

# DISPATCH

A newsletter from *Toxics Link*

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## Corporate attack on public hearing process

**P**aryavaran Suraksha Samiti (PSS), Environment Justice Initiative (EJI), Toxics Link and several other civil society groups strongly condemned the physical assault on the civil society representatives and environment activists who were participating in a Public Hearing organised by the Gujarat Pollution Control Board (GPCB) on August 7, 2002, in Valsad, Gujarat, at the behest of Atul Limited. The groups have called for severe action against the culprits. Sadly, the assault took place in the presence of the District Collector, who did not initiate any *suo moto* action.

Atul Limited is a manufacturer of more than 400 chemicals, one of which is a herbicide 2, 4-dichlorophenoxy-

acetic acid (generally referred to as 2,4-D). The public hearing was held as part of the EIA process for the company's 2,4-D production expansion plan.

The violence occurred when Michael Mazgaokar of PSS was translating Industrial Consultant Dr K.N. Ponnani's strong criticisms in Gujarati and the company was not able to reply to any of the queries and objections raised in the public hearing. Dr Ponnani's presentation was interrupted by an employee of Atul Limited, following which activists of the civil society groups were manhandled and Mazgaonkar was dragged out of the hall. During this time, for more than 15 minutes, neither the Collector of Valsad district, nor the regional



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## Rethinking responsibility

### Recycling and urban solid waste in India

Srishti has recently released a report *Recycling Responsibility: Traditional Systems and New Challenges of Urban Solid Waste in India*, which discusses in detail the social and technical aspects of recycling. The report, for the first time, attempts to put into perspective the changes and challenges being faced in the urban waste scenario, in the context of a developing country, India. As waste management is corporatised in cities, with the international waste industry seeking a foothold, it is displacing the traditional systems of recycling based on waste pickers. Paradoxically, as the Indian Government's policies harm the informal sector by introducing the corporates, the product industry (cans, plastics, other metals) is actually glorifying the informal sector instead of taking ownership of products and packaging materials – the industry dumped 1 billion drinking water bottles and 2 million tonnes of plastic waste in 2001.

Simultaneously, community-based projects, some of which have demonstrated outstanding success over the past decade, are being mercilessly torn apart through the introduction of the waste industry which is rapidly trying to install waste-to-energy plants in Indian cities. These are actually being subsidised through governmental funds. In a strange play of policy, while composting from waste is not supported by any incentives, WTE technologies can avail of subsidies of up to 50 per cent of the cost of the project.

The municipalities are doing their bit of lip service. Seeking a better public image after having been battered by Courts and citizens, they, on the surface, appear to support community-based projects while in reality they have been quietly signing off these efforts to corporate interests, as they receive an incentive from the government for doing so.

This study, based on a 15-month primary research on various aspects of the informal sector as well as a detailed policy analysis, suggests that recycling needs to be supported, in place of energy recovery, but only in an overall policy framework of Extended Producer Responsibility. Analysing in detail the current Indian policy on waste, the report lays out a framework for a new waste policy in India, based on industry responsibility and suggests that recycling and the production system have to work in tandem in a cyclic manner, and not linearly with recycling being an end-of-the-pipe solution.

The study also lays bare the dynamics of the informal sector, exploring its changing nature in today's context. The study examines various issues such as price negotiations, social networks, trade practices, technologies used and the exploitation prevalent within this sector, which is very unfair to the lowest actors in the chain – the waste pickers and the factory workers. The report also brings out the nature of the relationship between this sector and the legalised system.

Finally the report makes recommendations for integrating the traditional sector with industry responsibility and forming a resultant up-graded recycling sector through industry-driven investments. It also outlines specific roles for all stakeholders to enable this to happen without loss of livelihood and with improved working conditions.

*Ravi Agarwal*



officer of GPCB took any action. On the contrary, the company security and the police forcibly took Michael out of the campus.

“The fact that the public hearing was not held at a neutral place and was held at the chemical factory's compound hall speaks volumes about the farce of the public hearing made by the GPCB,” says Ravi Agarwal of Srishti. Members of PSS demanded cancellation of the public hearing as the public was not allowed to participate. It was only after this that a company Vice President came out to take Michael back in and apologised on behalf of Atul Ltd and his own person for the conduct of Atul employees.

The company officials and their consultant (Clean Environment Consultancy Services) painted a rosy picture of the company's track record. This was followed by a presentation made by Ms Swati (PSS) and Shweta Narayan (Toxics Link) on the health impact of the 2,4-D chemical. They pointed out that the researches quoted from the MSDS fact sheet were selective, highlighting the non-toxicity of this chemical, which was far from true as the major portion of the current available research on the toxic potential of 2,4-D was not included. The representatives had not much to say on this.

Even after the assault, the hearing could have continued had not the computer (in which all the data of the presentation by the industry was stored) hung. The hearing was obviously a formality which the GPCB was fulfilling without any seriousness. According to a report of the International Programme on Chemical Safety (IPCS), a joint venture of the United Nations Environment Programme, the International Labor Organization, and the World Health Organization, death may result in mammals and birds when they are administered oral doses of 2,4-D exceeding approximately 100-300 mg/kg body weight. The most characteristic signs of severe 2,4-D poisoning are those of myotonia, while various other physiological, haematological, biochemical and histological changes have also been described in the report.

*Gopal Krishna with inputs from Shweta Narayan*

## FEATURES

### DISARMING THE LAW The dilution of the EIA notification over the years

In order to predict environmental impacts of any development activity and to provide an opportunity to mitigate negative impacts and enhance positive ones, the Environmental Impact Assessment (EIA) procedure was developed in the 1970s. In India, the EIA was introduced through a gazette notification passed on January 27, 1994, requiring certain types of projects to obtain 'environmental clearance'. To make it more participatory, the provision of 'public hearing' was added, which was definitely a step forward. The main EIA notification has been amended seven times in the past eight years. All these amendments, instead of strengthening the process, have diluted it to an extent that it is now merely viewed by industries as a formality in the environmental clearance procedures.

The most recent amendment to the EIA process, notified on June 13, 2002, exempting pipeline projects from preparation of EIA reports, has further weakened the usefulness of environmental clearance. It also violates the basic premise of authority granted by the Environment Protection Act (EPA), 1986. Yet, public hearings need to be conducted in all the districts from where the pipeline will pass. This poses two problems: first, it is not clear how any EMP and Risk Mitigation measures can be formulated when one has not studied the potential impacts of the pipeline through the preparation of an EIA report; and, secondly, on what basis would persons attending a Public Hearing relating to a pipeline project voice their concerns? Both the routing and the construction of pipelines can have severe consequences on people and their environment. Pipeline projects may create unnecessary hardship to local people due to construction work,

and may later pose a hazard in the form of pipeline leaks. Both routing and construction can cause unnecessary and severe damage to sensitive ecosystems. But if these projects are exempted from the EIA process, no other mechanism ensures adequate review of these potential consequences.

This latest amendment was made without issuing notice to the public asking for their opinions and comments, stating that it was in "*the pub-*

*lic interest not to do so*"! Section 3 of the EPA, under which the EIA notification has been issued, authorises the Central Government to take measures for "protecting and improving the quality of the environment and preventing, controlling and abating environmental pollution". Naturally it follows that anything derived under Section 3 of the EPA should be for the purpose of preserving the environment and controlling pollution. Thus when sub-rule 4 of rule 5 of the Environment (Protection) Rules, 1986, speaks of public interest, it is in the context of preserving the environment and controlling pollution. One fails to see how these recent amendments serve the public interest in the context of conserving the environment and abating pollution.

The notification dated January 27, 1994, making the EIA a pre-requisite for environmental clearance for a large category of development



### Disasters in the pipeline

Pipeline projects have great potential for harm – to the sensitive ecosystems they pass through and to local people. If exempted from the EIA process, no other mechanism ensures adequate review of these potential consequences. According to a recent General Accounting Office report of the United States, an average of 22 people died annually from 1988 to 1998 in pipeline accidents. The overall number of pipeline accidents involving natural gas and other hazardous materials increased 4 per cent per year during that time, the agency reported. Some projects in the offing in India are:

- ▼ Petronet India Ltd has divided pipeline projects into two phases. Phase I plans for projects worth over Rs 12 bn and Phase II is the ambitious Central India Pipeline project with investments of over Rs 44 bn.
- ▼ Shell is expected to begin work on its 5 MTPA LNG terminal at Hazira in Gujarat by January 2003.
- ▼ Oman Oil is to review its participation in the 6 MTPA Bharat Oman Refinery to be set up at Bina in Madhya Pradesh in collaboration with BPCL. The project has already had a delay of Rs 25 bn from the original pegged cost of Rs 75 bn.
- ▼ The pricing of the four standalone refineries – Chennai Refinery, Bongaigaon Refinery, Kochi Refinery and Numaligarh Refinery – is expected to be completed by mid-January.
- ▼ Royal Dutch Shell and Cairn Energy, along with Reliance and ONGC (the other co-promoters), are in a race to buy out the 30 per cent stake of Enron in the Mukta Panna Oilfields. Enron has recently decided to exit from oil and gas interests in India.

Source: [www.oilwatch.org](http://www.oilwatch.org)

## EIAs and legal intervention

In the case of *Centre for Social Justice vs Union of India and Others*, the petitioners challenged the environmental clearance given by the Gujarat State Government to the thermal power project of the Gujarat State Electricity Board, on the grounds that the public hearings were *ab initio* void. The High Court, after going through the facts and circumstances, issued the following directions to the respondent authorities about the manner in which the public hearings should be conducted and made effective and meaningful:

- ▲ The venue of the public hearing should be close to the affected villages.
- ▲ A copy of the public notice should also be sent to the *gram panchayat*/municipality of each village or town.
- ▲ The minutes of the hearing should be provided by the board within a fortnight.

projects, was a much-needed and positive step towards the protection and conservation of the environment. However, the series of amendments over the years have contributed more to weakening the EIA notification rather than strengthening it. The following examples illustrate this point:

- The initial notification of January 1994 made it mandatory for the Impact Assessment Agency (IAA), that is, the Ministry of Environment and Forests, to consult a Committee of Experts before granting environmental clearance to a particular project. In its

present amended form, the notification states that the IAA **may consult** the Committee of experts **if deemed necessary**.

- The January 1994 notification made it mandatory for half-yearly compliance reports prepared by the project authorities to be made publicly available. The notification now leaves it to the discretion of the IAA to make complaint reports publicly available **subject to public interest**.

The provision for EIA reports and EMP to be made available to the public was removed through an amendment in 1997. It is indeed a welcome step in the latest amendment to see that EIA reports will now be made available to the public prior to Public Hearings. However with the increasing number of projects being exempt from preparing EIA reports, this provision may soon have no meaning.

*Sunita Dubey*

*Environment Justice Initiative*

## Illegal termination of services of power plant worker

**I**n a shocking incident, Raghunath Manwar, who has been tirelessly educating workers about the occupational hazards in a power plant, was unceremoniously removed from the Ahmedabad Electricity Company (AEC). Manwar has been an employee of AEC for the last 38 years. His services were illegally terminated without any investigation or opportunity to clarify the charges against him. A

dedicated worker, Manwar had reached the level of a Master Technician and had worked undauntedly to improve the safety and health condition of workers inside power plants.

Manwar's efforts have helped many workers, suffering from diseases caused by exposure to asbestos dust, receive compensation from the Management. Welfare laws have been made accessible to workers as a result of his efforts. As a member of the Safety Committee of the plant, Manwar has negotiated with the Management to provide safety gear to all workers. His own organisation, the Occupational Health and Safety As-

sociation, is building an environment where workers are aware of occupational health risks and are able to influence their working conditions.

Manwar has also undertaken a project to study the environment, social and health repercussions of power plants. This clearly brought him in conflict with the Man-

agement, which did not want such an investigative study to come out in the open.

Recently, AEC had appointed the British Safety Council (BSC) for a Safety Audit. Jeff Deacon, the BSC consultant, visited the company in January 2002 and had meetings with the Safety Committee and workers' representatives.

Manwar, was assured that a copy of the audit report would be given to the Safety Committee. In April 2002, Manwar came to know that the Safety Audit report had reached the Company. On requesting a copy, he was refused. Manwar wrote directly to Deacon for the report. On May 24, 2002, the General Manager of AEC handed him a letter informing him that he was dismissed with immediate effect. The reason cited was that he had violated rules by requesting Deacon for the report.

Only seven months are left for his retirement and this move is definitely aimed at denying Manwar his retirement benefits. The move by the company is a device to instill fear among the minds of workers.

*Dolon Sen*

*Ashoka: Innovators for the Public*



## Asbestos claiming 100,000 lives annually - ILO

Calculations by the International Labor Organization (ILO) present an appalling picture of the global asbestos tragedy. Every year at least 100,000 workers are dying from asbestos-related cancers; this figure does not include thousands of people disabled and killed by asbestosis, another asbestos-related disease. Dr Jukka Takala, Director of the ILO's In Focus Programme on Safety and Health at Work and the Environment (Safework), accepts that the true total "could be even more than 100,000". When the asbestos fatalities due to environmental exposure and para-occupational exposure (from fibres brought into the home on work clothes) are factored into the equation, we begin to get a picture of just how high the human tragedy caused by asbestos is.

The ILO's statistics were presented by Dr Takala at the XVIth World Congress on Occupational Safety and Health at Work which was held in Vienna, Austria from May 26-31, 2002 in a paper entitled: 'Decent Work, Safe Work'. He said, "According to the ILO figures, the biggest killer in the workplace is cancer, causing roughly 640,000 or 32 per cent of deaths, followed by circulatory disease at 23 per cent, then accidents at

19 per cent and communicable diseases at 17 per cent. Asbestos alone, the report says, takes some 100,000 lives annually."

A request to Dr. Takala to explain the calculations used to produce this figure was answered on September 20, 2002. He said, "The ILO has estimated that between 610,000-635,000 deaths are annually caused by work-related cancer. The asbestos component of this figure is taken from the best reporting base we found, Finland, where the recorded rate is 1.8 workers annually. The world labour force is about 2.7 billion, so the figure could be even more than 100,000... The estimate includes both lung cancers and mesotheliomas."

The ILO is not alone in finding it difficult to put a figure on the scale of the asbestos tragedy. One wonders, however, whether calculations based on working conditions in Finland, where some form of control has been in place for decades, are relevant to countries in which the misuse of asbestos and exposures experienced by the population are rampant.

An agency of the United Nations is calling for global trade restrictions on the sale of all forms of asbestos. On February 21, 2002, an announcement was made by the United Nations Environment Programme (UNEP): "All forms of asbestos should be added to an international list of chemicals subject to trade controls." This decision follows a review of asbestos which had been triggered by unilat-

## World Bank averse to financing asbestos projects

The World Bank has had a policy against asbestos since 1991, says Barry Castleman, an internationally acclaimed asbestos lawyer. An extract from the World Bank's *Environmental Assessment Sourcebook, Vol 3*, World Bank Technical Paper #154, states: "The Bank increasingly prefers to avoid financing asbestos use... Thus, at any mention of asbestos in Bank-assisted projects, the Task Manager needs to exercise special care." The guideline does go on to allow for the possibility that waivers to the policy might be allowed, but says the burden of proof lies with those seeking exceptions: "The onus is on proponents to show the unavailability of alternatives, partly because acceptance of the use of lower-risk asbestos-cement sewer pipes implies some incentive for asbestos manufacture and mining, which are higher risks and further outside project standards control."



eral bans adopted by the EU and Chile. The committee of government experts which studied the issue noted that the inhalation of asbestos fibres causes cancer and other illnesses. They said, "Asbestos is still used in seals, gaskets, joints, brakes, armaments and other applications although cost-effective substitutes are increasingly available for most applications."

The Chairman of the Interim Chemical Review Committee (ICRC), Reiner Arndt of Germany, said, "This decision of the Committee is another big step towards eliminating the risks associated with asbestos and its products. Even in countries like mine, where these products have been banned for a long time, they remain a major problem when decontaminating

buildings and paying the huge costs of treating people with serious diseases caused by asbestos."

These deliberations have been taking place within the framework of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. Although the Convention has been signed by 72 governments, it has been ratified by only 20 states. It gives importing countries "the tools and information they need to identify potentially hazardous chemicals and to exclude those they cannot manage safely. When trade is permitted, requirements for labelling and providing information upon export on potential health and environmental effects promote the safe use of chemicals."

According to a paper entitled 'Present Status of Asbestos Mining and Related Health Problems in India - A Survey' by A.L. Ramanathan and V. Subramanian, which was published in the *Industrial Health Journal* in 2000, imported asbestos is widely used in India: "In India, raw material asbestos is received from Canada without any warning and India sends back the finished product to them along with the warning *hazardous product*. In India, workers slice open the bags of Canadian asbestos with knives, then shake the bags into troughs and mix it with cement to make piping. Here the unprotected workers are completely covered in asbestos dust, where precautions are absolutely not in place."

Gopal Krishna

## REPORTS

### China bans mercury imports

China, one of the dominating mercury producers in the world has suspended the import of virgin mercury. China recently announced a permanent ban on mercury imports. The Chinese government took the decision in April 2002. Mercury being one of the important constituents in gold mining, China had increased its imports since 1992, with reported imports of as much as 481 tonnes in 1997. The primary mercury production used to be as high as 850-1200 metric tonnes during 1986-1989, a figure which was reduced to 200 metric tonnes in 1999 following a ban on mercury mining in June 2001. Following this order, the province of Guizhou, currently the largest producer in China and third in the world's mercury reservation ranking, reciprocated and all mercury plants in the province have been shut down since the Chinese lunar New Year.

The Environmental Protection Agency (EPA) website reported that the ban is intended to reduce the risk of the extent of mercury poisoning reported in Japan during the 1950s. It also stated that EPA is currently pursuing the drafting of legislation to limit or eliminate domestic production

of mercury as well as sponsoring research into the development of industrial substitutes.

China, despite its unregulated mercury market, has managed to join the long line of countries trying to regulate the use and production of mercury, while India still staggers to find its way out to environmentally viable alternatives.

Compiled by Ruchita Khurana

### Srishti survey: Delhi shows 50 per cent reduction in Medical Waste Incinerators

As compared to 51 medical incinerators operational in Delhi in 2000, there are only 26 incinerators operational in 2002. This was revealed in a survey of the capital's hospitals conducted by Srishti during July-September 2002. The survey covered 16 hospitals that have on-site incinerators. (There are five other hospitals that were not covered).

The pronounced decline can be attributed to the aggressive marketing and acceptance of the centralised facilities, which have improved their services, and the constant pressure on the hospitals. As per the survey, hospitals can end up spending more than Rs 300,000 annually on diesel for their incinerator and an additional Rs

55,000 on manpower, besides other operating and maintenance expenses.

Incinerators were found to be operating for only four hours per day on an average, as over-capacities made it impossible to attain the required temperatures. Most hospitals did not have pollution control devices and could not provide information regarding frequency of emission testing. The Pollution Control Board revealed that none of the incinerators were meeting emission standards. The Delhi Government has now disallowed the installation of fresh incinerators.

Ratna Singh

### Medical insurance for Pune waste pickers

In a unique effort to reduce the hardships of waste pickers, the Pune Municipal Corporation (PMC) has extended medical insurance to the ones operating in the city.

PMC Commissioner T C Benjamin says the decision is awaiting clearance by the Standing Committee. This initiative will benefit about 3,000 waste pickers, who are vulnerable to such ailments as TB, backaches, scabies and skin diseases. An outlay of just Rs 2.5 lakh can ensure that the waste pickers get an annual cover of Rs 5,000 per head.

Sanjay K Gupta

**Executive order promotes burn-based waste-to-energy technology**

In violation of the recently-signed United Nations Environment Programme's POPs treaty, known as the Stockholm Convention, a Supreme Court order and Ministry of Environment and Forests' (MoEF) Municipal Solid Waste (MSW) Rules, 2000, the Union Ministry of Non-conventional Energy Sources (MNES) has passed an executive order asking all the state governments to follow burn-based waste-to-energy policy. As a consequence, several municipal corporations are promoting Energy Development Limited's (EDL) projects.

EDL is an Australian company which is allied with US-based Brightstar Synfuel Corporation. Interestingly, the failed Timarpur deal is under the scrutiny of the office of the Comptroller and Auditor General, following Delhi High Court's order. Unmindful of its failures, the MNES

is encouraging commercial ventures with impractical and wishful claims, although it has no track record of successful pilot projects to back its energy generation claims.

Besides the projects mentioned in the table below, 20 other projects are on the anvil in Rajasthan alone, following a Waste Policy formulation of the Rajasthan government. The affected cities are Jaipur, Jodhpur, Kota, Ajmer, Bikaner, Udaipur, Bhilwara, Pali, Sikar, Tonk, Beawar, Churu, Hanumangarh, Jhunjhunu, Sawai Madhopur, Kisangarh and Gangapur.

The Jaipur Municipal Corporation (JMC) is signing an agreement with

the same company for generating energy from 500 MT of waste at Khori Rapada village. Six hectares of land has been earmarked for the Rs 141.87 crore project. Sunand Sharma, Managing Director, EDL India, has informed the JMC that they would receive about 20-25 per cent solid waste as inert residue after the power generation which can be sterilised and could be disposed off in landfills by the JMC. The process of segregation of heavy metals and mercury from the MSW will be undertaken using residual technology to avoid heavy metals at source, it is claimed.

*Gopal Krishna*



**EDL's proposed gasification-based electricity projects in Indian cities**

City	Waste (metric tonnes)	Electricity (MegaWatts)	Investment (Rs crore)	Role of MNES and Municipal Corporations
Chennai	600	14.85	170	Chennai Corporation and EDL India Private Limited signed a Memorandum of Understanding*
Delhi	1,000	21.60	240	Municipal Corporation of Delhi and EDL India Private Limited agreement shelved following Toxics Link intervention
Mumbai	1,000	21	242	Municipal Corporation of Greater Mumbai has signed an agreement with EDL India Private Limited
Bhopal	500	10.80	130	Municipal Corporation of Bhopal has signed an agreement with Bhopal Environmental Projects Private Limited (or EDL India Private Limited)
Kanpur	1000	24		Agreement signed by Kanpur Nagar Nigam

\* The Chennai project has been dumped by the Tamil Nadu Pollution Control Board following intervention by Toxics Link and Consumer Citizen's Action Group (CAG).

## INCINERATION UPDATE

### Global day of action displays solidarity against incineration

To mark the GAIA Global Day of Action against waste incineration, a series of programmes were held at Dilli Haat, New Delhi on June 17, 2002. The event was co-organised by the Global Anti Incinerator Alliance (GAIA), Toxics Link, Srishti, Karm Marg, Youthreach, CarePlus and Action India to promote the phasing out of non-viable burn technologies and their replacement by sustainable waste management practices.

In his keynote address, Ravi Agarwal of Srishti underlined the need for development of safe alternatives to burn technologies. Ms Naini Jayaseelan, Secretary, Department of Environment, Government of Delhi, inaugurated the event. She informed the gathering about the government's Bhagidari scheme through which it intends to undertake a range of waste

management initiatives.

The first programme during the event included songs on waste, which were sung by community women of Action India. The songs propagated the message of employing sound waste management practices. This was followed by a play performed by children of Karm Marg, an NGO working with street children. The beautifully enacted play aimed at spreading word about the ever increasing pollution problem. Then came an informative puppet show by Katkatha, followed by musical performances – the Sufi music of Dhruv and group, and fusion music by two Delhi-based bands Rail Road Avenue and Menopause. The event was one of 126 organised by groups in 54 countries in the first ever globally-coordinated day of protest against incineration technologies.

Ruchita Khurana

## BHOPAL UPDATE

### Gas leak – a case of homicide or mere negligence?

The Indian government is complicit with the crimes of Union Carbide and has been aiding Carbide's evasion of justice. Since 1992, Warren Anderson, the former Chairman of Union Carbide, has been a fugitive from justice. Various parties in power have not taken the tiniest step in having him or the other accused extradited so that they can be tried in India. The current government has outstripped the rest in its slavery to the might of the US corporations.

In a recent development, the CBI filed an application in the court of the Chief Judicial Magistrate, Bhopal, asking that the offence for which the absconding Anderson is charged, be modified from 'culpable homicide' to a 'rash and negligent act'. This charge is not an extraditable offence. It is therefore clear that the Indian government is itself making sure that the guilty of Bhopal cannot be brought to justice. This is the worst betrayal that the victims of the world's worst disaster have had to face.

Thankfully, though, justice pre-



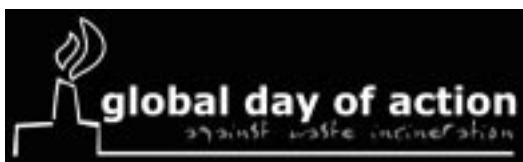
Materials such as these flyers brought out by the International Campaign for Justice in Bhopal bring out the double standards being practised by Dow Chemicals on the Bhopal issue.

vailed for the victims. The court of Chief Judicial Magistrate Rameshwar Kothe rejected the application for dilution of charges filed by the CBI, and also directed them to initiate extradition proceedings against Warren Anderson and keep the court informed about the steps taken.

In another development, the Group of Ministers on Bhopal convened by the Ministry of Chemical and Fertilisers declared that the residents of 20 municipal wards of Bhopal, hitherto considered unaffected by the disaster, would also be given compensation from the balance of the settlement fund (Rs 1,360 crore). The Indian Council of Medical Research (ICMR) which carried out the research on the effects of gas exposure, other official agencies and even the Supreme Court categorically mentions that residents in these 20 municipal wards were not exposed. This decision was initiated by the BJP MP from Bhopal in a blatant attempt to purchase votes.

It also needs to be kept in mind that the fund has remained in balance because 95 per cent of the victims have received only Rs 15,000 as compensation and no one has been paid interest on compensation which is a legal right. The balance of funds rightfully belongs to individual residents of the 36 gas-affected municipal wards and it can't be allowed to be used for petty political gains.

It is clear that under pressure from multinational interests, the Indian Government has taken decisions aimed at burying the ongoing saga of suffering of the survivors of the 1984 Union Carbide disaster. This has catapulted the Bhopal campaign for justice into an unanticipated emergency.





Three people, including two women survivors – Rasheeda Bee and Tara Bai – and Satinath Sarangi, a long-time Bhopal activist, sat on a marathon 22-day hunger strike in New Delhi. Despite the steadfastness of the hunger strikers and the support extended by numerous public interest groups and the media, the political establishment failed to respond, hoping that the protest will die away. At the recent Earth Summit at Johannesburg, the survivors raised their voice in front of the global body and international media, and demonstrations were also held before the Dow Chemicals Chairman.

On his trip to Bhopal, the President of India Dr A.P.J. Abdul Kalam also lent his sympathetic ear to the gas victims and stressed on the cure and proper medication. He commented, “Allah is with you and medicine is also a form of God”, after hearing the plight of the gas victims. The Chief Minister of Madhya Pradesh also urged the President to stress on the Union Government the need to extradite Warren Anderson to India.

*Kishore Wankhade*

## PESTICIDES UPDATE

### Endosulfan – the ban stays

Even as the struggle to get Endosulfan banned across the country continues, in a clear victory for environmentalists in the war against the use of the toxic pesticide, the Kerala High Court has banned its use in the state, pending a final decision from the Central Government. As is to be expected, the pesticide industry has undertaken a vicious misinformation campaign.

A division bench, comprising Chief Justice B.N. Srikrishna and Justice G. Sivarajan, banned the pesticide and made it clear that it cannot be used in any of its formulations or under any of its brand names. Exposure to this insecticide, banned in many countries, has been linked to several unusual diseases,

particularly among children. Several studies on the pesticide categorically show that it is dangerous to human life. It affects the reproductive system and causes diseases such as cerebral palsy, Parkinson’s disease, and various skin disorders.

These diseases have been noticed since the state-owned Plantation Corporation of Kerala (PCK) undertook aerial spraying of Endosulfan in over 4,600 hectares of cashew plantations in Kasaragod district during the late 1970s, the petitioners submitted. The government had imposed a ban on the use of the pesticide for five years on the recommendations of the Achuthan Committee and the state legislature committee. However, the ban was lifted by the government hardly a year after it was imposed. The Union Government awaits the report of the expert committee appointed by it to look into the hazardous effects of Endosulfan on the environmental health, before taking any decision.

Earlier the government had lifted the ban on Endosulfan spraying, unmindful of the report of National Institute of Occupational Health (NIOH), Ahmedabad. The report divulges various incriminating facts on the hazards of Endosulfan. The report was the result of the *suo moto* action initiated by the National Human Rights Commission (NHRC) asking the Indian Council for Medical research (ICMR) and a number of other agencies to submit detailed reports on the existing poor state of health conditions of the people of Kasaragod. The study was carried out on village school children and plantation workers. The blood samples were analysed for separate investigations on Endosulfan residues, hormonal analysis (thyroid and sex hormones), and

cytogenetic studies (for any chromosomal aberrations). Supplemented with all the relevant data and statistics, the report concurs the presence of Endosulfan residues in both water and blood samples in the exposed area. The residues are present even after 10 months of the last aerial spray, signifying continuous exposure to Endosulfan.

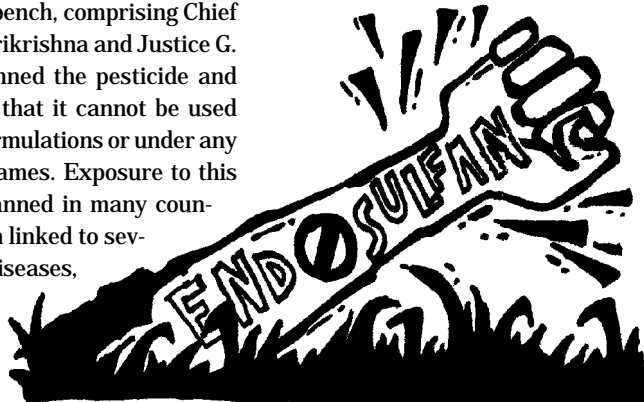
The medical findings reveal a higher prevalence of congenital malformations, neurological problems and other reproductive abnormalities as compared to the control population. The study once again establishes the disastrous health impact of Endosulfan.

### Suicides by cotton farmers in Bhatinda district

Kheti Virasat, a voluntary organisation working on the issues of promoting sustainable agricultural practices through organic farming, recently conducted a detailed study following a number of suicides by farmers in three villages of Bhatinda district. The villages – Mandi Khurd, Raman Vass and Harkishanpura in Tehsil Rampuraphool – were chosen on the basis of maximum number of farmer suicides reported.

The report – *Suicides by the Cotton Farmers in Bhatinda District and Villages ravaged by Water and Pesticides* – elucidates the dynamics of the survey penning down all the socio-economic factors. It briefly outlines the land holdings, crops sown and the amounts of debt of villagers. It highlights the plight of farmers who have been using pesticides extensively for a number of years. The farmers are reported to have been suffering from various ailments after the pesticide spraying. The report details the increasing incidence of cancer and kidney failure. It illustrates the villagers’ review on the non-efficacy of pesticides even after continuous spraying. The villagers were keen to know about pesticide-free agricultural practices. The report was compiled as a result of the survey conducted by a five-member team of Kheti Virasat who visited these villages.

*Summarised by Ruchita Khurana*



## ASBESTOS UPDATE

### Asbestos – a ‘silent killer’

After misleading both the Houses of Parliament on three occasions through Members of Parliament, the asbestos industry represented by V. Patabhi, advisor, Hyderabad Industries Limited and M.L. Gupta, Managing Director, Eternit Everest Limited, in an advertisement in the latest issue of *India Today* misinforms the public, saying, “Chrysotile asbestos is a magic mineral”. The Chrysotile Asbestos Cement Products Manufacturers’ Association (CACPM), which has launched this misinformation campaign, is an association of 14 large manufacturing companies.

The advertisement wrongly claims that “In a country like India, various types of roofing are used by the underprivileged, comprising 80 per cent of the population, who cannot afford concrete constructions. The most economical roofing available for the poor is chrysotile asbestos cement sheet.” Asbestos is being used in a large-scale manner in consumer products, particularly in products used in public utilities, including (a) asbestos roofing sheets; (b) asbestos pipes for water supply; (c) asbestos pipes for soil, rain water and ventilation; and (d) brake linings. According to occupational health expert Dr T.K. Joshi, “Even a single fibre, on reaching the right place in a cell can cause irreversible damage leading to asbestosis, lung cancer or mesothelioma.”

More than 30 countries have already banned asbestos. Even the

World Trade Organisation (WTO) has given an adverse judgment against its use. European Directive 98/12/EC, in effect since October 1, 1999, also prohibits the use of asbestos.

Given the availability of safer substitutes, in most cases it is practicable to use natural or man-made alternatives. The world over, countries are replacing asbestos with glass fibre, carbon fibre, cotton, organic fibre, man-made mineral fibres and particulate mineral fillers, poly vinyl alcohol, cellulose, paramid fibres, etc. Developing countries like India continue to be the dumping ground for asbestos from countries such as Russia and Canada, even as the Ban Asbestos Network of India (BANI) is spearheading a campaign to get asbestos banned all over the country.

*Gopal Krishna*

## PARLIAMENT UPDATE

*Dear Friends,*

*We are starting this new section of Parliament Q&A, wherein we cite questions related to environmental health and toxicity raised in the Parliament, along with the respective answers. We look forward to receiving your opinion regarding this effort.*

### Pesticides

**Question:** Whether the Government is aware of the fatally-affected 500 agricultural labourers due to exposure to chemical pesticides in the Warangal district of Andhra Pradesh and whether the Government plans to conduct an in-depth health study in this regard. (*Prakash V Patil*)

**Answer:** As per Government of Andhra Pradesh report, a number of pesticide poisoning cases have been reported. But if the pesticides are used as per prescribed directions, no harmful effects are posed to human beings, animals and the environment. The Government is also promoting Integrated Pest Management (IPM) to reduce consumption of chemical pesticides. Ministry has not considered to conduct any in-depth health monitoring study in this regard. (*Hukumdeo Narayan Yadav, Minister of State in Ministry of Agriculture, May 13, 2002*)

*Similar questions were raised regarding farmer deaths due to pesticides; effect of pesticides on food and threatening of food safety; ban on use of pesticides containing harmful chemicals and amendments to Insecticides Act to impart strict punishment to manufacturers of spurious pesticides and importers of banned pesticides.*

### Asbestos

**Question:** Whether the Government proposes to shut down asbestos sheets manufacturing units in India as it can cause lung cancer to the workers exposed to it. (*Suresh Ramrao Jadhav*)

**Answer:** There is no conclusive scientific evidence on harmful effects of asbestos. The units manufacturing asbestos have to follow BIS-prescribed safety norms to protect workers against harmful effects of asbestos. Therefore, it is not desirable to ban production of these sheets. (*Dr Raman Singh, Minister of State in Ministry of Commerce and Industry, May 17, 2002*)

*A few other questions were also raised regarding the impact of asbestos mining on workers' health.*

### E-waste

**Question:** Whether the Government is aware of exports of toxic electronics waste by USA and whether UNHCR and SC of India have banned dumping of such wastes and the measures taken or proposed to check such imports. (*Ramjivan Singh et al*)

**Answer:** The Government is aware and SC vide their order dated 5.5.1997 have directed that hazardous waste banned under Basel convention would not be permitted by any authority or person. Since electronics waste is included under List-A and List-B of Schedule-3 of the Hazardous Wastes (Management and Handling) Rules, 1989 as amended in 2000, the import of such waste requires specific permission of Ministry of Environment and Forests. No such permission has been given to any authority or person by the Ministry. (*T.R. Baalu, Minister of Environment and Forests, April 22, 2002*)

*Compiled by Ruchita Khurana*



# RESOURCES

## REPORTS

### **The Environmental Impact of Bt Cotton in China, published by Greenpeace, June 2002**

The Bt cotton plantings in China have seen enormous growth since 1997 when Monsanto Bt cotton was introduced in China. The Bt cotton plantations, which had accounted for some 16,000 hectares in 1996, are estimated to have grown to 1.5 million hectares in 2001. Since the time of introduction of this transgenic variety, the research on its environmental impact is being conducted to assess its potential adverse effects on biodiversity. A number of scientists and research institutes are involved in Bt cotton research for the past five years under a special research fund established for Bt cotton environmental assessment. The report – *A Summary of Research on The Environmental Impact of BT Cotton in China* – is based on the data collected during interviews of scientists who were conducting the research studies. It summarises the impact of Bt cotton on non-target organisms with a brief description of laboratory methods and field tests that were applied during the study.

The Bt cotton was studied for its impact on

- Natural enemies of bollworm
- Secondary pests
- Insect community diversity

With a further discussion on bollworm resistance to transgenic Bt cotton, the report documents adverse impacts of Bt cotton on the environment and biodiversity. The key impacts are that:

1. Bt cotton leads to a significant reduction in the population of parasitic natural enemies of cotton bollworm.
2. Bt cotton is ineffective in controlling secondary pests like cotton aphids, lygus bugs, etc. Bollworm was

replaced by some other primary pests damaging cotton growth.

3. There is a possibility of sudden outbreaks of pests in Bt cotton plantations because of reduced stability of insect community, pest and pest-natural enemies sub-community.
4. Bt cotton will probably lose its resistance to bollworms in fields after it has been planted continuously for 8-10 years.
5. Farmers use chemicals two-three times in the third and fourth generations.
6. There are no effective measures to postpone or resolve the resistance problem of bollworm to Bt cotton.

*Summarised by Ruchita Khurana*

## FILMS/VIDEOS

### **In God's Own Country – A film on the Protest by the People of Kasaragod against Endosulfan**

Format – DV

Duration – 28 minutes

Directors – Rajani Mani, Nina Subramani

Produced by Elephant Corridor

**In God's Own Country** is a 28-minute film that outlines how a simple, gentle community takes on the government and industrial giants. Directed by Rajani Mani and Nina Subramani, it highlights the protest by the people of Kasaragod against Endosulfan, a symbol of struggle against pesticides in India. The film is the official selection for the Pennsylvania Documentary Film Festival 2002 and the Raindance film festival in Britain.

**Synopsis:** Tucked away in the southern part of India is the tiny state of Kerala. Tourism brochures, while referring to the unique beauty of this land, often call it 'God's Own Country'. The film is set in a district called Kasaragod located on the border of Kerala with its neighbouring state Karnataka. Any visitor here will be struck both by the beauty of the land and the people. A closer look, however,



reveals a disturbing fact. Almost every family here is affected by serious medical afflictions. Children are born with grave disabilities and medical depression is common. The reason: 30 years of exposure to a deadly pesticide, Endosulfan. For three decades, Endosulfan has been sprayed aerielly over the State-run cashew plantations. A year ago, the community correlated their malaises to these pesticide sprayings. This was the beginning of an awakening and a battle to stop the spraying of this deadly pesticide. Will the struggle of these innocent people simply waste away? Is there hope for a better, environmentally secure future? Will the pesticide manufacturers wake up to the devastation they have caused and own up? It is questions such as these that underline the basic theme behind 'In God's Own Country'. The film was shown at the India International Centre.

### **Aftershocks – The Rough Guide to Democracy**

Duration – 66 minutes

This film about development/displacement, environment, people's rights and democracy deals specifically with lignite mining in Kutch, Gujarat. The film has won several national and international awards. To obtain VHS copies of the film, please write to Mr. Rakesh Sharma at [actindia@vsnl.com](mailto:actindia@vsnl.com). Individuals, academics and activist may write to obtain copies at a discount.

## THE AGBIOINDIA LIST SERVE

In an effort to promote understanding of the politics of food, the Forum for Biotechnology and Food Security has launched a mailing list called the AgBioIndia. The mailing list intends to create wider awareness and understanding of the complexities of the crisis facing Indian agriculture and food security. This

list focusses on posting the latest information on intricacies and games being enacted in the name of eradicating hunger.

It is a non-commercial educational service for non-profit organisations and individuals, where subscribers can contribute to information by mailing at [agbioindia@agbioindia.org](mailto:agbioindia@agbioindia.org).

To subscribe to this mailing list, please send a blank e-mail to [subscribe@agbioindia.org](mailto:subscribe@agbioindia.org), or visit <http://www.agbioindia.org> to subscribe or unsubscribe.



## E-toxic listserve

Toxics Link has started an electronic discussion group for sharing and disseminating information. If you would like to join the group, please e-mail us at [tldelhi@vsnl.com](mailto:tldelhi@vsnl.com)

## FACT FILE

▼ After the first commercial cellphone services were introduced in the US in 1983, the number of cellphones in use has skyrocketed from 340,000 in 1985, to 130 million by 2001.



the greatest environmental impact.

▼ The breakdown of the handset's environmental impacts by component is: 59 per cent from PWB and 39 per cent from LCD, of which 64 per cent of PWB's environmental

impact comes from the integrated circuits, accounting for 23 per cent of the impact of the handset.

▼ A study done at the Delft University of Technology in the Netherlands indicates that the Printed Wiring Boards (PWBs) and Liquid Crystal Display (LCD) together account for 98 per cent of the handset's environmental impact in production and recycling.

▼ According to INFORM's estimates, the US stockpile of retired cellphones could exceed 500 million by the end of 2005.

▼ The PWBs contained in all electronic products (not just cellphones) are the second largest source of lead in the US municipal waste stream.

▼ An estimated 100,000 to 125,000 tonnes of lead solder are produced globally for the electronics industry each year.

▼ The PWBs contained in all electronic products (not just cellphones) are the second largest source of lead in the US municipal waste stream.

▼ A US EPA study in 1988 found 40 per cent of the lead in US landfills to be from discarded electrical and electronic products.

▼ Studies at Delft University of Technology have found that, of all the materials contained in a printed wiring board, the lead and brominated flame retardants have

▼ In the US, the lead solder contained in the PWB of the 130 million cellphones estimated to be retired in 2005 will generate approximately 81,250 pounds of lead waste.

*Ruchita Khurana, with inputs from Waste in the wireless world: The challenge of cell phones, by Bette K Fishbein, 2002, published by INFORM*

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