

# INTERNAL AUDIT OF THE ENVIRONMENTAL MANAGEMENT SYSTEM ISO 14001 IN A HIGHER EDUCATIONAL ESTABLISHMENT

## VIDES PĀRVALDĪBAS SISTĒMAS ISO 14001 IEKŠĒJAIS AUDITS AUGSTĀKĀS IZGLĪTĪBAS IESTĀDĒS

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**Keywords:** *environmental management, internal audit, ISO 14001*

In the second half of 2007, an environmental management system (EMS) was introduced in the Institute of Energy Systems and Environment of the Riga Technical University (IESE). The first-year masters' students were responsible for the implementation of the EMS and the development of the handbook.

In the second half of 2008, an internal audit of this environmental management system was conducted. The first-year masters' students of 2008 were responsible for the auditing of the EMS and the results and management review. These students were educated on environmental management issues in their previous semesters at the Institute and thus no training of specialists was necessary.

The aim of the internal audit was to determine whether the EMS conforms to planned arrangements, has been properly implemented and is maintained and to provide the information about the results of audit to management.

At first the document audit was conducted and then employees of IESE were interviewed to find out if they are informed about environmental management system and if their actions are adequate. Some nonconformities have been found. The handbook was not user-friendly – there were no content and page numbering, also some chapters were uncompleted and it was not signed by the top management. The environmental policy of IESE was not available to the public. Protocol of the meeting and final report is not added to the handbook. There are no measurements of IESE electricity and heating consumption that should be done.

Employees are informed about EMS, and there were only a few insignificant nonconformities found. Other issues audited have been maintained appropriately. Re-use of used paper and carton materials and collection of printer/copier has been evaluated positively by the group of auditors.

As a result of the internal audit of the environmental management system, a number of improvements were made and the next environmental program for 2009 was developed. The greatest part of nonconformities was disposed in the process of auditing. The environmental policy of IESE is now available to the public. The handbook is improved and is user-friendly – with content and numbering, also some chapters are supplemented.

The environmental program for 2009 has two main objectives - fluorescent lamps should be collected and utilized, one of themes for bachelor thesis should be „Monitoring of electricity

and heating consumption in IESE". This program is being successfully realized – used fluorescent lamps are already collected and will be delivered to a waste treatment company. Theme for bachelor thesis will be given for one of IESE 3<sup>rd</sup> year bachelors and as a result of this paper, IESE will have organized monitoring and measurement system for electricity and heating consumption.

The conclusions of auditors' group were:

- Developed environment management system does not provide capturing of EMS activities in case of coordinators change;
- The EMS developed in IESE actually works imperfect, employees should more participate in this system;
- There is need for cooperation with Faculty of Power and Electrical Engineering to comply with some of requirements of standard ISO 14001:2004.

Regardless some gaps, the maintenance and evaluation of a real organisation's EMS could be highly advantageous form of teaching in every higher educational establishment because the aim of the course is not only to give theoretical knowledge and understanding of approaches to environmental management but also to provide training and practical skills in the use of different tools used in planning and assessment of EMS of an organisation. Other important aspects of the described activity are to:

- Train the students in working together in groups and achieve a mutually agreed common result;
- Train the students' presentation and report skills.

***Bērziņa A., Dāce E., Valtere S. Internal audit of the environmental management system ISO 14001 in a higher educational establishment.***

*The internal audit of an environmental management system is necessary to determine whether the EMS conforms to planned arrangements, has been properly implemented and is maintained. Conducting an internal audit at planned intervals new improvements can be made every time to develop and improve the EMS over time. EMS could be highly advantageous form of teaching in every higher educational establishment because the course provides training and practical skills in the use of different tools used in planning and assessment of EMS of an organisation.*

***Bērziņa A., Dāce E., Valtere S. Vides pārvaldības sistēmas ISO 14001 iekšējais audits augstākās izglītības iestādēs.***

*Vides pārvaldības sistēmas iekšējais audits ir nepieciešams, lai pārbaudītu, vai VPS atbilst plānotajiem pasākumiem, ir atbilstoši ieviesta un tiek uzturēta. Iekšējā audīta veikšana plānotos intervālos nodrošina arvien jaunus uzlabojumus, kas palīdz pilnveidot un attīstīt VPS. Vides pārvaldības sistēma varētu tikt ieviesta kā veiksmīga pasniegšanas forma jebkurā augstākās izglītības iestādē, jo šāds process gan iemāca, gan sniedz praktiskās iemaņas dažādu organizācijas VPS plānošanas un novērtēšanas instrumentu izmantošanā.*