



• Reinforcing the monitoring of ISO 14001

Al Keena Hygienic Paper Mill Company Ltd, Jordan

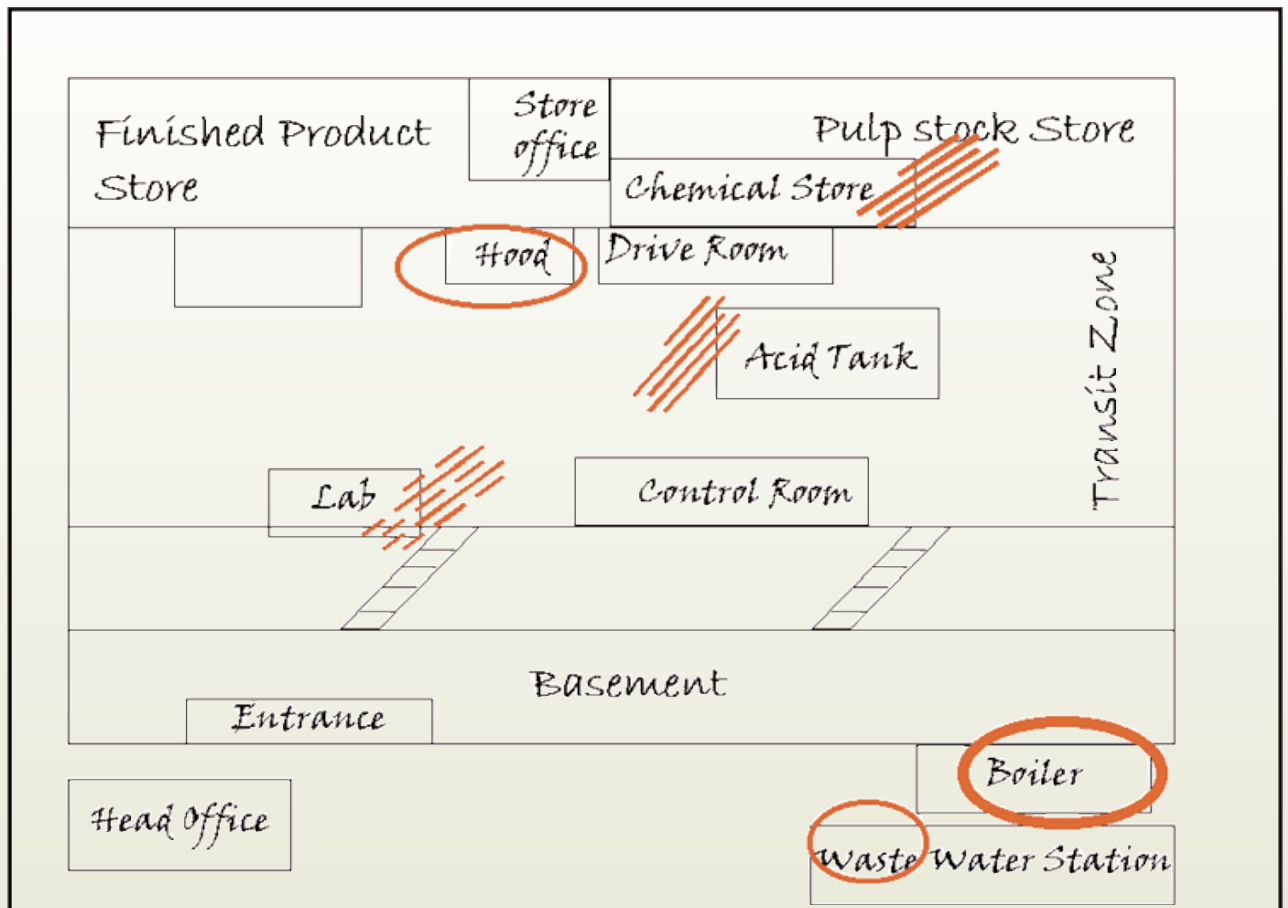
In brief

In production since 1996 and member of the Nuqul Group, Al Keena (175 employees) manufactures 30'000 tonnes per year of jumbo hygienic paper rolls used as raw material to produce, for instance, facial tissue, toilet paper, napkin paper, and kitchen towel. High quality standards of products and services are required to meet the needs of the worldwide customer base. Already certified ISO 14001, Al Keena is very dedicated to protecting the environment and to the continuous improvement of its environmental management system. During the company's review, the Ecomapping Guide was used to identify and locate the key problems to be dealt in priority. The results permitted to save 6.7% of total energy consumption and 43% of total water consumption.

Application

The Ecomapping Guide helped to prioritise the environmental work programme. First, in order to comply with its environmental policy, Al Keena elaborated a planning to reduce the consumption of water and energy that highly involved the employees. An awareness-raising programme was organised to inform and educate the workers on the different environmental issues and the environmental philosophy of the factory. The most impressive result lies in the reduction of the consumption of water. The pulp machine was originally designed to consume 15m³ water/tonne of paper produced. Through its environmental programme, Al Keena managed to reduce it to 7m³ water/tonne by reducing and reusing fibers and water lost during the production process, and by preventing leakage.

• Ecomaps



Action plan

| Environmental aspect | Corrective measures | Investment | Annual savings |
|----------------------|---|---|---|
| Water | <ul style="list-style-type: none"> · Level control improvement · Injected Teflon backing for pumps · Correction of nozzles size · Using treated water for irrigation | 40'000 US\$ | 50'000 US\$ |
| Energy | <ul style="list-style-type: none"> · Automatic control of pumps · Turn off non-critical selected loads during peak demand period · Turn off soft wood and hard wood pulpers during no load operations · Reduce lighting consumption using occupancy sensors | 21'000 US\$ 1'500 US\$ 500 US\$ 3'000 US\$ | 12'847 US\$ 8'000 US\$ 4'150 US\$ 2'530 US\$ |

Mini audit *

Although the management of Al Keena seemed to have made big efforts in sensitising their employees, the latter thought that environmental information and communication were lacking and could be developed. The mini-audit highlighted an area that can be improved in order to converge the different sensibilities between management and employees.

Use of raw materials

Use and choice of energy

Use of water and wastewater

Lessons learned

Even though Al Keena has already applied Good Housekeeping principles and has an Environmental Management System, the Ecomapping Guide was still very helpful and permitted the company to gain a visual overview of their environmental hot spots. The Ecomapping Guide was used to carry out a review of the implementation of the Environmental Management System.

"Adopting the Energy Conservation Policies reflected the environmentally "Green" image of the company. The Ecomapping Guide was a powerful incentive."

Eng. **Waheed Qannas**

Project Manager, Al-Keena Hygienic Paper Mill Company.

For further information

• WHO IS SBA?

SBA, Sustainable Business Associates is an international non-governmental organisation (NGO) working to engage industrialists in 'eco-efficiency' with the aim of minimising environmental impact and improving business productivity. To pursue this aim, SBA has initiated the DELTA Programme to sensitise industrialists to new business risks and opportunities, and to provide them with the management tools and training to move towards sustainable development.

• WHERE ARE THE DELTA NETWORKS?

The DELTA Networks are operating in: Algeria, Egypt, Jordan, Lebanon, Libya, Mauritania, Morocco, Palestine, Syria, Tunisia and Turkey.

• SUPPORT TO DELTA



• WHAT IS DELTA?

DELTA stands for Developing Environmental Leadership Towards Action. Chapter 30 of Agenda 21 (an outcome of the 1992 United Nations 'Earth Summit') indicates that business & industry have a critical role to play in achieving sustainable development goals. After an initial awareness-raising phase, the DELTA Programme focused on structuring industrialists in 'business & environment' networks (DELTA Networks) in 11 countries of the Mashrek & Maghreb. These Networks are composed of key industrialists interested in taking a proactive role and leadership on environmental issues. The DELTA Networks are practical, working structures for industrialists to obtain information & contacts, exchange experiences, develop environmental know-how, and gain access to practical management tools that can offer 'win-win' options based on eco-efficiency.

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The Ecomapping Guide, elaborated by the Association Belge des Eco-Conseillers (ABECE, Belgium), is a visual tool that enables managers and their staff to assess the environmental performance of a micro-company or workshop. By drawing a set of maps (water, soil, risk, air, etc.) of the plant, the main environmental risks and sensitive areas of the factory can be identified. See <http://www.ecomapping.org>

*The mini audit is a 120-second audit done by the workers to assess the company's environmental performance. The results of all staff are then consolidated in a table that is analysed and graphically interpreted.