2.92	Slightly Compliant
<b>Environmental management system audit</b>			
The organization established and maintained program(s) and procedure(s) for periodic environmental management system audits to be carried out in order to determine whether or not the environmental management system conforms to planned arrangements for environmental management including the requirements of this International Standard.		2.92	Slightly Compliant
<b>Grand Weighted Mean</b>		2.94	Slightly Compliant

The table for Checking and Corrective Action shows that under Checking and Corrective Action there are three sub-areas, first sub-area have two statement, second sub-area have one statement and last sub-area have one statement that needed to be comply by the institution as part of the requirements of ISO 14001, which has a grand weighted mean of 2.94 verbally interpreted as "Slight Compliance".

## MANAGEMENT REVIEW

Management Review	Weighted Mean	Verbal Interpretation
The organization's top management, at intervals it determines, reviews the environmental management system to ensure its continuing suitability and effectiveness.	2.92	Slightly Compliant
The management review addresses the possible need for changes to policy, objectives, and other elements of the environmental management system, in the light of the commitment to continual improvement.	3.00	Slightly Compliant
<b>Grand Weighted Mean</b>	2.96	Slightly Compliant

The table shows that under Management Review there are two statement that needed to be comply by the institution as part of the requirements of ISO 14001, which has a grand

weighted mean of 2.96 verbally interpreted as "Slight Compliance".

## CONCLUSIONS

1. The demographic profile of the respondents.

The researchers showed that majority of the respondents in terms of Educational Attainment were a college graduate, in terms of Position in the Organization were an Administrative Staff, in terms of Department were Maintenance, in terms of the type of Employment the respondents were Full time / Regular and in terms of Length of Service majority of the respondents were 1-3 years in the university.

2. The respondents rate the level of agreement in terms of the requirements of Environmental Management System.

- a. Majority of the respondents' level of agreement in terms of the requirements of Environmental Policy were slight compliance, according to EuropäischesKomiteefürNormung (2003), The environmental policy has to be clearly formulated so that it is understandable to internal and external stakeholders and it has to be regularly adapted to changing conditions and experiences. The environmental policy can be seen as the driving force for the implementation and improvement of the environmental management system which means that for the institution to

achieve the highly compliant in the requirements, the institution should focus in the formulation of the environmental policy because it is one of the important ingredients of ISO 14001. Giving an orientation and informing all the employees regarding the persons involved in the policy are also necessary for the awareness of all the personnel of the institution.

b. Majority of the respondents' level of agreement in terms of the requirements of Planning were slight compliance, according to EuropäischesKomiteefürNormung, (2003), the business has to develop a procedure in order to identify environmental aspects and to assess which of these are significance. Also, according to United States Environmental Protection Agency, Objectives and targets are set by considering as part of the legal and other requirements, the views of interested parties, as well as, technological, financial and other operational considerations. This ensures that the objectives and targets are robust, to respond to legitimate concerns, that they are realistic for the organization, and that it is possible to develop strong management programs to achieve them which means that the institution should develop a procedure in order to identify environmental aspects and scheduled a meeting to update all employees regarding the status of the institution in the requirements, to improve the readiness into highly compliant.

c. Majority of the respondents' level of agreement in terms of the requirements of Implementation and Operation were slight compliance, according to EuropäischesKomiteefürNormung.(2003),the successful implementation of the environmental management system requires the commitment of all employees of the business. Also, Sammalisto K. and Brorson T. stated in their case study that training and communication are essential elements in the implementation of environmental management systems (EMS).The literature review indicates that training is a key factor during implementation of EMS, and that training may change attitude and behavior among managers and employees which means that the management should provide several training and seminars to improve the knowledge and skills of the employees regarding the Environmental Management System and how to handle environmental impacts of the institution. The management should also pinpoint potential risk and together with this is the development of emergency plan to response immediately if an accident occurs.

d. Majority of the respondents' level of agreement in terms of the requirements of Checking and Corrective Action

were slight compliance, according to Theodore & Theodore 2010, A business has to keep their records up-to-date, as they either demonstrate the business' compliance with the environmental management system or help to reach compliance by analyzing the documentation which means that the management should conduct periodic assessments of compliance with legal requirements also, the management should make their records up-to-date to verify if the system was effective or not.

e. Majority of the respondents' level of agreement in terms of the requirements of Management Review were slight compliance, according to Europäisches Komitee für Normung, 2003, The management of a business is claimed to review the environmental management system to ensure its compliance and its effectiveness with an eye to continual improvement (US Environmental Protection Agency) which means that the management should set personnel who will comprehend the system to review on the development of the institution regarding the requirements of ISO 14001 and to determine if the institution is ready for the certification.

## RECOMMENDATIONS

Based on the findings and the conclusions the researchers come up with this following recommendations:

1. The researchers recommend to the institution to apply in ISO 14001 for it can help to improve their image as the first school in CALABARZON who will be certified as ISO 14001. The certification might encourage more students to enroll in the school.
2. The researchers recommend to consider the action plan that the study provided to improve and measure the effect of the action plan to the level of agreement of the employees regarding the requirements of ISO 14001: Environmental Management System.
3. The researchers would recommend to the management to allow the students to conduct research in a longer time frame or in a regular classes not in the summer term for the future researchers to have enough time to gathered and complete the study and to have more respondents.
4. The researchers recommend for the future researchers to conduct study after the implementation of ISO 14001 to validate the effectiveness of the implementation as part in the management review which is one of the requirements of ISO 14001.

The researchers recommend for the future researcher to check the Environmental Management System requirements for the

school based on the legal requirements set by the government.

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