



الجمعية العلمية الملكية
Royal Scientific Society

Hazardous waste and chemicals Management in Jordan

computerized electronic and integrated system

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Water and Environment Center

Royal Scientific society



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★ About the Royal Scientific Society

- ★ The Royal Scientific Society (RSS) was established in 1970 by a Royal Decree as a non-for-profit non-governmental organization enjoying financial and administrative independence.
- ★ It aims at conducting scientific and applied research serving the development process in Jordan with special attention to industrial research and services. It also aims at providing specialized technical consultations and services to the public and private sectors and at disseminating awareness in the scientific and technology fields.
- ★ The RSS laboratories are nationally & internationally accredited with close personal co-operative ties with local, regional, and international scientific organizations.
- ★ Supported by more than 500 science specialists, researchers, technical support staff, highly skilled management, and faculty, the RSS is recognized as a local, regional and international research and development hub.
- ★ RSS developed its activities concentrating on four major areas, namely; (1) Scientific and technological research & development, (2) Technical services and consultations, (3) Standards and specifications and (4) Human resources development.



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Water and Environment Centre



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- Water & Environment Centre consist of four divisions : Water Studies, Air Quality, Environmental Management and Environment Monitoring And Research Central Unit in addition to:
 - ❖ Cleaner production Unit (UNIDO/ UNEP – RECP net Member)
 - ❖ Green Help Desk initiative (ESCWA)
- provides technical services and consultations in addition to promoting the adoption of sound and best practices conforming to the concept of sustainable development. The WE Centre also delivers field water and environmental measurement and analysis services



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• National Contribution

- ★ Promoting Cleaner Production concepts on Nation wide scale.
- ★ Real-Time monitoring of air quality system.
- ★ Early Warning System for monitoring of water quality (EMARCU).
- ★ Earth-water Global Mega Watershed Development.
- ★ Online Monitoring of Hazardous Materials.
- ★ Industrial water and waste water treatment
- ★ Conducting water demand management project.
- ★ Environmental and Social impact Assessment to major development projects
- ★ Environmental auditing and responsible Production



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About the system



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- A computerized electronic and integrated system used as a tool for the management and control of hazardous materials imported and produced in the country. The system is an electronic model for the integrated and core management of hazardous materials as well as to provide the necessary information in an integrated manner for the involved decision-makers on the types, locations and quantities of hazardous materials used within the country.



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System functions

- Management of the unified list of banned and restricted materials in the country through concerned organizations.
- Monitoring of banned and restricted materials entering the country.
- Processing of electronic import permits for hazardous materials (e-Permits).
- Provision of Material Safety Data Sheets for the chemicals (MSDS).



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The screenshot displays the website interface for the 'System for the unified management of hazardous materials' (نظام المصطلح لإدارة المواد الخطرة - الإمارات العربية المتحدة). The page features a navigation menu with items like 'الرئيسية', 'تسجيل الدخول', 'مساعدة', and 'الصفحة الرئيسية'. A table of contents lists sections such as 'نسخة عن المشروع', 'نواحي السلامة لتداول الكيميائية (MSDS)', 'المواد الخطرة والمنوعة', 'أدوات الاستيراد والتصدير', 'مواقع ذات صلة', 'قوانين ومراجع', and 'الأسئلة الشائعة'. The main content area includes a header with the IHMMS logo and a large image of laboratory glassware. Below this, there is a section titled 'نظام المصطلح لإدارة المواد الخطرة - الإمارات العربية المتحدة' which describes the system's purpose in managing hazardous materials. A sidebar on the right contains a search bar, a login field, and a list of 'نواحي السلامة لتداول الكيميائية'. At the bottom, there are links to download the system's mobile application from the App Store and Google Play.



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System functions

- Tracking of materials and facilities that deal with hazardous materials.
- Provision of a database of hazardous materials incidents.
- Provision of a database of violations related to hazardous materials.
- Provision of instant reports and statistics related to hazardous materials.
- Manage and control disposal of hazardous wastes.



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Development and implementation



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- Development : Royal Scientific Society (Water and Environment Center & information Technology Center)
- Implementation :National authorities concerned with Hazardous chemicals and waste (Ministry of Environment, ministry of Health, ministry of agriculture, custom Department)



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Advantages and Disadvantages

Advantages :

- Provides organizations the ability to monitor, document, trace and control hazardous substances.
- Provides a comprehensive MSDS database for chemical substances.
- Provides public web site to serve users with respect to hazardous materials management together with all the needed information.

Disadvantages

- Information needed is not widely available in many languages.



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Financial



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- System Was developed with a support form Swiss agency for Development and Cooperation (SDC)
- System running cost was incurred by implementing agencies
- System by back was not calculated



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Replication



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- The system was first developed for Jordan and then for UAE (<https://www.hazmat.ae/>), both implementations are currently active. Thus, the system could be adapted and customized to the local conditions of any Arab country.



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Cleaner Production Unit

Competitive Industrial Production and Safe Environment

Applying Cleaner Production (CP)

To Enhance Productivity, Cost Efficiency and Competitiveness



Join a 1-year programme to implement and monitor

eco-efficient measures in your company;

Reduced production costs & Improved environmental management



University of Applied Sciences
Northwestern Switzerland



Development of Small
Businesses and Medium
Enterprises in the field of research,
innovation and business plan
seco



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الاسكوا
ESCWA



GHD

Green Help Desk

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GHD Web Site



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- (<http://www.cp.org.jo/ghdp/index.html>) was established in cooperation with Information Technology center (IT Center). The website includes different items related to GHD and green economy such as: services, events, technical assistance, information pool, national policies and legislations and success stories



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Thank You

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