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Industry compliance for sustained environmental protection

Governments have the responsibility of providing the overall framework needed to help society achieve sustainable development. One of the intended effects of environmental laws and regulations is to provide a level playing field for industry, so that it can contribute to a better quality of life without depleting resources or damaging the environment and jeopardizing current and future generations' health and economic well-being. Over the last three decades, national legal frameworks concerned with environmental protection have become almost universal; the body of international environmental law is also growing significantly.

But environmental laws and regulations are only words on paper if they are not implemented, complied with, and - where necessary - enforced. Governments must therefore devote resources to that end. Without such commitment, government agencies lose credibility and the ability to achieve more widespread compliance and related sustainable development. Non-compliance in turn signals to the public that environmental protection does not have a high priority. Further, long-term economic health often depends on environmental protection measures that may not seem to be economically advantageous in the short run, but which would result in economic and social benefits in the long run. Finally, enforcement action taken when companies do not comply with requirements can help ensure fairness for those who do.

An effective industrial compliance and enforcement programme requires governments to take a number of discrete but linked actions. Compliance should be considered when environmental laws and regulations are framed, as it will be difficult to achieve if they are unenforceable or incomprehensible. Good communication with industries likely to be affected can also help improve eventual compliance.

Economic instruments should be chosen carefully in order to maximize compliance. Environmental performance can be improved by a judicious mix of such instruments, including incentives as well as restrictions. In some cases, "command and control" regulations have not worked well in the past. Consideration should be given to other approaches, such as voluntary or negotiated agreements and market-based policy instruments.

As soon as an environmental law or regulation is in place, an effective compliance and enforcement programme should be set up. Such a programme needs to incorporate several elements. The first is attention to permitting systems. Permitting is the foundation for achieving effective industry compliance. It involves detailed discussions with companies in order to arrive at an agreed decision on how they may operate and on the measures they will need to take to comply with environmental standards. The permit then becomes the practical benchmark against which compliance can be measured.

The second element in a compliance and enforcement programme is verification that industry is meeting the conditions of permits, and therefore complying with the broader aims of the environmental laws or regulations on which they are based. Verification may be accomplished through monitoring and through inspections of company facilities. Both tasks require governments to ensure an adequate supply of well trained and well supported expert personnel.

The third element involves the variety of measures that can be taken to encourage or compel compliance. This element is particularly important where non-compliance is blatant or could cause serious damage to health or the environment. In such cases legal enforcement measures, including appropriate penalty systems, are needed. However, a number of other means of ensuring compliance are available that do not involve resorting to legal penalties.

Compliance and enforcement programmes are thus a central part of successful environmental policies. Attention to their effective and sustained implementation can make a big difference to the overall success of efforts to protect the environment.

Whether operating established programmes or setting up new ones, governments should also pay attention to new trends and to new opportunities for maximizing compliance and its effectiveness. One such area is the emerging multimedia, integrated approach. Environmental laws, and corresponding compliance and enforcement schemes, have often been designed to tackle a single-medium problem such as solid waste or water and air pollution. But this division of the environment into separate media fails to recognize that pollutants move from one medium to another. It also tends to encourage end of pipe controls such as treatment plants, filters and scrubbing, which not only leads to transfer of pollutants between media but also to high investment costs with no economic pay-back. And it leads to added paperwork, administrative complexity, and sometimes inconsistency. This is why integrated approaches encouraging the adoption of cleaner technologies and preventive measures in industrial facilities, and at the same time often resulting in a greater administrative efficiency, are being increasingly adopted.

Moreover, many countries have ratified international agreements including the Montreal Protocol on Substances that Deplete the Ozone Layer, the Basel Convention on the Transboundary Movement of Hazardous Wastes, and the Framework Convention on Climate Change. These countries have to reflect their commitments in national environmental laws and, when these laws concern industrial activities, make sure they are complied with.

In practice, many factors affect the extent to which compliance with environmental requirements is achieved: there are social, moral and personal influences, as well as economic factors, to be taken into account. The underlying goal of a compliance and enforcement programme should be promotion and encouragement of compliance rather than punishment. To create an atmosphere in which most of the regulated community chooses to comply, it is essential that there are effective awareness-raising and educational activities, a system of incentives for those who comply, and information systems to help industry identify solutions available to meet environmental standards.

Ensuring compliance is not the job of governments alone. Industry managers also have an important role to play. They need to install self-monitoring systems that can easily be checked by inspectors and develop internal environmental management systems, in particular auditing and reporting schemes.

ISO 14000 will be a useful tool in that respect. Dialogue between government, industry, and the public at large is a key element for successful compliance and sustained environment protection.

UNEP is assisting in a number of ways. In 1992, it issued the report "From Regulations to Industry Compliance: Building Institutional Capabilities". The corresponding training manual was published this year. UNEP has also taken an active part in the biannual conference series on "environmental compliance and enforcement" organized by the governments of the Netherlands and the United States.

In support of these activities, this issue of Industry and Environment focuses on four important current issues related to industry compliance: the special needs and opportunities of developing countries; compliance with international environmental agreements; making the move from single- to multi-media permitting; and effective verification.

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Developments in compliance and enforcement management

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Abstract

This article describes the major elements in the management of compliance and enforcement, using a simple figure explaining the regulatory process. Developments in rapidly industrializing countries are highlighted. In these countries, institutional arrangements to cope with the demand for better control of the environment are not in place or not fully developed. In more developed countries, on the other hand, there is political pressure on regulatory authorities to reduce their workforce, reduce governmental influence, minimize costs, and at the same time continue to improve the environment in many areas.

Résumé

Cet article présente les principaux éléments de la gestion de la conformité des industries, en se référant à une figure simple expliquant le processus de réglementation. Il met en exergue les développements observés dans les pays en voie d'industrialisation rapide. Les dispositions institutionnelles qui permettraient à ces pays de répondre aux exigences d'un meilleur contrôle de la pollution n'ont pas encore été mises en place ou sont encore insuffisamment développées. Dans les pays industrialisés, où de telles dispositions existent, les organes de réglementation sont soumis à des pressions politiques visant à comprimer leurs effectifs, modérer l'influence des gouvernements, réduire les coûts et en même temps améliorer l'environnement dans de nombreux domaines.

Resumen

Se pueden sacar tres lecciones de las experiencias en la reducción de la polución industrial durante los últimos 20 años. Existen cuatro fases en el desarrollo de la gestión medioambiental, que juntas constituyen un proceso de aprendizaje. Se pueden predecir los desarrollos que influenciarán el futuro desarrollo de la política medioambiental. En este artículo se exponen diez de estos desarrollos.

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Building domestic environmental compliance and enforcement programmes and networks for international exchange: a progress report

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Abstract

There is widespread international agreement on the importance of maintaining environmental compliance and enforcement programmes if environmental protection, sustainable development, free trade, and cleaner production goals are to be achieved. Common definitions and principles, and a common framework, provide a basis for international exchange. The Fourth International Conference on Environmental Compliance and Enforcement will be held at Chiang Mai, Thailand, in April of this year. UNEP is one of the sponsors. Elizabeth Dowdeswell, Executive Director of UNEP, will deliver the keynote address.

Résumé

Il est important de continuer à mettre en oeuvre des programmes de conformité aux réglementations environnementales si l'on veut atteindre les objectifs de protection de l'environnement, de développement durable, de libre échange, et de production plus propre. Ce point de vue fait l'objet d'un large consensus international. Des définitions, des principes et un cadre communs constituent une base pour les échanges internationaux. La quatrième conférence internationale sur le contrôle de la conformité environnementale des industries se tiendra à Chiang Mai, en Thaïlande, en avril de cette année. Le PNUE en est l'un des promoteurs.

Resumen

Existe un extenso acuerdo internacional sobre la importancia de mantener programas de cumplimiento y apoyo ambiental, si se quieren alcanzar objetivos relacionados con la protección ambiental, el desarrollo constante, el libre comercio, y una producción más limpia. Las definiciones y los principios comunes, junto con un marco de trabajo común, proporcionan una base para el intercambio internacional. La Cuarta Conferencia Internacional sobre Cumplimiento y Ejecución ambiental se celebrará en Chiang Mai, Tailandia, en Abril de este año. UNEP es uno de los patrocinadores.

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A multi-media, integrated approach to environmental compliance and enforcement

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Abstract

Multi-media compliance considers releases to all environmental media in an integrated manner. A comprehensive environmental license or permit for a facility addresses all media (and cross-media effects) as do compliance inspections and enforcement responses. Examples are given of the incorporation of this integrated approach in environmental policies in France, the United Kingdom, the Netherlands, the United States and the European Union.

Résumé

La conformité multimédia tient compte des émissions de polluants en intégrant tous les milieux qui composent l'environnement. Une licence ou une autorisation globale accordée à une usine concerne tous les milieux (et les effets croisés entre différents milieux), tout comme les inspections de conformité et les mesures coercitives. L'article présente des exemples d'application de cette approche intégrée dans les politiques environnementales en France, au Royaume Uni, aux Pays-Bas, aux Etats-Unis et dans l'Union Européenne.

Resumen

El cumplimiento multimedio ambiental toma en cuenta las emisiones a todos los medios ambientales de una forma integral. Una licencia o permiso ambiental extenso para una instalación consigna todos los medios (y los efectos que van más allá del medio) del mismo modo que las inspecciones de cumplimiento y las respuestas de ejecución. Se dan ejemplos de la incorporación de este enfoque integral en las políticas ambientales en Francia, Reino Unido, Países Bajos, Estados Unidos y la Unión Europea.

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Policies and programmes to encourage industry compliance: The Philippine experience

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Abstract

This article surveys policies and programmes in place in the Philippines to encourage industry

compliance with environmental protection measures. The concept of environmental protection is presented in one basic law, known as the Philippines Environment Policy . There are systems for monitoring and enforcement. The Department of Environment and Natural Resources (DENR) has initiated several programmes and projects aimed at developing innovative approaches to pollution reduction and waste management.

Résumé

Cet article passe en revue les politiques et les programmes mis en oeuvre aux Philippines pour encourager le respect des mesures de protection de l'environnement par les industries. Le concept de protection de l'environnement est défini dans une loi-cadre, connue sous le nom de "Politique Environnementale des Philippines". Des moyens permettant de contrôler le respect de la réglementation sont prévus. Le Ministère de l'Environnement et des Ressources Naturelles (DERN) a lancé plusieurs programmes et projets destinés à développer les approches innovantes du problème de la réduction de la pollution et de la gestion des déchets.

Resumen

Este artículo realiza una encuesta sobre las políticas y los programas adoptados en las Filipinas, para alentar el cumplimiento de las medidas de protección medioambiental por parte de la industria. El concepto de protección ambiental se presenta en una ley básica, conocida como la Política Medioambiental de las Filipinas . También existen sistemas de supervisión y ejecución. El departamento del Medio Ambiente y de los Recursos Naturales (DENR) ha iniciado varios programas y proyectos que tienen como objetivo crear enfoques innovadores para reducir la contaminación y la gestión de los desechos.

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Meeting the challenges of Integrated Pollution Control

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Abstract

This article explores the concept of Integrated Pollution Control (IPC) and considers the challenges it poses to regulators. It examines ways in which these challenges have been met by Her Majesty's Inspectorate of Pollution during the five years since the introduction in the United Kingdom of legislation requiring that industries be regulated through IPC.

Résumé

Cet article explore le concept de contrôle intégré de la pollution et les défis qu'il lance aux organes de réglementation. Il explique les divers moyens que l'inspection britannique de la pollution a utilisés pour relever ces défis au cours des cinq dernières années, c'est-à-dire depuis l'introduction au Royaume Uni d'une législation exigeant que les industries soient soumises au contrôle intégré de la pollution.

Resumen

Este artículo explora el concepto de Control Integral de Contaminación (IPC), y considera los retos que plantea a las autoridades reguladoras. También examina las formas en que la Inspección de Contaminación de Su Majestad ha cumplido con dichos retos a lo largo de los cinco años desde el momento de la introducción en el Reino Unido de la legislación que obliga a las industrias a someterse a la regulación IPC.

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Industry's responses to comply with environmental laws and regulations

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Abstract

The backbone of industry's compliance with environmental regulations will always be self-monitoring, based on an internal control system. Inspections by authorities are necessary to enforce a high degree of compliance on a continuous basis, and also to improve permits with clearer wording. Inspections are very effective in getting large companies to comply, but seem to be of less value in regard to the many thousands of small emitters.

Résumé

La clef de voûte du respect des réglementations environnementales par le secteur industriel sera toujours l'autocontrôle, fondé sur un système de contrôle interne. Les inspections par les autorités sont nécessaires pour garantir la continuité d'une stricte conformité à long terme, et également pour améliorer les autorisations en reformulant les textes avec plus de clarté. Les inspections s'avèrent très efficaces pour mettre les grandes entreprises en conformité, bien que leur portée semble amoindrie vis-à-vis des milliers de petits pollueurs.

Resumen

La piedra angular del cumplimiento de las leyes medioambientales por parte de la industria se basa en un sistema de control interno, de autosupervisión. Se requiere que las autoridades competentes realicen inspecciones regulares para reforzar el grado de cumplimiento sobre una base continua, así como para que los permisos otorgados tengan una redacción más clara. Las inspecciones son muy eficaces cuando se trata del cumplimiento por parte de las grandes sociedades, pero parecen ser menos válidas en el caso de miles de pequeños contaminadores.

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La politique française de l'environnement industriel: vers le développement de relais à l'action publique classique

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Résumé

En France, c'est l'Etat qui fixe les règles que l'industrie doit respecter à l'égard de l'environnement. Ces règles ont pour base juridique la législation des installations classées qui s'appuie sur le contrôle intégré des pollutions et des risques. Ce système est complété par une taxation des pollutions. A côté de ce dispositif classique, l'Etat met en place des relais à son action de contrôle. Il existe une demande croissante d'informations en provenance des partenaires économiques et du public sur le respect de l'environnement par l'entreprise. Il importe que l'Etat sache utiliser ce besoin en créant ou en favorisant les relais à son action comme il l'a fait par exemple en rendant obligatoire lors de la vente de terrains industriels l'information de l'acheteur par le vendeur sur le degré de pollution du site.

Abstract

In France it is the State which sets the environmental ground rules which industry must follow. The legal basis for those rules is the legislation covering installations classified as hazardous, which is founded on the integrated control of pollution and risk. This system is supplemented by taxation on pollution. Alongside this conventional system, the government is putting in place a number of mechanisms to extend the coverage of its powers of control. There is growing demand from economic partners and the general public for the provision of information on the extent to which the corporate sector ensures that the environment is protected. It is important for the State to put this to good use by instituting or encouraging measures to extend the effects of its powers, as it has already done, for example, by making mandatory the provision of information to the buyer by the vendor on the pollution levels of industrial land at the time of purchase.

Resumen

En Francia, es el Estado quien estipula las reglas que la industria debe respetar sobre el medio ambiente. Estas reglas tienen como base jurídica la legislación de las instalaciones clasificadas, que se fundamentan en el control integrado de las contaminaciones y de los riesgos. Este sistema es completado por una tasación de las contaminaciones. Al lado de este dispositivo convencional, el Estado implanta relevos a su acción de control. Existe una demanda creciente de informaciones por parte de copartícipes económicos y del público sobre el respeto del Medio Ambiente por la empresa. Es importante que el Estado sepa utilizar esta necesidad creando o favoreciendo los relevos para su acción como lo ha hecho, por ejemplo, en la venta de terrenos industriales, haciendo obligatorio que el vendedor informe al comprador sobre el grado de contaminación del emplazamiento.

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Regulacion Ambiental e Industria en Méxicos

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Resumen

En este artículo se presenta la evolución de los enfoques de la política ambiental hacia la industria en México, que parten de una perspectiva sanitarista para derivar, al cabo de 20 años, en una perspectiva de desarrollo sustentable. Se analizan los principales problemas ambientales generados por la industria en el país en materia de aguas residuales, atmósfera y generación de residuos. Finalmente se hace un recuento de las acciones de regulación y vigilancia llevados a cabo y se presentan los lineamientos del nuevo marco regulatorio.

Abstract

This article describes the changing direction of environmental policy toward industry in Mexico, which has widened from health-oriented objectives to include, after twenty years, the concept of sustainable development. The article analyses the main environmental problems caused by industry in this country in terms of waste water, atmospheric emissions, and process residues. Finally, successful measures are reviewed in the areas of regulation and monitoring and the main characteristics of the new regulatory framework are described.

Résumé

Cet article présente l'évolution des orientations de la politique environnementale vis-à-vis de l'industrie au Mexique, orientations qui partent d'une perspective sanitariste pour déboucher au bout de 20 ans, sur une approche de développement durable. On analyse les principaux problèmes environnementaux provoqués par l'industrie dans le pays en matière d'eaux résiduaires, d'atmosphère et de production de résidus. Enfin, on passe en revue les actions menées à bien dans les domaines de la réglementation et du contrôle, et l'on présente les grandes lignes du nouveau cadre réglementaire.

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South Africa: a state of change

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Abstract

South Africa's transition to democracy is providing the opportunity for a complete review of its environmental legislation, policies and institutions. If the reappraisal process now underway is successful, not only will environmental protection measures be improved, but this process may also serve as a model for other countries.

Résumé

Le nouveau régime démocratique qui se met en place en Afrique du Sud fournit l'occasion de revoir complètement les lois, politiques et institutions qui régissent la protection de l'environnement. Si le processus d'évaluation actuellement en cours est couronné de succès, non

seulement les mesures de protection de l'environnement seront améliorées, mais l'exercice pourrait également servir de modèle à d'autres pays.

Resumen

La transición democrática en Sudafrica provee una revisión completa de legislación ambiental, normas e instituciones. Si este proceso el cual está ya en marcha es un éxito, no solamente serán mejoradas las medidas de protección ambiental, sino que servirá de modelo para otros países.

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Industrial pollution inventory and management in Nepal

Surendra Raj Devkota, Bimal P. Koirala and Chiranjibi Gautum, Industrial Pollution Management Control Project, Ministry of Industry, Singha Durbar, Kathmandu, Nepal

Abstract

This article shows how Nepal, a relatively small and little-developed country, is applying up-to-date tools and thinking to assess the pattern and sources of industrial pollution, and is creating legislation in the light of the information obtained.

To develop an industrial pollution inventory, emission factors taken from US EPA and WHO publications were used with figures from the Nepal s 1992 census of industrial units with ten or more employees.

Résumé

Cet article montre comment le Népal, un pays relativement petit et peu développé, met en oeuvre des outils et des modes de pensée innovants pour évaluer les modes et les sources de pollution industrielle, et élabore sa législation à la lumière des connaissances acquises. Pour dresser l'inventaire de la pollution industrielle, les facteurs d'émission tirés des publications de l'Agence Américaine pour la Protection de l'Environnement (EPA) et de l'OMS sont appliqués aux résultats du recensement des unités industrielles népalaises de dix employés et plus datant de 1992.

Resumen

Este artículo muestra cómo Nepal, un país relativamente pequeño y subdesarrollado, utiliza herramientas modernas y piensa determinar el patrón y las fuentes de contaminación industrial, y crea una legislación basándose en la información obtenida. Para elaborar un inventario de contaminación industrial, se tuvieron en cuenta los factores de emisión extraídos de las publicaciones US EPA y WHO, que incluían cifras del censo de Nepal de 1992 de unidades industriales con diez o más empleados.

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General environmental policies and clean technology in the Republic of Korea

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Abstract

The upgrading of the Korean Ministry of the Environment to cabinet level in 1990 strengthened the coordination of environmental affairs. A number of other ministries and administrative units also have responsibilities for environment- related policies or programmes. Since 1990, environment- related legislation has been completely revised. Economic instruments and Environmental Impact Assessment are being used increasingly. Clean technology development and cleaner production are widely promoted.

Résumé

Avec l'accession du secrétariat d'état coréen de l'environnement au rang de ministère en 1990, la coordination des affaires d'environnement a été renforcée. La responsabilité des politiques et des programmes à caractère environnemental est partagée par un certain nombre d'autres ministères et organismes administratifs.

Depuis 1990, la législation portant sur l'environnement a fait l'objet d'une révision complète. Les instruments économiques et les études d'impact sont de plus en plus utilisés. Le développement d'une technologie respectueuse de l'environnement et la production plus propre sont vivement encouragés.

Resumen

El acceso del Ministerio Coreano del Medio Ambiente, en 1990, a nivel de Gabinete reforzó la coordinación de los asuntos medioambientales. Un buen número de otros ministerios y unidades administrativas también tienen responsabilidades respecto a políticas o programas relacionados con el Medio Ambiente. A partir de 1990, se ha revisado por completo la legislación relacionada con el Medio Ambiente. Los Instrumentos Económicos, y la Determinación sobre el Impacto Ambiental se usan con mayor frecuencia. A su vez, se fomentan ampliamente un desarrollo tecnológico limpio y una producción más limpia.

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Towards a pan -European environmental management programme for golf in Europe

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Abstract

Golfing authorities in Europe established the European Golf Association Ecology Unit in January 1994. During 1995, in conjunction with the European Commission, a pilot scheme was carried out to determine whether an environmental audit could be undertaken on golf courses. Over the next few years, it is intended to develop an Environmental Management Programme for Golf Courses

in Europe.

Many of the principles and policies involved are also applicable in other golfing regions of the world. Improving Environmental Impact Assessment

Résumé

Les instances européennes du golf ont mis sur pied l'Unité Ecologie de l'Association Européenne de Golf en janvier 1994. Au cours de l'année 1995, en conjonction avec la Commission des Communautés, était lancé un programme pilote visant à déterminer s'il était possible de réaliser un audit environnemental des terrains de golf.

Au cours des prochaines années, il est prévu de développer un programme de gestion de l'environnement dans les clubs de golf européens. Un grand nombre des principes et des politiques énoncés sont également applicables dans d'autres régions du monde où ce sport est pratiqué.

Resumen

Las autoridades del Golf en Europa establecieron la Unidad Ecológica de la Asociación Europea de Golf en Enero de 1994. Durante 1995, en asociación con la Comisión Europea, se ejecutó un esquema piloto para determinar si se puede realizar un control ambiental en los campos de golf. Durante los próximos años, se tiene el propósito de desarrollar un Programa de Gestión Ambiental para los Campos de Golf en Europa. Muchos de los principios y políticas implicadas también se pueden aplicar a otras regiones del mundo donde se practique el Golf.

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