

The Environment, Health, and Safety Regime in India and the Role of Courts

Indian industry has had a poor record of compliance with the environment, health, and safety (EHS) regulatory regime. However, judicial activism beginning in the 1980s has led industry to recognize its impact on the environment and the health and safety of its workers.

The concept of EHS is not new under the Indian regulatory framework. The mandate for EHS primarily originates from the Constitution of India, which lays the foundation for protection and preservation of the environment and the health and safety of workers. There are also numerous laws that deal with occupational health and safety issues. Environmental protection is handled under a separate set of laws, unconnected with the occupational health and safety regulatory regime.

The higher judiciary has made significant contributions to the growth and evolution of the EHS regime in India, especially in providing redress for issues that are not typically accounted for under the regulatory framework. Over the last few decades, the judiciary has given a new dimension to the EHS regime, not only by reinforcing already-existing laws but also by clearly defining industry's obligations to maintaining a pollution-free environment and safe working conditions, stipulating minimum standards for the health and safety of workers engaged in hazardous processes, or otherwise fixing clear liabilities and imposing penalties on defaulting industries.

The "Right to Life" Includes a "Right to Health" and a "Right to Environment"

The "right to life" is provided as a fundamental right of the people in Article 21 of the Constitution of India. The higher judiciary has interpreted the right to life to mean something more than mere survival or animal existence, expanding its scope to include and embody the "right to environment" and "right to health," as well as the right to live with human dignity.¹ The Supreme Court of India has ruled that the "right to live guaranteed in any civilized society implies the right to food, water, a decent

environment, education, medical care, and shelter."² Similarly, the Court has accorded special importance to the right of workers to a healthy and safe working environment in various cases.³ The Supreme Court, while deciding a writ petition relating to the protection of health of workers engaged in mining and asbestos industries, held that

the right to health of a worker is an integral facet of meaningful right to life to have not only a meaningful existence but also robust health and vigour without which worker would lead life of misery. Lack of health denudes his livelihood. Compelling economic necessity to work in an industry exposed to health hazards due to indigence to bread-winning for himself and his dependents, should not be at the cost of the health and vigour of the workman.⁴

Occupational Health and Safety of Workers

Rights of Workers and the Corresponding Duties of the Industry

The health and safety concerns of workers, especially those employed in hazardous processes like stone mining and asbestos manufacturing, have been dealt with extensively by Indian courts. These courts have creatively interpreted the provisions of the Constitution to expand the rights of workers and to elucidate employers' obligations. In *Consumer Education and Research Centre v. Union of India*, the Supreme Court addressed the issues concerning the health of employees engaged in the asbestos manufacturing industry. It drew upon the Asbestos Convention of 1986⁵ to lay down

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1 State of Maharashtra v. Chandrabhan (A.I.R. 1983 S.C. 803).

2 Singh v. State of Uttar Pradesh (A.I.R. 1996 S.C. 1051).

3 Consumer Education and Research Centre v. Union of India (A.I.R. 1995 S.C. 992) and Rajangam, Secretary, District Beedi Workers' Union v. State of Tamil Nadu (A.I.R. 1993 S.C. 401).

4 Consumer Education and Research Centre v. Union of India.

5 Convention 162 of the International Labor Conference (ILC) held in June 1986.

ELR India Update

ELR India Update is a quarterly newsletter analyzing the most relevant developments in Indian environmental law for international environmental lawyers, managers, policymakers, and thought leaders.

The goal of this service from the Environmental Law Institute (ELI) is to report on these developments and analyze their implications. The *Update* will also identify and analyze potential future developments for readers, so that they have advanced warning of risks and opportunities. The service will cover environmental legal and policy developments at the national and state level regarding climate and energy policy, manufacturing, importation and exportation, natural resources, product safety, worker safety, and other major environmental issues, such as water quality and supply.

We are very fortunate that *ELR India Update* is written by the attorneys at Kochhar & Co., a highly respected firm with significant environmental expertise and a thorough understanding of the ramifications of legal and policy developments. *ELR India Update* is edited by *ELR* attorneys in Washington, D.C.

ELI has a long history of working with partners in India to advance environmental law and policy. We hope this new partnership provides a service that meets your needs and expectations. We encourage any and all constructive feedback by contacting *ELR*'s Editor-in-Chief Scott Schang at schang@eli.org or 202-939-3865.

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guidelines for the asbestos industry.⁶ The Court used the principle of “vicarious liability” in order to place liability on employers, forcing them to pay damages in cases of occupational diseases. The court further expanded the scope of Article 32 and Article 142 of the Constitution to issue directions to private persons or industry and not just against the state. In this regard, the court observed,

in appropriate cases, the Court would give appropriate directions to the employer, be it the state or its undertaking or private employer, to make the right to life meaningful, to prevent pollution of work place, protection of the environment, protection of the health of the workman or to preserve free and unpolluted water for the safety and health of the people.⁷

In this case, detailed directions were issued to the asbestos industry to ensure compliance with standards for occupational health and safety. However, it may be noted that the court drew upon the provisions of existing laws to hold that maintaining health records of workers, conducting medical tests, and providing compulsory health insurance to every worker is mandatory. The court further directed state governments’ factory inspectors to send workers for medical examination. In cases where workers were found to be suffering from occupational health hazards, employers were directed to pay a sum of 100,000 rupees (approximately \$2,150 U.S.).

Similarly, in *Rajangam, Secretary, District Beedi Workers’ Union v. State of Tamil Nadu*, the Supreme Court directed the tobacco manufacturing industry to ensure compliance with the beneficial provisions of the Beedi Workers Welfare Cess Act of 1976 and the Beedi Workers Welfare Fund Act of 1976.⁸ Beedi, a popular tobacco product resembling a cigarette rolled in a leaf, is mainly manufactured in the informal sector, in which workers are employed temporarily and are not protected by welfare legislation. The Court ruled that in hazardous industrial processes like tobacco manufacturing, child labor should be completely prohibited. The government of Tamil Nadu was directed to instate a complete moratorium on the use of child labor in such tobacco industries, either immediately or in a phased manner within a period not exceeding three years. The Court further directed the industry to compulsorily insure all workers for a minimum of 50,000 rupees (approximately \$1,075 U.S.), for which the premium was to be borne by the employer and not employees.

6 A.I.R. 1995 S.C. 992.

7 A.I.R. 1995 S.C. 992.

8 A.I.R. 1993 S.C. 401.

Compliance in Companies: Directors’ Liabilities

The Indian Supreme Court has ruled that since directors have ultimate control over the affairs of their companies, complying with the mandatory provisions of the Factories Act of 1948 is the responsibility of directors and not the company’s managers or employees. In *J.K. Industries Ltd. v. Chief Inspector of Factories and Boilers*, the constitutional validity of the existing definition of a factory’s “occupier,” the official required to ensure the functioning and operation of the factory as stipulated under the amended Factories Act of 1948, was challenged.⁹

The Court debated whether only a director could be listed as a factory’s occupier, or whether any employee could be nominated by a company to be an occupier after having been approved to have “ultimate control over the affairs of the factory” by a resolution, complying with the Factories Act. An occupier, in addition to maintaining the factory, is responsible for the health, safety, and welfare of his workers. The Court ruled that it is not unreasonable to fix liability on a director of a company and make her responsible for complying with the provisions of the Factories Act of 1948 and the rules that followed. The Court held that this amended version of the Act was necessary to maintain a sense of responsibility in a company’s board of directors in order that they take proper care of the factories and observe its safety measures. The fear of penalty and punishment is likely to make a company’s directors more vigilant and responsive to their obligations and duties under the Act. The Court also noted that earlier, the directors were using another employee as a shield by nominating him as the occupier in order to escape liability for various breaches and defaults committed in the factory.

The Supreme Court thus held that in the case of a company that owns a factory, only a director of that company can be designated the occupier of the factory. The company cannot nominate any other employee to be the occupier of the factory. When a company fails to nominate one of its directors as a factory’s occupier, the Inspector of Factories, a government official, can proceed against any of the directors of the company, treating him as the deemed occupier of the factory, for prosecution and punishment in the event of any breach or contravention of the provisions of the Factories Act or for offenses committed. It needs to be seen whether the law is serving its intended purpose, since one cannot rule out the possibility that directors may be harassed by government enforcement officials, nor can one disregard

9 1996 (7) S.C.A.L.E. 247.

Book Review

by Eric Engle

Ecotaxes on Polluting Inputs and Outputs

Raja J. Chelliah, Paul P. Appasamy, U. Sankar, Rita Pandey
Academic Foundation (2007) (209 Pages)

Ecotaxes on Polluting Inputs and Outputs, written by Indian economists about the taxation of polluting activities in India, examines the most polluting sectors of the Indian economy and the existing and possible taxes aimed at reducing the deadly effects of toxic pollution. The book is well researched, covering several market sectors, and broad-ranging, comparing India's actual and projected position with other countries.

The book begins with a brief but solid overview of the basic economics of ecological taxation—externalities, Pigou, Coase—and a description of the regulatory approach (prohibitions) and the economic approach (taxation) to shift production from polluting

activities to healthier ones. The second chapter describes the design and implementation of ecotaxes. Essentially, the authors seek to modify the existing Indian taxes at the federal level by changing the rates of taxation and the activities and goods to be taxed. They favor revenue-neutral ecotaxes in order to internalize externalities and to shift production subtly toward healthier forms.

According to the authors, working within the existing tax structure is institutionally the easiest way forward, though they do speculate about using tax credits and reductions in taxable revenue as a means to encourage producers and consumers to act responsibly toward the environment. Because of the lack of legal and institutional capacity in India, the authors focus on federal excise taxes. This also explains why the authors recommend against the use of tradable pollution permits: there are simply too many

the possibility that a company may freely appoint any lower-level employee as a director with the objective to nominate him as the occupier.

Employers' Obligations Toward the Health and Safety of Workers After Cessation of Employment

The Supreme Court has also held that the right to health of a worker and the corresponding duty of the employer continues even after the cessation of employment of the worker.¹⁰ This principle was enunciated in *Mangesh Salodkar v. Monsanto Chemicals of India, Ltd.*¹¹ In this matter, a petition was filed by a retired employee of Monsanto Chemicals of India, Ltd. against the company. This petition had initially begun with the individual grievance of an employee who claimed to have suffered neurological damage while working in the hazardous processes of a factory establishment. In this case, the petitioner and the company arrived at a settlement and the company agreed to pay the petitioner a compensation of 1,780,000 rupees (approximately \$38,300 U.S.). The significance of this case lies in the fact that the Court acknowledged that employers have an obligation to the health of employees even after employment ceases, specifically if an employee contracts a disease during his period of employment. The case highlighted the fact that despite social security and labor welfare legislation, the implementation of workers' welfare has not been satisfactory.

Environmental Law Principles and Their Application

The relaxation of the rules of *locus standi*—or standing—by the courts in India ushered in a new form of legal action: public interest or social action litigation. In order to decide complex issues involving the struggle between environment and development—issues often raised under such public interest litigation—the higher judiciary in India has relied upon and, in certain cases, expanded the scope of, certain globally recognized principles of environmental law, like the precautionary principle, absolute liability, and polluter pays. These principles now form an integral part of Indian environmental jurisprudence. They have helped strengthen and crystallize the existing legal regime and determine industry's obligations.

In *Vellore Citizens' Welfare Forum v. Union of India*, the Supreme Court explicitly recognized the “precautionary principle” as a standard principle of Indian environmental law.¹² The Court held that in cases of environmental damage, the burden of proof is on the actor or the developer to prove that his action is environmentally benign. The Court further held that where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. Similarly, in *Narmada Bachao Andolan v. Union of India*, the Court explained,

when there is a state of uncertainty due to the lack

¹⁰ Consumer Education and Research Centre vs. Union of India (A.I.R. 1995 S.C. 992).

¹¹ 2007 (2) Bom C.R. 883.

¹² A.I.R. 1996 S.C. 2715.

legal and institutional hurdles to vault for tradable pollution permits to be a workable Indian solution. Thus, those interested in tradable permits should look elsewhere. Similarly, the book does not consider climate change as a justification for ecological taxation. Instead, the authors focus on the immediate and deadly health impacts of polluting industrial processes, and how to reduce such pollution by changes within the existing federal Indian tax structure. While the authors recommend against introducing a general carbon tax in India, they do suggest that a general carbon tax may become desirable later in time.

Chapter three is devoted to coal and ecotaxes to pay for cleaning up pollution. Funding cleanup via ecological taxes is a standard ecotax policy mix, using the revenue from taxing polluting activities to clean up the polluting activities. Logically, a perfect ecotax would eliminate pollution and thereby the tax

itself. Chapter four looks at automobiles. The authors propose levying ecotaxes on vehicles in proportion to how much pollution they emit, and consider the OECD comparisons of countries with automotive ecotaxes, including the United States. Subsequent chapters are devoted to chlorine, phosphates, pesticides, fertilizers, batteries, and plastics sectors.

As a primary producer, India confronts heavily polluting industrial activities with direct adverse impact on people's health and well-being, and the book describes the Indian economy and ecological tax measures in heavily polluting activities sector-by-sector and possible measures to combat their ill effects. The book examines not just the Indian economy, but also considers other countries' tax systems as possible models for India. The authors offer a snapshot of the dirty side of a rapidly industrializing country's economy, providing evidence of the outsourcing of production

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of data or material about the extent of damage or pollution likely to be caused, then, in order to maintain the ecological balance, the burden of proof that the said balance will be maintained must necessarily be on the industry or the unit which is likely to cause pollution.¹³

In *Mehta v. Union of India*, a case involving the leakage of oleum gas from a factory that resulted in the injury of several people, the Supreme Court developed the concept of "absolute liability," thus doing away with the exceptions in the strict liability principle set forth in *Rylands v. Fletcher*.^{14, 15} The components of absolute liability, as identified by the Court, include the following: it applies to an enterprise that is engaged in inherently dangerous or hazardous activity; the duty of care is absolute; the exception to the strict liability developed in *Ryland v. Fletcher* is not applicable; the liability is on the enterprise rather than on the company; and the larger the industry, the larger the payable compensation.

These principles are increasingly being applied by courts in determining industry's liability for environmental restoration and compensation. While deciding a writ petition filed by a civil society group seeking the Supreme Court's intervention for keeping the Noyyal River free from pollution by the textile industry in Tirupur, Tamil Nadu, the Court imposed a fine of nearly

550 million rupees (approximately \$11.8 million U.S.) on the polluting industry. It is now an established law that industry may be liable for the cost of environmental restoration and it may have to pay damages to those affected by pollution.

Conclusion

The EHS regulatory regime, imperative for the efficient and effective functioning of every industry, has gained significance after the intervention of the higher judiciary in India. Legal provisions have always existed, with or without effective enforcement. However, the courts, when called upon, have examined the aspects relating to the implementation of laws. In several rulings, they have given detailed instructions to various industries for ensuring compliance with the law. Where the law is silent or unclear, the courts have interpreted various laws to secure the rights of workers and the protection of the environment. The approach of the courts is not anti-industry; the courts have merely attempted to crystallize the regulatory regime in order to define clear responsibilities.

¹³ Narmada Bachao Andolan v. Union of India (A.I.R. 2000 S.C. 3751).

¹⁴ (1987) 1 S.C.C. 395.

¹⁵ (1868) L.R. 3 H.L. 330.

Beyond Bhopal: The Evolution of Indian Laws on Industrial Disasters

The recent decision of the Chief Judicial Magistrate of Bhopal to hold the six former employees of Union Carbide India, Limited, guilty of a “negligent act not amounting to culpable homicide” under Section 304-A of the Indian Penal Code, 1860, was received with criticism and outrage in India. Though the former employees were given the maximum punishment and fine prescribed for the offense—two years imprisonment—the media used the enormity of the Union Carbide disaster to generate a perception that the guilty were treated too lightly. But in 1996, the Supreme Court had found that the charges under Section 304 of the Penal Code, culpable homicide not amounting to murder—which entails up to 10 years of imprisonment—could not be made against the former Union Carbide employees. Thus, they were to be tried under Section 304-A. Still, as the events of the last 25 years were revisited, public debate transformed into a “blame game” moving up through the government, even reaching the Supreme Court. Protestors pinned blame on the Congress Party, the ruling party in 1984, for allowing the former Union Carbide chairman, Warren Anderson, to flee India for the United States.

The Bhopal gas tragedy was one of the world’s worst industrial disasters. It killed thousands of people and left many more with lifelong medical problems. Its repercussions will be felt for generations. However, without delving too deeply into the controversies surrounding the disaster, one must see if lessons were learned from the Bhopal tragedy and how it impacted the Indian regulatory framework.

The Bhopal tragedy raised new, critical questions regarding the management of industrial disasters in India and the efficacy of the regulatory system to address such disasters. When lethal methyl isocyanate gas began escaping from Union Carbide’s Bhopal plant on December 2, 1984, plant management and local authorities were completely unprepared to avert or to combat the situation. At that time, existing laws on environment protection, hazardous substances, and disaster management were either inadequate or nonexistent. The industry was broadly unaware or negligent toward the impact of its activities on the environment and human health. However, in the past 25 years, the regulatory regime on environmental protection has evolved considerably. The lessons learned from the Bhopal disaster are reflected in this regime.

The First Step: Putting Together an Umbrella Framework for Environmental Protection

Soon after the Bhopal disaster, the Government of India enacted the Environment (Protection) Act of 1986, the first piece of Indian legislation specifically dealing with environmental protection and its various components. Though the preamble to the Act states that it addresses the decisions taken at the United Nations Conference on the Human Environment held in 1972, it remained peculiar that the government waited 14 years to carry out its commitments from that conference. One cannot rule out the possibility that the Bhopal tragedy was the immediate precipitator of the Act. The Act provided a framework for the following: the management of hazardous substances, prior assessment of the possible environmental impacts of major industrial and developmental projects, the monitoring of industrial pollutant discharge and effluents, guidance for industrial siting, and the management of chemical accidents, among other regulations. In the less than three years since the Act took effect, the central government framed separate rules regulating the use of hazardous chemicals,¹ hazardous wastes,² and hazardous microorganisms.³ The Manufacture, Handling, Storage, and Import of Hazardous Chemical Rules, 1989, were formulated to regulate industrial activities and processes using hazardous chemicals. Approximately 684 or more hazardous chemicals come under the purview of these rules. Industrial processes or sites handling such chemicals cannot be commissioned without the prior approval of State Pollution Control Boards or Pollution Control Committees. The rules stress prevention as well as the management of accidents and disasters that may occur while handling such hazardous chemicals. The owners of such processes or sites are also required to prepare safety reports and conduct independent safety audits, including mock-drills, at regular intervals. The rules also mandate the preparation of on-site and off-site emergency plans. The rules also necessitate disseminating information to at-risk employees regarding major accident hazards and safety measures in place in the case of accidents.

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- 1 The Manufacture, Handling, Storage, and Import of Hazardous Chemical Rules, 1989.
 - 2 The Hazardous Wastes (Management & Handling) Rules, 1989, now superseded by the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
 - 3 The Manufacture, Use, Import, Export, and Storage of Hazardous Micro-Organisms, Genetically Engineered Organisms, or Cells Rules, 1989.

Regulations Ensuring Relief to Victims of Industrial Disasters

Nineteen years ago, the Government of India enacted the Public Liability Insurance Act of 1991 with a view to provide immediate relief to people affected by an accident while handling hazardous substances. If death or injury to non-workmen personnel or damage to any property results from an accident occurring while handling hazardous substance at any industrial site, the owner of the site is liable under this Act to pay for relief. The Act places a cap on the amount of relief required to be paid, but stipulates that the relief is required to be paid whether or not the accident was caused due to the negligence or fault of any party. To cover his liability under this Act, the owner is required to take out insurance policies of an amount no less than the original capital cost of the company. This Act is a progressive step toward ensuring relief to those who suffer because of industrial accidents.

Soon afterwards, the government enacted the National Environmental Tribunal Act of 1995 with the aim of establishing a tribunal to quickly adjudicate or decide on claims arising out of death or injury or damage to any property or environment resulting from accidents occurring while handling hazardous substances. Though this Act could not be implemented and has now been repealed by the enactment of the National Green Tribunal Act of 2010, the original intention of ensuring relief to industrial disaster victims remains.

Chemical Accidents: A Regime for Planning, Preparedness, and Response

To further strengthen the regulatory regime for the management of chemical accidents, the government put in place a mechanism for the establishment of “crisis groups” at the central, state, district, and local levels by developing the Chemical Accidents (Emergency, Planning, Preparedness, and Response) Rules in 1996. These crisis groups are nodally responsible for dealing with major chemical accidents and providing necessary assistance to the government in this regard. They are not only involved in the post-accident stage but also in emergency planning and disaster mitigation.

The Cardinal Principles of Environmental Law and Their Application by Indian Courts to Fix Liability on Industry

In the last 25 years, the Indian judiciary has made significant contributions to the evolution of environmental law. The higher judiciary has, over the years, creatively interpreted constitutional provisions in light of the emerging principles

of environmental jurisprudence in order to determine industries’ liabilities for damages to the environment and human health. Ideas like the precautionary principle, polluter pays, and absolute liability are now integral parts of the environmental law regime in India. Such principles are also articulated under the Environment (Protection) Act of 1986 and subsequent rules, under which the responsibilities of handling hazardous industries and liabilities for damages and remediation have been placed on the owner of the industry.

The Indian judiciary has also creatively applied such principles to address larger issues and concerns. The courts have held that the burden of proof to prove that one’s action is environmentally benign lies on the actors or developers. The liabilities placed on industries extend to the payment of actual compensation for damages to life, environment, and property. Absolute liability has also guided recent decisions made by the Indian judiciary. This principle primarily applies to an enterprise engaged in inherently dangerous or hazardous activities. The courts have also mandated that industries’ duty of care is absolute. They have further stressed that the larger the industry, the greater should be the compensation payable. It is now established that industries are liable to bear the cost of environmental restoration and pay damages to those affected by the resulting pollution.

Conclusion

Since the Bhopal gas tragedy, Indian environmental regulations have evolved and matured tremendously. One might even be able to see the remnants of the Bhopal gas disaster in India’s present environmental law regime. The Indian legislative framework has also expanded with recent international agreements. The Indian laws and regulations on the transboundary movement of hazardous waste, biodiversity, and air pollution reflect the country’s commitments under various international treaties and conventions. In fact, the regulatory regime is further evolving to address the challenges posed by increasing industrialization. The National Green Tribunal Act of 2010 has recently been approved. Soon, India will have “green tribunals” to deal with matters relating to civil liabilities for damages to persons and property. Separate rules for the management of electronic waste have also been discussed for some time and may be passed soon. But while there have been several legislative developments, actual enforcement of these laws and regulations has largely been unsatisfactory. The poor implementation of laws and regulations, coupled with rapid industrialization in the last few decades, has resulted in a severely degraded environment and continuing threats to natural resources,

ecology, and human life. India has laws that define civil and criminal liabilities if an oil spill on the scale of the Gulf of Mexico disaster were to occur, but greater danger lies in the insidious seepage of pollutants, particularly industrial effluents, into the environment. There are inadequate or even non-existent infrastructural resources to give effect to the mandate of law. The government must do more not only to push forth the remediation and restoration of already degraded environments but also to create infrastructure for waste treatment, waste disposal, and the environmentally sound management of industrial activities. This undoubtedly requires a massive amount of investment, and the government must consider adequate budgetary allocation for environmental restoration and protection, either through existing resources or by levying an environmental tax or cess.

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to the Third World—a fact often overlooked in the First World. The book's documents and tables are particularly useful from a comparativist perspective, allowing one to quickly obtain a global view of the rise of an exotic yet exciting taxation mechanism.

Ecotaxes on Polluting Inputs and Outputs offers an in-depth analysis of an industrializing economy tailored to meet the needs and problems of that nation while providing greater comparative context of other countries' approaches to the same problem. In addition, environmental law concepts, such as the "polluter pays" principle, have clearly been taken up by the authors. Although the book focuses on the Indian economy and does so in great detail, it considers experiences in other countries when forming recommendations. The book should be of interest to English-speaking environmental and tax lawyers worldwide.

Legal and Regulatory Updates

Recent Enactment

The National Green Tribunal Act of 2010

India has enacted the National Green Tribunal Act of 2010 to provide for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and the conservation of forests and other natural resources. As per the Act, the Tribunal would consist of a full-time chairman, between 10 and 20 full-time judicial members, and an equal number of expert members. The Tribunal is also empowered to invite one or more people with specialized knowledge and experience in a particular case to provide assistance.

The Tribunal has jurisdiction over all civil cases that involve a substantial question relating to the environment, including enforcement of any legal right relating to environment, as well as cases in which an environment-related question arises out of the implementation of certain specified enactments like the Environment Protection Act of 1986, the Biological Diversity Act of 2002, and the Forest Conservation Act of 1980.

The issues relating to the establishment of the National Green Tribunal were discussed in detail in the previous issue of *ELR India Update* (see volume 1, issue 1).

Rules and Notifications

Amendment to the Batteries (Management and Handling) Rules, 2001

The Ministry of Environment and Forests has amended the Batteries (Management and Handling) Rules, 2001 [vide Batteries (Management and Handling) Amendment Rules, 2010].¹ This amendment was announced in the Ministry's official gazette on May 4, 2010 (vide S.O. 1002). Under the amended rules, the definition of "bulk consumers" was expanded to include consumers of lead acid batteries who purchase 100 or more batteries in a year. Prior to the amendment, the definition of "bulk consumers" was restricted to government undertakings or entities that purchased batteries through or under government contracts or requisition alone. Now, private consumers who purchase batteries in bulk also come under the purview of the Batteries (Management and Handling) Rules, 2001, and such consumers are required to comply with the regulatory requirements for the management and disposal of used batteries. Other changes included in the amendment relate to the provisions concerning registration requirements for importers, dealers, and recyclers.

¹ The Batteries (Management and Handling) Rules, 2001, only governs the management and handling of lead acid batteries.

Draft and Proposed Statutes or Rules

Expert Committee to Examine Comments and Suggestions on Draft of the Plastics (Manufacture, Usage, and Waste Management) Rules, 2009

The Ministry of Environment and Forests has convened an expert committee to consider the comments and suggestions received on the draft of the Plastics (Manufacture, Usage and Waste Management) Rules, 2009. The Ministry had announced the draft of the Plastics (Manufacture, Usage and Waste Management) Rules, 2009, in September, 2009, in order to seek public comment. The expert committee will also consider and suggest new economic tools, including, for example, fiscal measures to promote environmentally friendly alternatives to plastic bags. The proposed Rules, if approved, will supersede the existing Recycled Plastics Manufacture and Usage Rules, 1999.

Draft E-Waste (Management and Handling) Rules, 2010

The Ministry of Environment and Forests has issued a draft of the E-Waste (Management and Handling) Rules, 2010, for comments and suggestions. The draft rules provide for the recovery and/or reuse of useful material from electrical and electronic equipment waste in order to reduce hazardous waste destined for disposal and to ensure environmentally sound management of all e-waste.

These draft rules, if approved, would apply to every producer, dealer, collection center, refurbisher, dismantler, recycler, auctioneer, consumer, and bulk consumer involved in the manufacture, sale, purchase, and processing of electrical and electronic equipment or components. These are specified in the schedule to the draft rules, which includes the following: large household appliances, medical devices, IT and telecommunication equipment, electrical and electronic tools, toys and sports equipments, and others. Under the draft rules, producers are responsible for collecting e-waste generated from their “end-of-life” products in line with the principle of “extended producer responsibility.”² They must also ensure that such e-waste is channeled to registered refurbishers, dismantlers, or recyclers. The draft rules also stipulate threshold limits for 20 hazardous substances, including cadmium, lead, mercury, and beryllium. Producers are required to ensure that the use of such hazardous substances in electrical and electronic equipment does not exceed the specified limits.

2 “Extended producer responsibility” is the responsibility of any producer of electrical or electronic equipment from the manufacturing process up until the environmentally sound disposal of their end-of-life products.

Proposed Amendments to the Wildlife (Protection) Act, 2002

The Ministry of Environment and Forests has proposed certain amendments to the Wildlife Protection Act of 1972 and has issued the Draft Wildlife (Protection) Amendment Bill, 2010, for public comment. The Ministry seeks to introduce more stringent penalties and to regulate trade in parts and products derived from protected wildlife through these amendments. It aims to strengthen the deterrent powers of the Wildlife Protection Act by increasing penalties for offenses, especially those involving unlawful trade in wildlife products. It also seeks to increase the efficiency of the procedure governing the prosecution of offenses and to empower officers who are critical for the enforcement of the Act. The Ministry further aims to fully implement India’s international obligations under the Convention on the International Trade in Endangered Species of Wild Fauna and Flora. This includes establishing a Management Authority to regulate trade in animals and plants alien to India, species that may negatively affect Indian ecosystems if introduced. The amendments ban the trade in peacock tail feathers and articles made from them, although they allow reasonable exceptions for their use in religious ceremonies.

Taking on Climate Change Through Post-Copenhagen Domestic Actions

The Ministry of Environment and Forests has issued a paper enumerating the steps taken by the Government of India to mitigate climate change. Some of these steps are set out below.

Convening an expert group charged with developing a low-carbon strategy

The Government of India has set up an expert group with a mandate to help develop a low-carbon strategy for inclusive growth. The group will recommend prioritized actions in the electricity, transport, industry, oil and gas, buildings, and forestry sectors.

Developing a “carbon tax” on coal to fund clean energy

India has announced a levy on coal at the rate of 50 rupees (approximately \$1.10 U.S.) per tonne. The tax will apply to both imported and domestically produced coal. This money will go into a national clean energy fund that will be used for funding research, innovative projects in clean energy technologies, and environmental remedial programs.

Developing a Perform, Achieve, and Trade (PAT) mechanism for energy efficiency

India's Cabinet approved the National Mission on Enhanced Energy Efficiency on June 24, 2010, as one of the eight National Missions under the Prime Minister's National Action Plan on Climate Change (NAPCC). The Mission includes several new initiatives, with the most significant the Perform, Achieve, and Trade (PAT), which would assign energy-efficiency improvement targets to the country's most energy-intensive industrial units. The units will be allowed to retain any energy-efficiency improvements in excess of their target in the form of Energy Savings Certificates. The PAT mechanism will cover facilities that account for more than 50% of the fossil fuel used in India and help reduce carbon dioxide emissions by 25 million tonnes per year by 2014-2015.

Approving the National Mission on Sustainable Habitat

The National Mission on Sustainable Habitat was recently approved. The Mission is aimed at promoting energy efficiency in residential and commercial sectors by bridging the knowledge gap on designing green infrastructure, by ensuring better implementation of government schemes, and by offering appropriate financial incentives. A comprehensive strategic plan is being drafted for the implementation of this Mission.

Taking a lead in solar energy initiatives

The Jawaharlal Nehru National Solar Mission, launched recently as one of eight NAPCC missions, is a mission to make India a global leader in solar energy.

Developing programs to re-green India

The Green India Mission (GIM), also one of eight NAPCC missions, is currently being finalized. The target of this Mission is to double the area to be taken up for afforestation and eco-restoration in India in the next 10 years, increasing the total area to be re-greened to 20 million hectares.

Beginning India's first clean development mechanism program of activity

The Bachat Lamp Yojana, conceived as a Clean Development Mechanism (CDM) Program of Activity for the mass distribution of compact fluorescent lamps in India, has been registered successfully by the CDM Executive Board. This is the first Program of Activity to be registered from India and the third registered Program internationally. However, the environmental hazard created by such large-scale distribution of these lamps may cause unforeseen troubles, since there is no effective mechanism for the collection of used compact fluorescent lamps currently in place.