



Toxics Link
for a toxics-free world

Roundtable

On

**“Compliance Mechanism of
Reduction in the use of Hazardous Substances”**

On

25th March 2014

At

Maple Hall, India Habitat Centre, New Delhi



1. Workshop Background:

E-waste (electronic and electrical waste) is broken, obsolete, end-of-life or surplus electrical gadgets – computers, printers, phones, T.V. refrigerators, toasters, toys, shavers, etc. – which has been discarded. It is one of the fastest growing waste streams globally and the increased volumes are often results of the fact that electrical and electronic products are ‘design to dump’ rather than ‘design for environment’. The waste contains cocktail of hazardous chemicals/materials which makes it a complex waste stream to be handled.

Some of these complexities and concerns for environment created conditions for the policy-makers in India to come up with E-waste (Management & Handling) Rules, 2011. One of the key components to this framework is where the producers / product manufacturers have been mandated to reduce the quantity of hazardous substances in their products, thereby reducing the risk at the end-of-life. Though this part of the Rules is coming into force from May 2014, till date there seems to be little initiative from the authorities to implement or monitor its effectiveness.

The roundtable provided a platform to all the stakeholders for a healthy discussion, knowledge sharing so as to find a way forward in trying to implement compliance mechanisms to reduce environmental impact related to E-waste.

2. Inaugural Session:

Mr. Ravi Agarwal (Director, Toxics Link), on behalf of the organization, welcomed all the panellists to discuss the major issues surrounding e-waste. He stressed on taking the issue forward and seeing the issue from various stakeholders’ point of view.

Mr. Satish Sinha (Associate Director, Toxics Link) shared that the idea behind the roundtable is to find a way forward in trying to implement compliance mechanisms on the Reduction in the use of Hazardous Substances (RoHS) by understanding viewpoints of all key stakeholders. All suggestions and comments raised during the interaction will be passed on to CPCB.

The first presentation built the framework of the entire discussion. Speaking on an overview of RoHS, **Ms. Priti Mahesh (Toxics Link)** said that it is mandated under the E-waste (Management and Handling Rules), 2011, which came into effect in May 2012. Two year time frame was provided for RoHS (May 2014 is when RoHS comes into effect). Detailing on the Rules, she pointed out that the Producers are the key actors in RoHS and have to reduce six substances, namely Mercury, Lead, Cadmium, Hexavalent Chromium, Polybrominated Biphenyles and Polybrominated Diphenyle Ether from their products.



Stressing on the benefits of RoHS, she talked of four points:

- Design for the environment;
- More proactive approach than reactive, i.e. looking at reducing hazards from the very beginning and not really look at only end-of-life;
- Focus on preventing long-term issues;
- Address global issues versus domestic, i.e. trying to not only address global pollution but also a market which is much more global. This kind of regulation will benefit the whole global scenario.

Elaborating further, she added that RoHS looks at homogeneous material and at final product; not process. The responsible agency for implementing this is CPCB.

Speaking about the enforcement, she said that there are elements which need to be flagged off in the meeting and a need to discuss elements that requests clarity before RoHS comes into effect:

- There is a need to see whether there will be self-declaration on conformity. So, will it be CPCB's responsibility to check whether the brands comply or whether it is the brand's responsibility to show that they are complying;
- There is no indication on how is the implementing agency going to assess whether the products – multinational brands, local brands, national brands – in the market across the country are RoHS compliant. So there is a need to look at if there is a need for market surveillance and how it will be put into effect.
- Also, there is a need to see what kind of criteria (random selection, high volume products etc) will be considered for the investigation on RoHS compliance.
- Laboratory checks to check compliance would also need to look at financing.
- If there is a need for new labelling system or existing ones could be adopted
- Exemption for spare parts; anything put on the market prior to 2006 will be exempted but what happens to products which have been sold after that. There is a need to look at the exemption of spare parts sold between 2006 and 2014

Ms Mahesh also added that the role of customs is very important as most products in India come from outside and have to go through custom. There is a definite need to discuss whether the customs are aware of this regulation, how would they identify non-RoHS compliant.

She also stressed on the need to establish penalty for non-compliance. Measure like fines, product recalls, prohibition of future sales etc need to be looked into.



The second presentation was given by **Dr Anand Kumar (Sr. Environmental Engineer, CPCB)**. He said the CPCB has been interested to enforce both the provisions of the laws.

Talking about the constraints, Dr. Kumar said that:

- The rule does not outline any said procedure for RoHS compliance;
- Typical analytical process like receiving of

samples and analytical test certification of each product would be difficult and time consuming at this stage when there is limited manpower;

- There is also a lack in lab facilities and resources.

Taking all these constraints into consideration and talking about the framework of CPCB, he added that:

- CPCB is at present going through a self-regulation model. This certification will have random verifications after the laboratories and mechanisms are set at CPCB;
- CPCB would have a central registry of producers; there will also be a dynamic database on the number of electrical and electronic equipment being placed in the market;
- There would also be a memorandum of understanding with CMET which has the facility for testing RoHS parameters, till such time that CPCB would develop its own lab facility;
- There would be a central and zonal level RoHS testing in laboratories.
- CPCB has already started developing a standard operating procedure for sampling and testing of RoHS and this has not been brought into the public domain;
- CPCB will have a system of certification of RoHS testing labs.
- CPCB would also organize stakeholders meetings with departments, IT, customers and MoEF. There would also be integration of RoHS compliance, i.e. authorization;
- There will also be awareness campaign through mass media.

Post tea session, saw the third presentation by **Mr. Pranshu Singhal (Head, Sustainability, Nokia India Pvt. Ltd.)**. Speaking on how one could declare a product to be RoHS compliant, he said that Nokia follows a precautionary principle by removing materials even before they were regulated. One of the objectives of the product is to know what is going into the product and getting to that level of information is a significant job.



He said that Nokia has a Nokia Substance List (NSL) which defines the basis on which it has or does not have certain substances. It has three parts:

- Banned part: Banned is not necessarily regulated by law but regulated by Nokia, e.g. certain flame retardants.
- Restricted part: Restricted is from a purely precautionary principle perspective, e.g. questionable substances;
- Targeted for reduction: Targeted looks at the long-time future. This paves a pathway for suppliers of Nokia to ensure that they manage things in a decent way.

He further added that the central principle of Nokia is that each and every supplier providing components to them needs to give full disclosure of the raw material content going into the component. The process evolved so much that it is at present easier to find out the full contents of a substance. On the basis of the information coming from components, Nokia captures

information on each and every sub-part, part, component and a product. That becomes the basis on which Nokia declares whether the product is compliant or not.

Talking about the system of compliance that needs to be in place, he talked of the need to focus on global harmonization and not create a system which is different because that could create disruptions and it could create a system which may be difficult to comply. He added that even the compliance procedures needs harmonization. Mr Singhal pointed out that it is important to understand the information declaration procedures: For example to declare compliance to CPCB, what are the various mechanisms to do it? He said that in Europe most manufacturers do not declare compliance on testing basis because testing of a single phone can take millions of euros and the timescale would run to several months. So the declaration is based on the inflow of data that a producer procures. However, it is up to the regulator to pick up a product and do random sampling. PMD is the most preferred method to declare materials by any country.

Mr. Singhal stressed that when a product is tested, it is actually the components which are tested and the timescale is long (asked Dr. Munirathnam to shed some light). So most of the time, it is not possible. If one were to check a register of a singular product, one may have to procure 500 phones from the market to get a minimum quantity to test because some minimal number of materials is required to do the testing. This is not feasible. Also, the costs for testing are significant and need to be kept in mind.

3. Open Discussion:

Mr. Satish Sinha (Associate Director, Toxics Link) opened the discussion stressing on the



need for evolving clear guidelines and infrastructure to implement policies. When some doubts were raised on the schedule related to lighting equipments by Dr. Munirathnam, he questioned that if the schedules are a copy of the EU RoHS, then how is it that the European Union is implementing the standards while in India they are unable to implement the standards.

Mr. Sinha then opened the topic on a broad level for discussion and requested panellists to take the discussion forward point-by-point so that the suggestions coming out the discussion can then be collated and presented to CPCB which can then help them take this forward. He started the discussion raising concerns on the CPCB ability to check compliance by all Producers. This is critical since apart from the multinationals which operate at national level, there are local Producers which only sell products in a particular state and it might be difficult for CPCB to monitor them.

In the point of enforcement, Mr. Sinha spoke about points for further discussion among panellists:

- Self-declaration: which are the labs and what is the process; frequency of declaration; how it works;

- Market surveillance: the periodicity; which is good way to do;
- Random sampling: who bears the financial burden of sampling; how much is to be done and where;
- Labelling: is it mandatory or not; would it be a new level or taken from existing labelling system; how does it work;
- Non-compliance: what is the compliance in case of violations; how to deal with it; after 1st violation, 2nd violation and 3rd violation, what is to be done with it; if compliance has to be effectively done, are there provisions or not;
- Implementing agency
- Exemptions, spare parts: How to deal with products put in the market before 2006 even though their spare parts continue to come till today? So are the spare parts also exempted or not since they are put into the market in 2014? How can they be dealt with?

He further added that he raised these points because there is no clarity on the road map of CPCB. He also raised concerns about capacity and resource with CPCB and SPCB for implementation. As a group it needs to be suggested whether the current format looks feasible or possible. Gathering the viewpoints of participants, Mr. Sinha also questioned the kind of processes and system CPCB has in place to put the self-declaration on the table. Mr. Sinha said that for Indian companies to be handheld there is a need to develop the protocols.

Voicing the concerns of Ms. Kalra and Mr. Singhal on the standardization of labels, Mr. Sinha said the points raised need to be taken as suggestions. If a company has a manufacturing facility in India and they are exporting outside, it is important to understand what kind of labelling will be provided which are acceptable in other countries.

He also raised the problem that no discussion or meetings were organised by the authorities in the last three years on RoHS. At present it seems there is only one approved lab- CMET. He then asked Dr. Kumar the timeframe for establishing labs or getting the kind of infrastructure in the country.

He also raised points on:

- Surveillance – who and how will the surveillance be carried out;
- Number of brands (how many brands are there) and their registration
- CPCB capacity to do market surveillance

Mr. Ravi Agarwal (Director, Toxics Link) said that the discussion is also for establishing/gauging the kind of capacity the regulatory body requires. That helps in thinking the stages involved which thus is the approach of the discussion. To accept the Producer self compliance documents, it is important to understand the kind of capacity any regulator would require.

Ms. Upasana Chaudhary (HP) asked whether there are any proposals detailing what could be applied because in EU the CE mark incorporates RoHS. One cannot put CE mark unless the product is RoHS compliant. So it makes no sense to add an additional logo. So the CE mark can be recognized.

Putting across her concerns, **Ms. Radhika Kalia's (Head-Corporate & Public Relations, Panasonic)** said that in e-waste CPCB had come up with a guideline to implement it, but there are still confusions regarding it, especially authorisation. There is disconnect between how the MoEF is interpreting the rules and how CPCB is setting the guidelines. So she requested that that kind of disconnect should not be there in the present guideline.

She further raised doubts on implementation and readiness and capacity among the test labs as well as the process of getting it. Ms. Kalia added that the new self-regulation model by CPCB is excellent and accepted by them. She requested the panel to look into the periods and the timelines online because that will make the mechanism efficient. She suggested that outsourcing the process of compliance check to another company could smoothen the process.

Ms. Kalra also added that since CE labelling is common for many countries, it might be good for India to adopt it as well.

Dr. N.R. Munirathnam (Director, CMET) said that the CMET laboratory was funded by DEITY and it has established systems required for the compliance of the six components (Pb, Cd, Hg, Cr6, PBB, PBDE) covered under RoHS. He pointed out that since the laws have come into place, CMET has started getting more samples and in their last testing it was found that 20 per cent of the samples were not compliant.

He further added that if RoHS is implemented – the amount of data to be analysed and the amount of certification that is needed, government machinery alone or a few scientists won't be able to do that. However, a trustable private agency can monitor them.

Dr. Niloufer Shroff (Scientist- G & HOD-EMCD, Department of IT) expressed her concern on the fact that the panel does not have any Indian manufacturers. Mr. Sinha responded saying that though the companies were invited, they have not participated.

On the issue that multinational companies are compliant while the Indian ones are not, she said there needs to be a way to help domestic ones become compliant. On the concern of surveillance, she said that there is a need for people from excise because those are the people who see the market. The person who collects the sales tax or excise tax would know what is coming into the market. She stressed that the team would have to be multi-dimensional.

On the issue of penalty provisions as discussed by Dr. Kumar and Ms. Mahesh, she said that the board can only penalize if the board is authorized. So the Government cannot go beyond its reach.

Speaking on the compliance issue pointed out by Ms. Kalia, **Dr. S. Chatterjee (Additional Director – EMCD, Department of IT)** agreed with Mr. Mishra that some more labs are required so that the infrastructure support can be extended.

Voicing his opinion on the questions raised by Mr. Sinha on surveillance, Mr. Chatterjee said that:

- Sales declaration and monitoring can be outsourced giving a guideline;
- A surveillance team can be formed with DEITY or other ministries or other labs.

He talked about an HS-code for compliant components and non-compliant components coming to India because that would be very handy for the customs to understand which particular codes should be banned.

Mr. Shailesh Mishra (Head-Technical Regulation and External Affairs, Panasonic) said that although 98 per cent of compliance is there, there is a glitch in the technique or process. There is no proper mechanism. If there is talk about a new compliance, there should be proper mechanism and handholding technique, which is missing presently. He further added that there are many manufactures and 67 multinational companies (apart from local players) deal with similar kind of products. So if all the products have to be sent for discreet product testing, then then it will be 10 or 20 times higher than the BIS scheme and it might not be feasible.

On being asked by Ms. Mahesh whether any verification is done on the testing methods done by vendors, **Mr. Pranshu Singhal (Head, Sustainability, Nokia India Pvt. Ltd.)** replied that random tests are done by laboratories. Nokia is unable to test each and every component. The way the system is designed there is hardly any possibility to cheat the system because the cost of cheating is very high for any manufacturer (he could be out of the system).

He also mentioned that according to a study that Indian Cellular Association did with CMET, on testing of different mobile phones (15 different modes including Nokia, Indian manufacturers, Chinese manufacturers with no brand names), CMET found that almost all of international manufacturers were RoHS compliant while Indian manufacturers and local brands were not.

Echoing the same thought as Mr. Agarwal regarding the capacity that a regulatory body requires, Mr. Singhal said that some parallels or guidelines could be dropped because testing is the least relied procedure or the last resort any company or regulatory body wants to take up as it is impossible to establish. Clarifying the point of documentation, he said that Nokia does not submit any documentation in EU and it is done only when the enforcement body asks for certain things.

Voicing the same concerns as Ms. Kalra about a standard labelling system, he added that there could be a complimentary approach. If CE mark is present there is no requirement of an additional mark.

Mr. Singhal suggested that as a group all the suggestions could be made as a working practice document which identifies the existing processes and how things are happening. In such a case there will be no misinterpretation of reality.

Like the system followed at Nokia, **Ms. Priti Kadam (Program Manager, Corporate Environment Affairs, IBM)** spoke about a similar system in IBM called Product Environment Profiles (PEP).

Mr. Rajoo Goel (Secretary General, ELCINA) said that there is a big gap between the multinationals and domestic companies. Mr. Goel specifically pointed out that the point to be taken into consideration is the implementation agency – the CPCB and the SPCB.

- Are the authorities strengthened enough to take care of it? The first step is for the agencies to have a team.

- Possibly 4-5 states can be identified where a lot of electronics industry is already existing. There could be an officer or a team of 2-4 people from CPCB who can take care of that particular state.

He added that associations have a role to play in getting all the stakeholders together. He further added that there is a need to motivate local companies. He felt that though SMEs may be legally exempted but there is a need to handhold them.

He also felt that there has to be a way of checking the imports coming in. A harmonized system of declaration is required. This will be something which the industry and CPCB can create together. On the suggestion made by Dr. Chatterjee regarding HS-codes, Mr. Goel clarified that HS-codes are globally approved and there cannot be separate codes for compliant and non-compliant. One can look at the CE market and if the product has a CE mark it needs to be accepted.

He gave a suggestion on getting a short study done to come up with a roadmap based on that. It needs to be funded by the government. Such a research will clarify the number of labs – private or public – present in the country and required; the number of experts to be trained within CPCB to be placed in different areas etc.

Dr. S. Chatterjee (Additional Director-EMCD, Department of IT) said that first of all CPCB is going for self-declaration so it is important to find out how this can be done. Dr. Chatterjee added that DEITY is already working with MoEF and CPCB. He said that there should be one working group where members from industry, CPCB, MoEF, DEITY and other related organization should be present.

Ms. Sarojini Kaul (Project Manager-Economic Cooperation, EU) said that it is not possible to keep multinationals at par with small SMEs who are manufacturing small TVs, etc. Therefore it is required to handhold small SMEs and make them at par with the big companies. It is correct that government should do the needful but the corporate should also come up and handhold these SMEs (those supplying spare parts) and do a capacity building for them.

Regarding implementation in MNCs, **Ms. Priti Mahesh (Toxics Link)** said that customs have a vital role to play and it would be better if they are included in the discussions itself so that they are on board and their difficulties are also taken into account.

On Mr. Kumar's fact of CPCB's reorientation from industry pollution control to product testing, Ms. Mahesh pointed out that the rules for testing a product were assigned 3 years back and at present there is only 1 month left for interaction. This indicated the fact that no progress has been made.

She directed the importance of national registry and their compliance. She then pointed out that such a move can catch those people who are not giving certification and selling products (maybe even in small numbers). Echoing the same thought as Dr. Munirathnam and Ms. Shroff, Ms. Mahesh questioned the route of the funds for outsourcing since there are no separate budgets allocated for it.

On the questions raised by Mr. Sinha regarding the roadmap of CPCB, **Dr. Anand Kumar, CPCB** assured that – unlike the notion that CPCB is not prepared – CPCB is preparing itself. The only hitch was that it has not come out with its preparedness in the public domain. Dr. Kumar said that the new mechanism, when developed and functional, will be transparent. He further appreciated the concerns raised by the members and said that CPCB will put some parts of the implementation only when they are fully ready with large number of labs. Till such a time, self-regulation and random testing will be done.

On the questions raised by Mr. Sinha about the vision of CPCB, Dr. Kumar accepted that fact there is a lack of manpower. He assured that CPCB will be going ahead – with 35 state boards, all regional offices, scientific offices. But at present, it requires time to take the route even though 2 years has passed. On the point raised by Ms. Mahesh regarding the inclusion of customs in the discussion, Dr. Kumar said that CPCB is in consultation with customs.

Talking about the point on documentation, Dr. Kumar said CPCB will only require a certificate from a company in a prescribed format. Speaking about certification, he stated that most of the products from EU have a CE mark which means it is RoHS compliant. This is fine with products coming from EU or exported abroad. However, he said that there is a need to come out with a label for products manufactured in India and CPCB is thinking on that front. On the issue of bringing about a standardized system of labelling (voiced by Ms. Kalra and Mr. Singhal), Dr. Kumar said that the points discussed have been taken into account.

On the issue of exemption of spare parts that are sold between 2006 and 2014, Dr Kumar clearly said as per CPCB understanding of rules those spare parts would be exempted from RoHS compliance.

On the question raised about how non-compliance will be dealt with, Dr. Kumar said that E-waste Rules have been framed under the EPA. Whatever the penalty provisions are present, it has to be according to the EPA only. He clearly stated that he is willing to take ideas from the meet and forward it to competent process.

4. Key Recommendations:

The key recommendations emerging from the discussion have been listed below:

- A clear guideline to implement the RoHS component of E-waste Rules, 2011 should be notified.
- The guideline should have clarity and should be in concurrence with the authorities at MoEF.
- A research study to understand the current capacity and resource available and the requirement to implement the guideline should be commissioned.
- CPCB is currently moving in the direction of self-declaration, so it is important to find out the implementation mechanism.
- The resource and capacity to deal with the large number of Producers and compliance procedures is missing and hence there is a need for capacity building and training.

- The need for a national registry which will help in identifying free riders. There is a need to motivate local companies.
- There were suggestions of outsourcing the whole system of compliance to improve efficiency also to reduce the load on CPCB /SPCB.
- There must be readiness and capability built-in among the test labs to make the mechanism efficient.
- Need for labelling system to be harmonised with the global system so that the companies which are exporting or manufacturing outside India do not face double labelling. Use of CE could be explored.
- A surveillance team can be formed with DEITY or other ministries or other agencies. People from excise also could be included in the team.
- Customs have a vital role to play and it would be better if they are included in the discussions itself so that they are on board and their difficulties are also taken into account.
- SMEs may be legally exempted but there is a need to handhold them and make them at par with the big companies. It is correct that government should do the needful but the corporate should also come up and handhold these SMEs (those supplying spare parts) and do a capacity building for them.

Agenda

Roundtable on “RoHS Compliance”

0930 – 1000	Registration& Tea	
1000 – 1015	Welcome & Special Address	Mr. Ravi Agarwal, Director, Toxics Link&Mr. Satish Sinha (Associate Director, Toxics Link)
1015 – 1030	RoHS – Need for the Hour	Ms. Priti Mahesh (Toxics Link)
1030 – 1045	Framework of Regulation Model	Dr Anand Kumar (Sr. Environmental Engineer, CPCB)
1045 – 1100	Substance Management in Products	Mr. Pranshu Singhal (Head, Sustainability, Nokia India Pvt. Ltd.)
1100 – 1115	Tea	
1115– 1315	Open Discussion: Chaired by Satish Sinha, Toxics Link	
1315 – 1330	Closure Remarks	
1330 - 1415	Lunch	

List of Participants

	Name	Organization		Name	Organization
1.	Dr. N.R. Munirathnam	CMET	14	Ms. Radhika Kalia	Panasonic
2.	Dr. Anand Kumar	CPCB	15	Mr. Shailesh Mishra	Panasonic
3.	Dr. Vinay Gangal	CPCB	16	Mr. Manish Pande	QCI
4.	Ms. Parul	CPCB	17	Mr. John Dunham	US Embassy
5.	Mr. Shalender Kumar	Dell	18	Ms.Priya Ghose	US Embassy
6.	Dr. S. Chatterjee	Dept of IT	19	Mr. Ravi Agarwal	Toxics Link
7.	Dr. Niloufer Shroff	Dept of IT	20	Mr. Satish Sinha	Toxics Link
8.	Mr. Rajoo Goel	ELCINA	21	Ms.Priti Mahesh	Toxics Link
9.	Ms.Sarojini Kaul	EU	22	Ms.Ankita Jena	Toxics Link
10.	Ms.Upasana Chaudhry	HP	23	Mr. Vinod Kumar	Toxics Link
11	Ms.Priti Kadam	IBM	24	Ms.Prashanti Tiwari	Toxics Link
12	Mr. Amit Jain	IRGSSA	25	Mr. Mohit Bhatia	Toxics Link
13	Mr. Pranshu Singhal	Nokia India			