Status Review Report on Implementation of Batteries (Management and Handling) Rules, 2001 (as amended thereof)

2016



CENTRAL POLLUTION CONTROL BOARD

Ministry of Environment, Forest and Climate Change, Govt. of India Parivesh Bhawan, East Arjun Nagar Delhi-110032

1.0 Background

The Batteries Management and Handling Rules were notified in the year 2001 with the primary objective of channelizing the used lead acid batteries for environmentally sound recycling. The Rules mandates State Pollution Control Boards to seek data on sale, import, generation, collection and recycling of used batteries from manufacture, assembler, re-conditioners, importer, auctioneers and batteries recyclers for keeping track of used batteries.

Responsibilities have been fixed on manufacturers, importers, re-conditioners and assemblers to ensure that used batteries are collected back and sent to registered recyclers. Responsibilities were also fixed on other stake holders such as dealers, recyclers, bulk-consumers and auctioneers to maintain records and file annual returns. The regulatory authorities involved are State pollution Control Boards, Customs authorities, Central Pollution Control Board and Ministry of Environment, Forest and Climate Change.

2.0 Mechanism of Implementing the Rules

The rules provide that manufacturers, dealers, assemblers, re-conditioners, auctioneers, bulk-consumers, authorised recyclers and importers have to file half yearly returns on sale, collection of used batteries and quantity sent to registered/authorised recyclers.

The rules also provide for registration/authorisation of dealers by SPCBs and registration of importers by CPCB. Dealers, who are key stakeholders in these roles have to file half yearly returns to manufacturers, who in turn have to file compiled half yearly returns to SPCBs. Manufacturers are required to manage channelization through their dealer network and also through their collection centres. One of the main responsibilities of manufacturers is also to create awareness among the consumers and to implement take-back system for the end of life batteries produced by them.

There is no provision of registering/authorising manufacturers, assemblers, re-conditioners, auctioneers and bulk-consumers by SPCBs, therefore SPCBs may have to acquire data about manufacturers on their own, which may include market survey, creating awareness and vigilance mechanism. (However, provisions for developing registry of manufacturers, assemblers, re-conditioner, bulk-consumers and auctioneers not specified under Rues)

The scheme for registration for importers of new lead acid batteries has been transferred from MoEF to CPCB as per the amendment notification SO 1002 (E) dated 4.5.2010 under Batteries (Management & Handling) Rules, 2001. CPCB has been issuing registrations to importers of new lead acid batteries as per rule 5 of Batteries Rules, by following a procedure evolved by CPCB for issuing registrations (the procedure is given at CPCB website). Registration of importers is an enlisting process at CPCB so as to ensure that importers of new lead acid batteries channelize the used batteries to registered recyclers. The customs department verifies the registration

certificates issued by CPCB/MoEF, the Import Export Certificate and the undertaking in Form-II and half yearly returns filed (of previous imports if any, for clearing the consignment of new lead acid batteries.

State Pollution Control Boards are the prescribed authority to ensure compliance by stakeholders namely manufacturers, dealers, bulk-consumers, assemblers, re-conditioners, recyclers, importers and auctioneer. SPCBs are required to submit annual compliance status reports to CPCB. CPCB is required to compile the annual information received from State Pollution Control Boards and publish the data received every year from the State Boards and also review the compliance of the rules periodically to improve the collection and recycling of used Lead batteries and appraise the MoEF&CC. Rules also mandate MoEF&CC to register the recyclers of lead acid batteries and also develop a system for computerized tracking of (i.) distribution and sale of batteries; (ii) collection, auction, transport and re-processing of used batteries; (iii) sale of re-processed lead by registered recyclers; and (iv) sale of lead from all domestic producers or importers.

3.0 Status of Compliance

SPCB has the responsibility of submitting annual compliance status reports on their own to CPCB. Since the rules do not provide specific form for forwarding the compiled information, CPCB has circulated formats to all SPCBs requesting submission of annual compliance reports. CPCB issued several reminders to SPCBs to ensure compliance and submission of compliance status reports. However, it has been observed that very few SPCBs have complied by filing annual reports. The matter was also raised in the 58th Conference of Chairman & Member Secretaries of Pollution Control Boards/Committees held during February 21st -22nd, 2014. The number of SPCBs filed annual reports over the past 3 years is given at Table-1 below. During the year 2015-2016, CPCB has received ACSR information from only 05 States while the other States have not responded to reminders.

Table-1: Number of SPCBs/PCCs submitted Annual Compliance Status Reports (ACSR)

	2013-14	2014-15	2015-16
Number of SPCBs/PCCs submitted ACSR	11	14	5

CPCB has received annual compliance status reports form only 5 SPCBs/PCCs during the year 2015-2016. The details of States submitted ACSR, the number of batteries sold and number of batteries sent/collected for recycling by registered/authorised recyclers during the year 2013-14 and 204-15 are given at Annexure-I. The annual compliance status for the year 2015-2016 is given in Table-2 below;

Table-2: Number of Lead Acid batteries Sold and collected for recycling for the year 2015-2016

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers
1	Andaman and Nicobar Islands	-	-	-
2	Andhra Pradesh	-	-	-
3	Arunachal Pradesh	-	-	-
4	Assam	-	-	-
5	Bihar	-	-	-
6	Chandigarh	-	-	-
7	Chhattisgarh	-	-	-
8	Delhi	-	-	-
9	Gujarat	1078131	334466	81646
10	Goa	-	-	-
11	Haryana	-	-	-
12	Himachal Pradesh	-	-	-
13	J&K	-	-	-
14	Jharkhand	-	-	-
15	Kerala	-	-	-
16	Karnataka	-	-	-
17	Lakshadweep	-	-	-
18	Madhya Pradesh	387339	207138	325279
19	Maharashtra	-	-	-
20	Manipur	-	-	-
21	Meghalaya	-	-	-
22	Mizoram	-	-	-
23	Nagaland	Nil	Nil	Nil
24	Orissa	-	-	-
25	Punjab	947837	465433	48128
26	Rajasthan	-	-	-
27	Sikkim	-	-	-
28	Tripura	-	-	-
29	Tamil Nadu	-	-	-
30	Telangana	-	-	-
31	Uttar Pradesh	-	-	-
32	Uttrakhand	-	-	-
33	West Bengal	2358440		16248 (Nos)
34	Daman & Diu	-	-	-

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers
35	Dadra & Nagar Haveli	-	-	-
36	Pondicherry	-	-	-

Note: All values are in Tonnes per Annum (TPA), otherwise as mentioned.

As per the available information received from SPCBs/PCCs, the inventory of stakeholders involved in management of Batteries are compiled and given in Table- 3.

Table-3: Inventory of stakeholders involved in Management of used lead acid batteries

S.No	Name of State PCB/PCC	Year of Data	Manufactur er	Dealers	Recyclers	Auctioneer	Re- Conditioner	Assembler	Bulk- consumer	Importer *
1	A&N Islands	-	-	-	-	-	-	-	-	Nil
2	Andhra Pradesh	2015	5		09			01		60
	Arunachal	2015	NIL	NIL	02	NIL	12	NIL	98	Nil
3	Pradesh									
4	Assam	2015	01	01	05	01	NIL	NIL	14	2
5	Bihar	2014	01	02	04	NIL	NIL	NIL	07	1
6	Chandigarh	2015	01	50	NIL	NIL	NIL	NIL	07	9
7	Chhattisgarh	-	-	ı	-	-	1	ı	-	7
8	Delhi	-	-	-	-	-	-	-	-	378
9	Gujarat	2016	10	141	30	7	98	3	578	42
10	Goa	2014	5	14	NIL	NIL	11	01	33	4
11	Haryana	-	-	-	-	-	-	-	-	85
	Himachal	-	-	-	-	-	-	-	-	8
12	Pradesh									
13	J&K	-	-	-	-	-	-	-	-	1
14	Jharkhand	-	-	-	-	-	-	-	-	4
15	Kerala	2013	10	33	02	07	02		07	20
16	Karnataka	2014	22	305	26	02	12	NIL	105	214
17	Lakshadweep									Nil
18	Madhya Pradesh	2016	14	294	41	17	90	15	96	23
19	Maharashtra	2012	15	1050	48	-	-	-	1913	323
20	Manipur	-	-	-	-	-	-	-	-	Nil
21	Meghalaya	2015	NIL	NIL	NIL	NIL	NIL	NIL	NIL	Nil
22	Mizoram	2015	NIL	NIL	NIL	NIL	NIL	NIL	NIL	Nil
23	Nagaland	2015	NIL	NIL	NIL	NIL	NIL	NIL	NIL	Nil
24	Orissa	2015	01	NIL	01	NIL	NIL	NIL	NIL	2

25	Punjab	2016	33	612	32	-	8	17	63	12
26	Rajasthan	-	-	-	-	-	-	-	-	12
27	Sikkim	-	-	-	-	-	-	-	-	Nil
28	Tripura	2015	01	NIL	03	NIL	NIL	04	NIL	Nil
29	Tamil Nadu	2013	12	69	05	07	NIL	NIL	17	162
30	Telangana	-	-	-	-	-	-	-	-	11
31	Uttar Pradesh	-	-	-	-	-	-	-	-	67
32	Uttrakhand	-	-	-	-	-	-	-	-	12
33	West Bengal	2016	5	61	53	0	0	0	58	42
34	Daman & Diu									
	Dadra & Nagar	2015	NIL	2						
35	Haveli									
36	Pondicherry	2015	02	20	NIL	01	NIL	NIL	08	4

^{*} As per CPCB record

The number of stakeholders submitted half yearly returns to SPCBs/CPCB are compiled for the year 2015-2016 and given in Table -4 below;

Table-4: Status of filing of returns by stakeholders during 2015 - 2016

S.N o.	Name of State PCB/PCC	Manufa cturers	Dealers	Batterie s	Auction eer	Re- conditio	Assemb ler	Bulk- consum	Importe rs *
0.	Andaman and			recycler		ner		er	0
1	Nicobar Islands								
2	Andhra Pradesh								6
3	Arunachal Pradesh								0
4	Assam								0
5	Bihar								0
6	Chandigarh								0
7	Chhattisgarh								1
8	Delhi								29
9	Gujarat	3	43	6	5	0	0	560	11 (4)
10	Goa								0
11	Haryana								5
12	Himachal Pradesh								2
13	J&K								0
14	Jharkhand								0
15	Kerala								5
16	Karnataka								14
17	Lakshadweep								0
18	Madhya Pradesh	6	84	30	-			12	2(0)
19	Maharashtra								32
20	Manipur								0

S.N o.	Name of State PCB/PCC	Manufa cturers	Dealers	Batterie s recycler	Auction eer	Re- conditio ner	Assemb ler	Bulk- consum er	Importe rs *
21	Meghalaya							<u>.</u>	0
22	Mizoram								0
23	Nagaland	Nil	Nil	Nil	Nil	Nil	Nil	Nil	0
24	Orissa								0
25	Punjab	13	29	11	Nil	Nil	8	15	1(1)
26	Rajasthan								2
27	Sikkim								0
28	Tripura								0
29	Tamil Nadu								9
30	Telangana								-
31	Uttar Pradesh								1
32	Uttrakhand								-
33	West Bengal	5	4						10(3)
34	Daman & Diu								-
35	Dadra & Nagar Haveli								-
36	Pondicherry								-
	Total								

^{*} Numbers in parenthesis indicates returns filed to CPCB

The data shown in Table-2 and table-3 indicates that the information provided by SPCBs is grossly in-adequate with respect to number of dealers, manufacturers, assemblers and reconditioners. This indicates that the SPCBs/PCCs did not have complete list of stakeholders involved in implementation of Batteries Rule, which reflects poor status of implementation of Batteries Rules in almost all the States/UTs. Therefore, there is a need to update the inventory by SPCBs/PCCs. Data provided in Table-3 also does not reflect the indicative market of sale of batteries in the country.

Complied annual information for the year 2015 – 16 indicates that in these 5 States namely West Bengal, Punjab, Madhya Pradesh, Nagaland and Gujarat have sold 47,71,747 number of batteries by manufacturers and importers out of which 4,60,469 no. of batteries were sent to registered recyclers. The annual report of these 5 States as given in table 4 indicates that all stakeholders (manufacturers, importers, re-conditioners, assemblers, bulk-consumers and auctioneers) have not submitted returns. Therefore the data given in table 2 is also does not reflect the correct picture even in those 5 States, who submitted annual reports.

4.0 Registration of Importers

As per the provision under Rule 5 Batteries (M&H) Rules, 2001 and as amended in 4th May 2010, the responsibility of granting registration to importers of the new lead acid batteries has

been transferred from Ministry of Environment, Forest and Climate Change to Central Pollution Control Board. Accordingly, importer shall get registered with CPCB for a period of 5 years. As per rule 5(ii), Member secretary or any officer designated by the Central Pollution Control Board is the prescribed authority for issuance, cancellation or refusal of registration.

CPCB has been granting the registration to importers of new lead acid batteries as per the procedure recommended by MoEF & CC in its letter dated 22nd June, 2010.

To improve the transparency in the import of the battery process, CPCB has developed web based software and was functional since March, 2013. In "Batteries Registration and Management System (BRMS)" importer can submit their application through online either fresh/new application as well as renewal, file half-yearly returns and undertaking. In spite CPCB, SPCB and Custom Authorities can also verify the status of importer through BRMS portal.

About 2573 importers have been registered till March, 2017 by Ministry & CPCB for import of new lead acid batteries. The status of application of importer of new lead acid batteries and registration granted to importers are available on BRMS portal. There are 384 number of registration whose validity expired, 944 registration cancelled and 1245 active importers as on March, 2017.

S.No.	State	2010-	2011-	2012-	2013-	2014-	2015-	2016-	СРСВ	MoEF
		11	12	13	14	15	16	17		
1.	Andhra Pradesh	15	06	05	08	12	14	Nil	60	51
2.	Arunachal Pradesh	Nil	Nil	0						
3.	Assam	Nil	02	Nil	Nil	Nil	Nil	Nil	02	0
4.	Bihar	Nil	Nil	Nil	Nil	Nil	Nil	01	01	2
5.	Chhattisgarh	01	01	01	01	02	01	Nil	07	1
6.	Goa	Nil	04	Nil	Nil	Nil	Nil	Nil	04	1
7.	Gujarat	12	05	10	04	04	05	02	42	45
8.	Haryana	18	09	11	09	12	16	10	85	45
9.	Himachal Pradesh	01	04	01	01	Nil	Nil	01	08	3
10.	Jammu & Kashmir	Nil	01	Nil	Nil	Nil	Nil	Nil	01	3
11.	Jharkhand	Nil	Nil	Nil	Nil	02	02	Nil	04	3
12.	Karnataka	24	37	30	23	41	43	16	214	106
13.	Kerala	03	05	04	06	Nil	Nil	02	20	10
14.	Madhya Pradesh	05	08	05	02	01	01	01	23	16
15.	Maharashtra	53	60	32	34	58	62	24	323	194
16.	Manipur	Nil	Nil	Nil						
17.	Meghalaya	Nil	Nil	Nil						
18.	Mizoram	Nil	Nil	Nil						
19.	Nagaland	Nil	Nil	Nil						
20.	Orissa	Nil	01	01	Nil	Nil	Nil	Nil	02	1

S.No.	State	2010-	2011-	2012-	2013-	2014-	2015-	2016-	СРСВ	MoEF
		11	12	13	14	15	16	17		
21.	Punjab	03	02	02	Nil	02	02	01	12	14
22.	Rajasthan	07	02	Nil	01	02	Nil	Nil	12	19
23.	Sikkim	Nil	Nil	1						
24.	Tamil Nadu	29	27	29	14	26	31	06	162	214
25.	Telangana	Nil	07	Nil	Nil	01	01	02	11	0
26.	Tripura	Nil	Nil	0						
27.	Uttar Pradesh	07	18	17	10	11	08	03	67	45
28.	Uttrakhand	03	02	03	Nil	02	02	Nil	12	5
29.	West Bengal	04	07	05	03	05	05	13	42	52
30.	Chandigarh	01	01	Nil	04	01	01	01	09	4
31.	Delhi	43	62	51	30	67	76	49	378	221
32.	Dadra & Nagar	Nil	Nil	0						
33.	Daman & Diu	01	Nil	Nil	Nil	Nil	Nil	01	02	2
34.	Lakshadweep	Nil	Nil	0						
35.	A & N	Nil	Nil	0						
36.	Pondicherry	Nil	01	Nil	01	01	01	Nil	04	8
Total 230 272 207 151 247 271 133									1507	-
No of registrations given by MoEF&CC prior to May, 2010									-	1066
No of r	egistrations got expir	ed							384	-
No regi	istrations cancelled								944	1
Effectiv	Effective number of registered importers								124	5

^{*} Numbers in parenthesis indicates number of registration issued by MoEF&CC

Over the period it was observed that many new lead acid importers were not filing half yearly returns regularly. CPCB has given public notice among leading newspapers across the country on 4th October, 2013 to registered importers of the new lead acid batteries for submission of half-yearly returns as per the Batteries (Management & Handling) Rules, 2001 and as amended in 2010 with opportunity to respond within 30 days. Thereafter, CPCB issued cancellation notices to defaulter importers. CPCB has so far cancelled 944 registrations granted to importers in 10 states namely Chhattisgarh, Andhra Pradesh, Telangana, Delhi, Gujarat, Haryana, Himachal Pradesh, Bihar, Tamilnadu and Maharashtra for failing to file half yearly returns.

5.0 Authorised/Registered Batteries Recyclers

State Pollution Control Boards/Pollution Control Committees are the designated authorities for grant and renewal of registration of recyclers having environmentally sound recycling facilities for recycling of lead acid batteries/plates/other lead scrap/ashes and residue under hazardous

waste management rules notified under E(P) Act, 1986. The said recyclers also come under the preview of channelisation of used lead batteries under the provision of batteries rules 2001.

These recyclers are granted authorisation as per the technical guidelines for environmentally sound recycling of lead bearing wastes published by CPCB. SPCBs shall ensure compliance to these guidelines prior to issuance of authorisation to these lead acid battery recyclers.

As per information received from SPCBs, 500 used lead acid battery recycling units having environmentally sound recycling facilities have been granted registration in the country and total established recycling capacity is 41,03,298 MTA. State-wise availability of recyclers and their installed recycling capacities are given in Table-5

Table-5: Status of authorised/registered recyclers of lead bearing waste

S.No.	State	Units	Capacity in MTA
1.	Andhra Pradesh	21	181118
2.	Arunachal Pradesh	Nil	Nil
3.	Assam	08	30942
4.	Bihar	04	6870
5.	Chhattisgarh	05	3308
6.	Goa	Nil	Nil
7.	Gujarat	41	381210
8.	Haryana	41	195563.5
9.	Himachal Pradesh	08	41650
10.	Jammu & Kashmir	09	74960
11.	Jharkhand	02	3000
12.	Karnataka	28	2137022
13.	Kerala	03	3700
14.	Madhya Pradesh	42	100730
15.	Maharashtra	63	232232
16.	Manipur	Nil	Nil
17.	Meghalaya	Nil	Nil
18.	Mizoram	Nil	Nil
19.	Nagaland	Nil	Nil
20.	Orissa	Nil	Nil
21.	Punjab	55	79446.06
22.	Rajasthan	75	317341
23.	Sikkim	Nil	Nil
24.	Tamil Nadu	14	77620
25.	Telangana	Nil	Nil

S.No.	State	Units	Capacity in MTA
26.	Tripura	Nil	Nil
27.	Uttar Pradesh	24	121900
28.	Uttrakhand	Nil	Nil
29.	West Bengal	57	114686
30.	Chandigarh	Nil	Nil
31.	Delhi	Nil	Nil
32.	Dadra & Nagar Haveli	Nil	Nil
33.	Daman & Diu	Nil	Nil
34.	Lakshadweep	Nil	Nil
35.	A&N	Nil	Nil
36.	Pondicherry	Nil	Nil
	Total No. of Units 500	Total Capacity	y in MTA 4103298

6.0 Observations on Compliance to Batteries Rules, 2001

It has also been observed that annual data submitted by few SPCBs is also not complete since data of manufacturers, assemblers, re-conditioners is not available with SPCBs since many of them are operated in informal sector or not approached by SPCBs for ensuring submission of returns. From the limited data available from SPCBs, it is also observed that registration of dealers is not complete in the States. However significant dealer registrations were observed in case of West Bengal State.

The data reported even for these 5 States is not complete when compared to indicative sales of batteries in those States. Inadequacy of data reported also attributed to (i.) improper filing of returns by the stakeholders, (ii.) non registration of all dealers selling lead acid batteries in the State, (iii.) non-availability of list of stakeholders namely manufacturers, bulk-consumers, auctioneers, re-conditioners and assemblers and (iv) in-adequate action against the non-complying stakeholders by the State Pollution Control Boards.

CPCB could not publish the data since only few SPCBs/PCCs have been submitting annual reports and also the data submitted by them has been gross adequate.

7.0 Initiatives Taken By CPCB

CPCB has taken up initiatives such as regularly reminding SPCBs to submit annual reports, awareness campaign with newspaper advertisements, publication of technical guidelines on recycling of lead acid batteries, organising regional workshops in association with SPCBs and follow-up in conferences of Chairman and Member Secretaries. CPCB has initiated regional

awareness workshops in different Zones of the country in association with SPCBs/PCCs to create awareness wherein all the stakeholders namely manufacturers, importers, reconditioners, assemblers, dealers, recyclers, consumers have participated. Such awareness workshops have been conducted at Kolkata, Mumbai, Bangalore, Jaipur, Jalandhar, Delhi, Chennai and Bhopal since the year 2009. CPCB has also developed Computerised system for Registration of Importers called 'Battery Registration Management System (BRMS)' wherein the applicants desirous of seeking registration can apply online, view the status of their application, give the under taking prior to import and also submit half yearly returns on the same platform. This application would also help SPCBs and Customs Authorities in tracking the status of compliance of each registered importer, the said BRMS application is operation since March, 2013.

8.0 Issues in Implementation of Batteries Rules, 2001

Based on the status reports submitted by SPCBs and review of compliance under batteries Rule, 2001 the major issues pertaining to implementation of Batteries Rules, 2001 are summarised below;

- (i) Lack of inventory There is no credible data on sale of new lead batteries in the country. According to literature survey, the market value of new lead acid batteries is 22,400 crores during the year 2012 and has been growing at 15 20%. Presently, the battery market in India is divided into organised and unorganised sectors, with each accounting for 45 per cent of the market, and imports making up 10 per cent.
- (ii) Batteries Rules accounts for only the lead acid Batteries sold in organised sector, whereas other type of batteries namely nickel-cadmium, nickel metal hydride and Lithium ion batteries. Use of Lithium ion batteries is steadily growing emerging in the country
- (iii) States Pollution Control Boards have been failing to submit annual compliance status reports to CPCB. The data provided by few SPCBs is not adequate to be published by CPCB as the same does not reflect actual implementation of batteries Rules in the country. The reason for the same is attributed to the following;
 - a) Lack of awareness among stakeholders i.e. consumers, bulk-consumers, assemblers, re-conditioners and manufacturers.
 - b) Non-compliance by stakeholders,
 - c) Non registration of all dealers selling lead acid batteries in the State,

- d) lack inventory of stakeholders namely manufacturers, bulkconsumers, auctioneers, re-conditioners and assemblers and
- e) Lack of stricter action against the non-complying stakeholders by the State Pollution Control Boards.
- (iv) Overlapping provision for Registration of Recyclers of Batteries Rule 9 of B(M&H) Rules, 2001, provides that recyclers of used lead acid batteries may get registered with MoEF&CC, though in actual practice MoEF&CC has never issued any registration under this provisions since same is already implemented under the provisions of Hazardous Waste Management rules.

The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 1989 as amended, has laid down provisions for registration/authorisation of recyclers of lead bearing waste including batteries wastes such as rails and rakes (as specified under ISRI code). This provision enables SPCBs to register/authorise such recyclers for having environmentally sound facilities. Moreover, recycling of lead bearing wastes generates residues, which require authorisation for generation and disposal under Hazardous Waste rules; therefore it is more convenient in registering/authorising the recyclers of lead bearing waste under Hazardous Waste Rules.

Therefore, registration of used lead acid batteries recyclers thus becomes redundant under Batteries Rules. However the over-all objective of registering environmentally sound recycling facilities for used batteries and lead bearing wastes already implemented through Hazardous waste Rules.

- (v) Regulation of Key-stakeholders Batteries Rule does not provide for registration/authorization of Manufacturers, Assemblers, re-conditioners, Bulk-consumers, Auctioneers so as to monitor their responsibilities such as channelization of used batteries, ensuring registration of their dealers with SPCBs, establishing collection centres, etc. There is no provision for authorising the said stakeholders to implement a plan or to ensure collection of 90% of the new batteries sold by them.
- (vi) Original Equipment Manufacturers are not given any responsibilities under these rules. It is observed that automobile sector, power back-up units, etc. use significant number of lead acid batteries which are either imported or purchased from manufacturers; however Rule 4(i) provides that batteries sold to OEM and bulk-consumers are excluded from the scope of collection by manufacturers. Therefore the battery sold to OEM does not reflect in returns filed for collection.
- (vii) No responsibility has been assigned to Original Equipment Manufacturer (OEM). That may be incorporated in the said rule.

- (viii) Rules imply that manufacturer shall file returns in every State Pollution Control Board of the States where they are selling new lead acid batteries. However, Rules does not specify whether the manufacturers or assembler have to file returns in only those States where their manufacturing facilities exists or to all the SPCBs where they have network of sales through their dealers.
- (ix) Registration of dealers It has been observed that SPCBs are not actively registering the dealers as per the amendments to Batteries rules in May, 2010. SPCBs are required to ensure that manufacturers shall sell their new batteries only through registered dealers.
- (x) There is no specific regulation on setting up collection enters by manufacturers either individually or jointly by the manufacturers and importers,
- (xi) Verification of returns filed While it is easier to verify the records batteries sold by a particular manufacturer in a State, it would be difficult for SPCBs to verify or track the number of used batteries collected by manufacturers through their network of dealers across the State.
- (xii) For registration importers, Rule 6 (i) stipulates requirement of valid registration with the Reserve Bank of India (with Importer's Code Number), however, RBI does not issue IECs anymore since the same is being issued by DGFT.

9.0 Recommendations on Implementation of Batteries Rules, 2001

MoEF&CC may consider the following points for the proposed amendments to Batteries Rules, 2001;

- (i) MoEF&CC may consider imposing Extended Producers Responsibility on Producers of batteries similar to E-Waste Management Rules, 2016. Imposition of EPR authorisation on Producers may ensure effective channelisation of used lead acid batteries to registered recyclers.
 - Alternatively, for effective implementation, provision for one-time registration of Producers (i.e. Manufacturers, assemblers, re-conditioners) by SPCBs may be incorporated in rules so as achieve complete registry producers to monitor their responsibilities at SPCBs/PCCs level.
- (ii) It has been observed that filing of half yearly returns by of importers, manufacturer, bulk consumers, and recyclers is resulting into voluminous paper work. The same may be replaced by annual returns filing. Further MoEF&CC may initiate for facilitating computerised tracking of returns with adequate safeguards.

- (iii) Revised targets for collection of used batteries may be introduced since 90% collection target on producers in impractical to implement.
- (iv) Batteries rules may cover other types of batteries (like Lithium Ion batteries, Nickel-Cadmium batteries, etc.) placed on the market, for which the definition of battery may be re-defined. Guidelines may be evolved by CPCB for recycling of other batteries also.
- (v) Unit weight of batteries needs to be addressed since many importers are importing small size batteries, which are difficult to track for channelisation.
- (vi) MoEF&CC may consider removal of provision for registration of recyclers of used lead acid batteries under Batteries Rules, 2001. The same may be regulated through Hazardous Waste management Rules as is already being practiced.
- (vii) There should be some provision for concessions, may be in the form of rebate for the recovered lead to facilitate recyclers. This would make them competitive to un-authorized recyclers and thereby discourage illegal recycling.
- (viii) The revised rules may address management of residual acid in the used batteries for ensuring proper collection, storage, transportation and handling and disposal.

Annexure-I

Number of Lead Acid batteries Sold and collected for recycling for the year 2013-2014

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers
1	Andaman and Nicobar Islands	-	-	-
2	Andhra Pradesh	-	-	-
3	Arunachal Pradesh	-	-	-
4	Assam	-	-	-
5	Bihar	26170	101605	102393
6	Chandigarh	-	-	-
7	Chattisgarh	-	-	-
8	Delhi	-	-	-
9	Gujarat	-	-	-
10	Goa	39193	5405	5405
11	Haryana	-	-	-
12	Himachal Pradesh	-	-	-
13	J&K	-	-	-
14	Jharkhand	-	-	-
15	Kerala	-	-	-
16	Karnataka	2290284	85269	85269
17	Lakshadweep	-	-	-
18	Madhya Pradesh	85910	25587	232933
19	Maharashtra	-	-	-
20	Manipur	-	-	-
21	Meghalaya	-	-	-
22	Mizoram	Nil	Nil	Nil
23	Nagaland	Nil	Nil	Nil
24	Orissa	1907	269	2252
25	Punjab	1320271	1014747	48149
26	Rajasthan	-	-	-
27	Sikkim	-	-	-
28	Tripura	7004	22	22
29	Tamil Nadu	-	-	-
30	Telangana	-	-	-
31	Uttar Pradesh	-	-	-
32	Uttarakhand	-	-	-
33	West Bengal	3003384	566111	496318
34	Daman & Diu	318815	15108	60050
35	Dadra and Nagar Haveli			
36	Pondicherry	-	-	-

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers
Total				

Note: All values are in Tonnes per Annum (TPA), otherwise as mentioned.

Number of Lead Acid batteries Sold and collected for recycling for the year 2014-2015

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers TPA / Nos
1	Andaman and Nicobar Islands	-	-	-
2	Andhra Pradesh	39271565	5680866	43083
3	Arunachal Pradesh			0.794
4	Assam	228840		121164
5	Bihar	-	-	-
6	Chandigarh	153713		80721
7	Chattisgarh	-	-	-
8	Delhi	-	-	-
9	Gujarat	-	-	-
10	Goa	-	-	-
11	Haryana	-	-	-
12	Himachal Pradesh	-	-	-
13	J&K	-	-	-
14	Jharkhand	-	-	-
15	Kerala	-	-	-
16	Karnataka	-	-	-
17	Lakshadweep	-	-	-
18	Madhya Pradesh	532319		886682
19	Maharashtra	-	-	-
20	Manipur	-	-	-
21	Meghalaya	NiL	NiL	NiL
22	Mizoram	NiL	NiL	NiL
23	Nagaland	NiL	NiL	NiL
24	Orissa	70	07	1800
25	Punjab	1058942	507326	48132
26	Rajasthan	-	-	-
27	Sikkim	-	-	-
28	Tripura	14017	8814	8814
29	Tamil Nadu	-	-	-
30	Telangana	-	-	-
31	Uttar Pradesh	-	-	-

S.No.	Name of State PCB/PCC	No. of batteries sold by importers manufacturers, re-conditioners and assemblers	No of batteries auctioned by Auctioneer	No batteries sent to Recyclers TPA / Nos
32	Uttarakhand	-	-	-
33	West Bengal	3564950		282515 Nos
34	Daman & Diu	NiL	NiL	NiL
35	Dadra & Nagar Haveli			
36	Pondicherry	66100	66100	66213
Total		`		

Note: All values are in Tonnes per Annum (TPA), otherwise as mentioned.
