

India Readies Itself for Clearing Electronic Junk

The electronic scrap market in India, currently unorganized and unregulated, will likely undergo major changes led by the recently enacted Electronic Waste (Management & Handling) Rules of 2011 (E-Waste Rules). Dismantlers and recyclers of electronic waste and scrap will be required to register their facilities and to adopt scientifically and environmentally sound processes for the dismantling, recycling, and disposal of electronic waste (e-waste). For manufacturers and importers of consumer electronics, information technology (IT), and telecommunications equipment, the federal government has stipulated provisions related to extended producer's responsibility (EPR) and restrictions on the use of hazardous substances (RoHS).

Rules regarding e-waste were overdue, given the spurt in the IT and electronics industry over the past two decades. In the absence of any regulations, growth in the industry could not be supplemented by sound and scientific waste management practices. The collection and segregation of e-waste was mainly left to the unorganized scrap market, which neither had the means nor the inclination for health, safety, and environmental considerations. Another issue was the dumping of scrap from developed countries into India under the guise of recycling or reuse. It had thus become a priority for the federal government to devise a mechanism for the effective management of toxic e-waste and to prevent it from fusing with solid wastes and eventually arriving at landfills or informal dismantling facilities.

However, the current E-Waste Rules fall short of expectations on many fronts. The differing interests of the government, industry, and environmental organizations and their long-standing disputes regarding an acceptable e-waste regime resulted in the present rules: at best, a compromise, designed to please every stakeholder. Several drafts of the rules were prepared and circulated prior to their present form. The industry resisted the idea of having extended responsibilities, especially for the establishment of collection centers. RoHS and EPR require substantial investments and

changes in manufacturing technologies and processes. Environmental nongovernmental organizations were, however, keen that binding obligations be imposed on the industry. There was also a debate on which industries were to be brought under the purview of the E-Waste Rules. From the original list of nine industries originally proposed under the first draft of the rules issued in May 2010, the list has now been reduced to only consumer electronics, IT, and telecommunications equipment.

The E-Waste Rules will come into effect on May 1, 2012. The government has given a year's time for industries to undertake the necessary groundwork for meeting their obligations under the rules. Enforcement agencies must also gear up to put the rules into action. It is a moot question whether one year is sufficient for the industry to devise and organize an appropriate collection system, set up collection centers, and develop manufacturing processes and techniques incorporating RoHS. It is more important that the rules should have first focused on having adequate dismantling and recycling infrastructure, rather than imposing requirements for registering dismantling facilities and bringing the manufacturer's obligations into force simultaneously. This move is akin to putting the cart before the horse.

Current Status of E-Waste Management in India

The Legal Position

Currently, India generates about 400,000 metric tons of e-waste and imports almost 50,000 metric tons annually.¹ However, there are no specific regulations for the management of e-waste. Certain classes of e-waste fall within the purview of the Hazardous Wastes (Management, Handling, and Transboundary Management) Rules of 2008 (Hazardous Waste Rules) as they apply to waste generated from the electronics industry, as well as wastes

¹ Finally a Law to Tackle Mounting E-Waste in India, Zeenews.com (Apr. 22, 2010), http://zeenews.india.com/news/sci-tech/finally-a-law-to-tackle-mounting-e-waste-in-india_621146.html.

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containing cadmium, mercury, copper, cobalt, lead, and other metals in concentrations beyond the prescribed limit. For instance, certain electronic and electrical assemblies and scrap are considered hazardous wastes for the purpose of their import and export. Some materials require prior informed consent of the Ministry of Environment & Forests (MoEF) and approval of the Director General of Foreign Trade (DGFT) prior to their import or export. The Central Board of Excise & Customs has recently issued an order² confirming the aforesaid and also stipulating that the imports of secondhand computers would require the permission of the MoEF. In India, hazardous wastes can only be imported for recycling, recovery, or reuse, and any import for dumping and disposal is prohibited. The domestic handling, recycling, and recovery of e-waste classified as hazardous waste should be in compliance with the Hazardous Waste Rules and requires prior permission from the state pollution control boards (SPCBs).

Still, the Hazardous Waste Rules are not adequate to address e-waste management issues. The definition of hazardous waste under these rules has not been conceived to specifically include all toxic e-waste categories. It also entirely leaves out nonhazardous e-waste categories, which remain largely unregulated. The Hazardous Waste Rules do not incorporate unique e-waste management approaches, including the participation of the manufacturers in e-waste disposal and treatment.

The Ground Reality

In the absence of regulations, volumes of discarded and defective electronic equipment have found their way to the unorganized dismantling sector, except for a few hazardous electronic goods sent for recycling. Small consumer electronic goods often get mixed with solid municipal waste and go to landfills, posing extreme environmental threats. A major reason for the careless disposal of e-waste is the lack of clear guidelines on the mandatory take-back of end-of-life electronic products by manufacturers. Though some IT and electronics companies, such as Nokia, have started take-back and collection schemes on a voluntary basis, these initiatives have not been emulated by the majority.

Under current schemas, it is the consumer, whether household or commercial, who decides whether end-of-life electronic products or otherwise discarded products would head to the formal or the informal market. Sending the wastes to the formal sector is an exercise that requires

Extended Producer's Responsibility

Extended Producer's Responsibility (EPR) is a concept whereby the producers of consumer goods are required to take greater responsibility for managing the environmental impact of their products throughout their entire life cycle. EPR may take the form of a reuse, buy-back, or recycling program. In this way, EPR shifts responsibility for waste from the government to private industry, obliging producers, importers, and/or sellers to ensure the sustainable and safe handling of the remains of their products.

The idea of EPR was first introduced in India under the Batteries (Management and Handling) Rules of 2001 (Battery Rules). Under the Battery Rules, manufacturers, importers, assemblers, and reconditioners of lead acid batteries are required to ensure that when a consumer purchases a new battery, he is provided an opportunity to bring back a used lead-acid battery for recycling. The manufacturers and the importers are specifically required to set up collection centers, either individually or jointly, for the collection of used batteries.

In 2008, the Guidelines for Environmentally Sound Management of Electronic-Waste, formulated by the Central Pollution Control Board in consultation with the Ministry of Environment and Forests, stressed the need to establish a mechanism for the effective take-back of discarded or end-of-life electronic products. The guidelines recommended the incorporation of EPR into the regulatory framework, making EPR a mandatory activity associated with the production of electronics and electrical equipment over a period of time.

effort as well as cost in the absence of accessible collection systems from the manufacturer's end. Selling such end-of-life electronic products to scrap collectors at one's door not only is convenient, but also gives monetary returns. At present, there are only a few specialized e-waste recycling facilities. Thus, for consumers, the easiest way to get rid of defective or end-of-life electronic products is to hand them off to scrap dealers, whence they eventually find their way to informal dismantling units.

E-waste recycling in the informal sector essentially involves collection, segregation, and dismantling. Dismantlers carry out repairs and refurbishment activities, which feed the secondhand electronics and IT market. Scrap dealers are also involved in the extraction of precious metals. However, on account of their lack of education and training, they often use unsafe techniques and processes, which pose a great danger to their own health, as well as the environment. Nonetheless, the informal sector has existed for years and offers employment to many. It is strongly connected to the industry, as well as to the secondhand market. Thus, regulating the informal market will be a difficult task for the government and the enforcement agencies.

² Government of India, Central Board of Excise & Customs, Circular No. 27/2011-Customs (July 4, 2011), available at <http://www.cbec.gov.in/customs/cs-circulars/cs-circulars11/circ27-2k11-cus.htm>.

The E-Waste Rules and Implications for Industry

The E-Waste Rules intend to achieve the environmentally friendly and sustainable management of electronic products and wastes mainly in the following three ways:

- introducing mandatory EPR provisions for the consumer electronics, IT, and telecommunications industries (i.e., manufacturers, importers, and assemblers) to collect end-of-life products³ from consumers and channelizing the same for recycling and dismantling at authorized facilities;
- requiring bulk consumers of certain specified products of the above industries to channelize their e-waste to authorized and registered facilities for collection or recycling; and
- mandating all recycling and dismantling units to obtain registration with the SPCBs and adopt environmentally sound practices while recycling and/or dismantling e-waste.

These three components are so closely connected that if any stakeholder at any stage fails to fulfill his obligations, the objective of the E-Waste Rules would be defeated. The consumer will have to send the end-of-life electronic products to either the take-back centers set up by the manufacturers or authorized and registered facilities for dismantling and recycling. However, if the manufacturers fail to set up take-back systems to cater to all consumers or if there are inadequate specialized dismantling or recycling facilities, the pilferage into the unorganized scrap market will be difficult to check.

Challenges for Manufacturers, Importers, and Assemblers

The manufacturers, importers, and assemblers of certain electronic products of the consumer electronics, IT, and telecommunications industries will be required to set up collection centers or take-back facilities to collect end-of-life or discarded electronic products from the consumers. The collection centers may be established individually or jointly by industry associations or groups of different companies. The manufacturers, importers, and assemblers are further required to ensure that the wastes collected at the collection centers are channelized to authorized recycling or dismantling facilities. The rules clearly stipulate that the industry is required to finance and organize the system for e-waste management. Thus, the huge costs of collecting

³ The e-waste rules apply to certain products of the consumer electronics, IT, and telecommunications industries as are enumerated in Schedule I of the rules. These include air conditioners, refrigerators, washing machines, television sets, personal computers, laptops, notebooks, electronic note pads, mobile phones, cordless phones, printers, and fax machines, among others.

and recycling the electronic products is to be borne by manufacturers and importers alone. Further, the rules do not envisage any incentives, financial or otherwise, or any support to the industry by the government, which means that the industry would be less motivated to adapt to the new regime. Needless to say, this new regime demands a complete shift in product management by industries, as well as much higher costs.

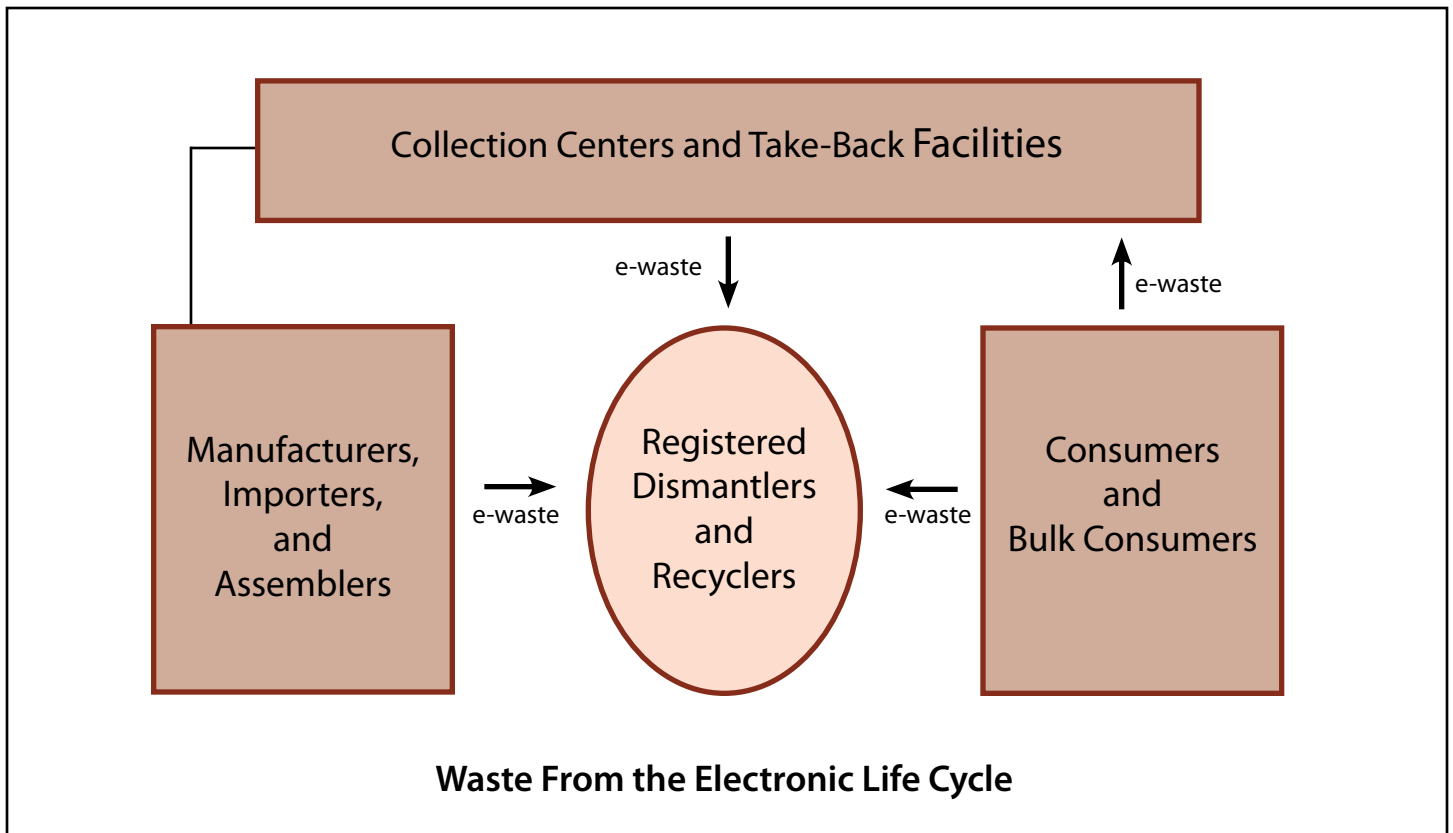
Another challenge looming large on the electronics, IT, and telecommunications industries is to find viable alternatives for lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs), and polybrominated diphenyl ethers (PBDEs). Within two years of the commencement of the rules, i.e., from May 2014, these industries would be prohibited from manufacturing or importing electronic products into India that contain the aforesaid substances, unless the product falls under any of the exceptions to the general rule. The components of electronic products manufactured or introduced in the market within six years from the date of commencement of the rules are exempt from the RoHS requirements. However, it is not clear whether the six-year period refers to the manufacture or introduction of the component or the electronic product containing such components. The rules do not stipulate as to how long this exemption would continue.

The obligation to reduce the use of hazardous substances is a welcome step. However, the E-Waste Rules do not envisage a certification or assessment procedure to actually ascertain whether manufacturers are complying with RoHS requirements or not. The manufacturers or the importers are not required to file any return or report in this regard. It will be left to the enforcement agencies to inspect various manufacturing facilities or test random samples of the products to see whether they are RoHS compliant or not. In the case of imported products, such a certification process is even more necessary.

Challenges for Recyclers and Dismantlers

Although products other than the specified consumer electronics, IT, and telecommunications products are not subject to EPR and RoHS requirements, waste generated from these end-of-life products are considered e-waste.⁴ Without regard to how these products reach recycling or dismantling units, such units would have to be authorized to deal with e-waste under the E-Waste Rules. In other

⁴ The term e-waste is defined as "waste electrical and electronic equipment, whole or in part, or rejects from their manufacturing and repair process, which are intended to be discarded." The term electrical and electronic equipment is defined as "equipment which is dependent on electric currents and electro-magnetic fields to be fully functional."



words, the obligations of recyclers and/or dismantlers are not limited to the products of the three industries coming within the purview of the E-Waste Rules. These obligations extend to all types of e-waste.

The E-Waste Rules target unorganized scrap market units by requiring all recycling and dismantling units to obtain authorization and registration with the SPCBs. The registration will be granted only if the recycling or dismantling facility has the necessary infrastructure and technical capabilities and is using environmentally sound waste management technologies. No recycling or dismantling unit is permitted to operate without authorization and registration with the SPCBs. This would ensure that e-waste is handled only at facilities that have the requisite expertise, as well as infrastructure. These units are required to carry out their respective recycling or dismantling activities in accordance with the health and safety standards to be specified by the government. The government is authorized to take penal action against the units operating in violation of the E-Waste Rules.

However, the E-Waste Rules do not specify the standards or lay down the conditions that dismantlers and recyclers would need to fulfill. At present, there are no health and safety guidelines, although the Central Pollution Control Board has been requested to frame them. In the absence of standards or conditions, it will be difficult for the current recyclers or dismantlers from

the unorganized sector to gear up for registration by May 2012.

Thus, all recyclers and dismantlers, including those in the informal sector, would have to register their facilities with the SPCBs and submit periodic reports providing details of their operations. However, is this enough to contain the unsafe dismantling, recycling, and refurbishing operations going on in the unorganized sector? Is it wise and realistic to completely exterminate the informal sector? Today, the majority of e-waste recycling and dismantling activities are undertaken in the unorganized sector. It will take years for the specialized recycling facilities to set up and register with the government. Notably, there are no incentives for anybody to set up a dismantling and recycling facility. The government has also evaded its obligation to ensure an adequate number of these facilities in the country. As mentioned above, the entire purpose of the collection and take-back of e-waste will be meaningless if there are no facilities to recycle such wastes. To avoid such a scenario, the government must consider capitalizing on the existing structures and manpower by helping these small-scale units install the necessary infrastructure and technologies and build their capacities. This would also ensure the continued employment of the people involved in the informal sector, as well as the constructive use of the knowledge and experience that they have already gained.

Conclusion

The E-Waste Rules present a satisfactory first step toward e-waste management. However, the e-waste rules are limited in scope, as they only apply to certain listed products of the consumer electronics, IT, and telecommunications industries. Certain significant e-waste categories have been left out, such as large and small household appliances, toys, leisure and sports equipment, and medical devices, meaning that there are no obligations on these industries to collect used and discarded products from consumers. This may be acceptable if the government is planning to introduce EPR provisions to different industries in a phased manner, targeting only the critical industries at the first go. If the government is really serious about effective e-waste management, sooner or later, it would have to bring other industries within the ambit of the E-Waste Rules.

The rules are further silent on the “refurbishing” of end-of-life electronic products, a major activity in the informal sector: after minor or major repairs, electrical and electronic items are put back to their original use and are sold mainly in the grey market. No regulations have been stipulated for refurbishers. It is clear that refurbishment and repair are essential components of overall e-waste management, and they need to be addressed under

the rules. This gap may be misused to evade stipulated obligations under the guise of refurbishment or repair.

It is surprising that, in the implementation of a set of rules designed to overhaul the electronics industry and introduce completely new waste management practices, the government wants to be nothing more than a watchdog. It is only interested in granting authorization for various operations and taking penal action. It has no obligation for setting up recycling facilities in various states. The rules also do not offer any incentives to the private sector for the establishment of these facilities or to the informal sector to upgrade their operations and obtain authorization. Consequently, it has become nobody’s job to set up dismantling and recycling units, without which the entire regime would crumble. There is no motivation or incentive to the industry to invest in improved technologies and product life-cycle management. There are no special monitoring and enforcement procedures to ascertain compliance with RoHS and other provisions. The rules are vague and also fail to lay down specific health and safety standards or conditions subject to which the registration for dismantlers and recyclers will be granted.

With such a start, it is unlikely that the E-Waste Rules will go far. However, the government has one year to rethink and reinvent the regulations.

Is It the End of Endosulfan in India?

India has recently been facing tremendous pressure to ban endosulfan, a popular insecticide used on crops. The Fifth Conference of Parties to the Stockholm Convention concluded in April 2011 with India softening its stance and acceding to the global ban on endosulfan, though with some exemptions. Soon thereafter, in May, the Supreme Court of India ordered a temporary ban on the production, use, and sale of endosulfan pending the report of an expert committee. Now, the Conference of Parties to the Rotterdam Convention held in June 2011 has decided to list endosulfan under Annex III to the Convention, mandating prior informed consent for international trade.

India is one of the largest producers, users, and exporters of the so-described “killer insecticide,” which explains the significance attached to India’s final verdict on endosulfan. Many other countries became aware of the devastating impact of endosulfan almost a decade ago, but India has been in denial. Recent events have forced

the government into reconsidering its policy, which may result in the eventual extermination of the insecticide.

The Legal Position in India

Endosulfan has been in use in India for more than 50 years. It is used for food- and non-food crops, including cashews, coffee, tea, jute, and cotton. It is a registered insecticide under the Insecticides Act of 1968, and its manufacture and import is permitted under a license.

Under the Insecticides Act, the government has the power to prohibit or restrict the manufacture, sale, or use of any insecticide in order to protect the public. However, the central government has never been amenable to a nationwide ban on endosulfan; most restrictions on endosulfan can be seen at the state level. In Kerala, the sale and use of endosulfan was banned in 2004 because of a Kerala High Court order prohibiting it. Consequently, the government of India banned the sale and use of endosulfan in Kerala from 2005 onward. Earlier this year,

the state of Karnataka imposed a 60-day ban on the sale of the pesticide, which was later challenged in the Karnataka High Court for being arbitrary and without any basis.

Endosulfan is also listed as a “hazardous chemical” in India under the Manufacture, Storage, and Import of Hazardous Chemical Rules of 1989. The manufacture and handling of endosulfan requires prior approval from the state pollution control board (SPCB) of the state where the manufacturing facility is located. The manufacturing facility is required to have adequate environmental, health, and safety arrangements in place. The import of hazardous chemicals is not restricted as such, but it requires prior intimation to be sent to the SPCB and the Director General of Foreign Trade.

Industry and Government Views

Until now, the federal government had managed to defy broad sentiments against endosulfan, whether from civil society, environmental and health experts, or the international community. The government has, over the years, claimed a lack of reliable scientific evidence pointing to adverse health and environmental effects of endosulfan. In 2003, the Dubey Committee, a special committee, was appointed for the purpose of investigating health problems found in Padre, a village in Kasaragod District, Kerala, and their possible linkage with the use of endosulfan in nearby cashew plantations (see info box). The Dubey Committee gave a clean chit for endosulfan and decried the absence of scientific data to establish the chemical’s adverse impact. The Dubey Committee report was thrashed by many groups, mainly environment and health organizations, for being “inconsistent” and “manipulated.”¹ Consequently, in 2004, the Ministry of Agriculture appointed Dr. C.D. Mayee, then Agricultural Commissioner, to review the health risks of using endosulfan as a pesticide. The Mayee Committee also cleared endosulfan of all responsibility in the mutations and health problems in Padre.

India’s sustained resistance to the global ban on endosulfan may be attributed to the presence of a strong and a flourishing industry. Endosulfan is the world’s third-largest-selling generic insecticide, with 40 liters valued at \$300 million in today’s market. India is the largest producer and exporter of endosulfan, controlling 80% of the global market.² India’s endosulfan production is primarily controlled by three companies, including the state-owned Hindustan Insecticides, Limited (HIL).

The Controversy Surrounding Endosulfan

Endosulfan is a chlorinated hydrocarbon insecticide of the cyclodiene subgroup primarily used in agriculture around the world to control a wide variety of insects and other pests. Due to its unique mode of action, it is useful in resistance management, but it can negatively impact populations of beneficial insects too. It is primarily used on a wide variety of food- and non-food crops like tea, fruits, vegetables, cotton, and others. Endosulfan is highly toxic if not properly used. Various Indian and international studies have revealed that endosulfan can disrupt the action of hormones and lead to reproductive and developmental problems, especially in males.

The Pesticides Manufacturers & Formulators Association of India has been vehemently rejecting every initiative or study indicating endosulfan’s harmful effects for being arbitrary and unscientific. The Association blamed European Union countries for triggering the endosulfan controversy with a hidden agenda of promoting their expensive pesticides, costing up to 10 times as much as endosulfan, on the world market.³

India Against the Developed World

While India was in denial, along with some other developing countries like China and Uganda, most developed countries, including the United States, New Zealand, Australia, and European Union nations, have either banned endosulfan or have initiated the necessary steps for phasing it out.

The world community contemplated banning endosulfan under two international treaties, the Stockholm Convention on Persistent Organic Pollutants and the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides. India, after a long struggle, finally yielded to the demands for banning endosulfan under these two conventions.

The Stockholm Convention on Persistent Organic Pollutants is a global treaty to eliminate or regulate the production and use of chemicals that remain intact in the environment for long periods and have adverse effects on human health and/or the environment. India ratified the Stockholm Convention on January 13, 2006. Though the proposals to bring endosulfan under the purview of the Stockholm Convention have been under consideration since 2008, it was only in April 2011, at the five-day plenary session of the convention, that a decision to ban endosulfan was finally taken.

1 *Lies, Damn Lies and Endosulfan*, Downtoearth.org (Apr. 15, 2004), at <http://www.downtoearth.org.in/node/11070>.

2 Dave Pradeep, *Should Endosulfan Be Banned?*, ECON. TIMES (Mumbai) (Apr. 29, 2011).

3 *Id.*

On the first day of the plenary session, India distributed a statement at the regional (Asia-Pacific) meeting, arguing against the inclusion of endosulfan under Annexure A of the Stockholm Convention (i.e., the list of persistent organic pollutants to be eliminated). However, India changed its stance on the last day and agreed to the ban on endosulfan, with some exemptions. The ban will take effect in mid-2012, with certain uses exempted for five additional years. This five-year period can be extended to a maximum of ten years. After that, it will take another one year for the ban to be executed. India, China, and Uganda are the only three countries that have asked for exemptions, and these are for certain pests on cotton, coffee, tea, jute, apples, tobacco, cow peas, beans, tomatoes, okra, eggplant, onions, potatoes, chilies, mangos, grams, pigeon peas, maize, rice, wheat, groundnuts, and mustard. For the countries that have not asked for exemptions, the ban takes place within one year. India has also obtained an assurance from the convention for getting technical and financial assistance for implementing the consensus.

The Rotterdam Convention on the Prior Informed Consent (PIC) Procedure for Certain Hazardous Chemicals and Pesticides in International Trade presents another realm for constraining the global use of endosulfan. Jointly administered by the United Nations Environment Program (UNEP) and United Nations Food and Agriculture Organization (FAO), the Rotterdam Convention promotes shared responsibilities and cooperative efforts among the parties for the international trade of certain very hazardous chemicals, in order to protect human health and the environment from potential harm. In other words, the convention covers pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons by parties and that have been notified by parties for inclusion in the “prior informed consent” procedure. In order to regulate the unwanted import of a harmful chemical or pesticide into a country, the Rotterdam Convention imposes an obligation on the exporting country to inform the importing party regarding the proposed export, prior to the shipment thereof. The Rotterdam Convention enables member countries to alert each other to potential dangers by exchanging information on banned or severely restricted chemicals and to take informed decisions with regard to whether they want to import such chemicals in the future.

Now, the Conference of Parties to the Rotterdam Convention held in June 2011 has decided to list endosulfan under Annex III to the convention. This

Endosulfan in the Kasaragod District

Kasaragod is located in the state of Kerala. The Plantation Corporation of Kerala, a state government undertaking, had been aerielly spraying cashew plantations in Kasaragod since the 1970s. Various research studies conducted on children from many villages, including Padre, have linked endosulfan exposure to delays in sexual maturity among boys. Endosulfan was the only pesticide applied to cashew plantations in the villages for 20 years and had contaminated the village environment.

From 2000 onward, various government departments, nongovernmental organizations, and technical bodies, including the Indian Council of Medical Research, visited Kasaragod and submitted reports to the government regarding this issue. The state government of Kerala and federal government have appointed more than 10 commissions and committees to inquire about the adverse health effects of endosulfan in Kasaragod, including a committee appointed by Kerala Agricultural University and a committee from the National Institute of Occupational Health in Ahmedabad. Most of these studies have revealed the hazardous effects of endosulfan use and its impact on food, water, and other beverages.

Most of the researchers compared the villagers to a control group of boys from a demographically similar village that lacked a history of endosulfan pollution. Relative to the control group, the exposed boys had high levels of endosulfan in their bodies, lower levels of testosterone, and delays in reaching sexual maturity. Birth defects of the male reproductive system, including cryptorchidism (absence of one or both testes), were also more prevalent in the study group.

makes prior informed consent of importing countries necessary for the export of the pesticide. India, one of the biggest exporters of endosulfan, will be greatly affected by this decision.

The Indian Supreme Court on Endosulfan

The major blow to the endosulfan industry came in the form of an interim order of the Supreme Court of India, imposing a ban on the production, sale, and use of endosulfan. A writ petition⁴ was filed by a youth organization, the Democratic Youth Federation of India, seeking a ban on the chemical, on the basis of its adverse effects, as evident in Kasaragod. On the basis of the scientific reports and studies conducted so far, the Supreme Court was convinced to delve further into the issue. The Supreme Court appointed a joint committee,⁵ headed by the Director General of the Indian Council on Medical Research and the Agriculture Commissioner to conduct a scientific study on whether the use of endosulfan would cause any serious health hazards to human beings and the environment. The manufacture,

⁴ Writ Petition (C) No. 213/2011.

⁵ Order dated May 13, 2011.

sale, and use of the pesticide have been completely banned till the time the joint committee completes the study and submits its report. The above order was passed in order to secure the fundamental right to life guaranteed to all citizens under Article 21 of the Constitution of India.

The Way Ahead

The end of endosulfan is now inevitable. All eyes are set on the expert committee report and the Supreme Court verdict on the same. However, it is clear that even if the Supreme Court decides in favor of endosulfan, it may eventually be forced to be phased out by recent decisions taken in furtherance of the Stockholm and Rotterdam Conventions. Although India has obtained certain exemptions under the Stockholm Convention, they may only last for a maximum of 11 years, beginning in 2012. Exports from India would also suffer a major setback in view of the PIC requirement imposed under the Rotterdam Convention. The Government's sudden change in the policy will have a detrimental impact on the endosulfan industry. However, the immediate precipitator for this change is not clear.

The current situation not only presents a challenge for the insecticide industry, but also for the agricultural

sector. India might have to invest time and money into identifying and developing safe alternatives to endosulfan. For certain crops, substitutes may not be readily available. The cost of such alternatives is also a concern, as most of the available alternatives are more expensive than endosulfan. It may be difficult for the poor farmers to shift to costlier alternatives, especially for want of government support.

Nonetheless, the current situation was inevitable. The Indian government has a constitutional obligation to ensure the health and safety of its people and to protect their right to life. Reluctance to look into the larger issues of public health and safety and rejecting every scientific study and report decrying endosulfan will only worsen the situation. The very fact that different scientific studies (conducted in India and elsewhere) have suggested long-term and harmful effects of the pesticide on human health and environment, should force the government to delve deeper into the matter. Now, what the Parliament failed to address was imposed by way of a Supreme Court order. Mounting pressure from the international community has only heightened the difficulties lying ahead for the government.

News

Plastic Waste (Management and Handling) (Amendment) Rules of 2011

The Ministry of Environment and Forests (MoEF) of India has amended certain provisions of the recently enacted Plastic Waste (Management and Handling) Rules of 2011.¹ The amendments are intended to clarify the scope of the principal rules and to address ambiguities therein.

It has been clarified that the principal rules apply to “multilayered plastic pouches and sachets” and not to “multilayered packaging material.” The plastic packaging material has been specifically removed from the definition of “carry bags.” As a result, the provisions of the rules concerning the manufacture, labeling, and recycling of plastic carry bags, including the standards for quality, color, and other features, do not apply to the packaging material. Furthermore, an exemption has been granted to the carry bags manufactured specifically for export purposes.

The amendment rules provide that waste collection and recycling responsibilities belong to municipal authorities. These authorities may seek the assistance of the manufacturers of the plastic carry bags and actively involve them in the process of collecting and recycling the waste, in line with the principle of extended producers' responsibility. Notably, the principal rules stipulated that the manufacturers would provide financial assistance for setting up collection centers. Under the amendment rules, such explicit financial obligations of the manufacturers have been removed. Municipal authorities must devise a mechanism for manufacturers' involvement in the waste collection process.

Clarifications on the Environment Impact Assessment Notification of 2006 (EIA Notification)

The MoEF has clarified that prior environmental clearance under the EIA Notification does not apply to Solar PV Power Projects² and Aluminum Recycling Projects.³

1 S. O. No. 1527(E), July 2, 2011.

2 Officer memorandum, May 13, 2011.

3 Officer memorandum, June 23, 2011.

The MoEF has further decided that proposals for obtaining environmental clearance for building and construction projects that have obtained a green building rating under any recognized system, such as Leadership in Energy & Environmental Design or Green Rating for Integrated Habitat Assessment, will be given priority and will be considered out of turn for appraisal and clearance.

India and Climate Change

In the first official discussion on climate change after the negotiations in Cancun, Mexico, Jairam Ramesh, India's Minister of Environment and Forests,⁴ participated in the Petersberg Dialogue on Climate Change held on July 3 and 4, 2011, in Berlin. Dialogue participants deliberated on the outcomes of the climate conference in Cancun and attempted to form political consensus on key deliverables for the 17th Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC), to be held in Durban, South Africa, later this year.

Mr. Ramesh outlined five key issues that need to be addressed before Durban:

- ensuring the actual disbursement of fast-start finance that was promised at Cancun;
- preserving the structure of the Kyoto Protocol and its second commitment period;
- working on content before deciding legal forms;
- agreeing on the modalities of the review of a global goal and laying down a process for monitoring, reporting, and verifying the same; and
- resolving pending issues from Cancun, such as equity, intellectual property rights, and trade.⁵

Ministers and delegates at the Petersberg Dialogue agreed that there is a need for a step-by-step approach to the deliverables promised at Cancun, especially the Green Climate Fund (GCF), technology mechanisms, and the adaptation committee. Regarding finance, discussions focused on the importance of a structure and modalities for the GCF.

In other climate-related news, the Government of India has proposed that the following additional agenda items be included in the provisional agenda of the 17th Conference of Parties (COP 17) to the UNFCCC:

- Accelerated access to critical mitigation and adaptation technologies and related intellectual property rights, to be included under item “7(c) Development and transfer of technologies”;
- Equitable access to sustainable development, to be included under the item “7(h) Review of implementation of commitments and other provisions of the Convention”; and
- Unilateral trade measures, to be included as a separate item, namely, “7(i) Review of implementation of commitments and other provisions of the Convention.”⁶

⁴ Jayanthi Natrajan is currently serving as Minister of Environment and Forests.

⁵ Press Release, Ministry of Environment and Forests, Indian Minister Calls for 5-Pronged Approach to Fast-Track Climate Talks (July 2011), <http://moef.nic.in/downloads/public-information/Petersberg%20Dialogue%20v2.pdf>.

⁶ Press Release, Ministry of Environment and Forests, Proposal by Government of India for Inclusion of Additional Agenda Items in the Provisional Agenda of COP-17 (2011), http://moef.nic.in/downloads/public-information/India_proposal%20for%20addl%20items%20in%20COP%2017%20agenda.pdf.