

July 2015

MEGHALAYA

18P

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH AT NEW DELHI**

**Original Application No. 199 of 2014**

**IN THE MATTER OF:**

**ALMITRA H. PATEL & ANR.**

**...Applicants**

**Versus**

**UNION OF INDIA & ORS.**

**...Respondents**

<b>S. No.</b>	<b>Particulars</b>	<b>Pg. No.</b>
1.	Status Report on behalf of the Department of Urban Affairs, State of Meghalaya in compliance of the order of this Hon'ble Tribunal dated 13.07.2015	

**Through –**

*Apajita*  
**APRAJITA MUKHERJEE**  
**Advocate for the State of Meghalaya**

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D-1365/ 2012**

BEFORE THE NATIONAL GREEN TRIBUNAL,

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Affidavit on behalf of the State of Meghalaya pursuant to

Order dated 13.07.2015 passed by this Hon'ble Tribunal.



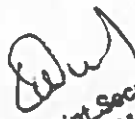
I, Shri E. Kharmalki, aged about 51 years, son of Late A.L Shabong, resident of Nongrim Hills, Meghalaya, Shillong, do hereby solemnly affirm and declare as follows :-

1. That I am the Joint Secretary to the Government of Meghalaya, Urban Affairs Department and as such I am competent to affirm this affidavit on behalf of the State of Meghalaya. I know all about the facts and circumstances of the case out of which the aforementioned case arises. I have been duly authorised to affirm this affidavit on behalf of the State of Meghalaya.

  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Dept.

2. That this Hon'ble Tribunal while adjudicating on this instant case was pleased to pass an order dated 13.07.2015 directing the Secretary, Urban Affairs Department, Government of Meghalaya to file a status report before this Hon'ble Tribunal in Original Application No. 40 (T<sub>HC</sub>) of 2013 in the matter of People for Transparency Through Kamal Anand v. State of Punjab, decided on 25th November, 2014, and the judgement with regard to the State of Haryana in the matter of Almitra H. Patel Vs. Union of India, Original Application No. 199 of 2014.
3. That the Urban Affairs Department on the compliance of the requirement at schedule I of the Municipal Solid Waste (Management and Handling) Rules 2000 has the following status report to submit on the setting up of Waste Processing and Disposal Facilities: (The Shillong Municipal Board and the Shillong Cantonment Board shares an Aerobic Compost Plant treating the bio-degradable municipal solid wastes which is operating at Mawiong. Tura Municipal Board has vermi-compost Plant for processing of bio-degradable waste and Shillong and Tura already has existing processing and disposal facilities in operation and the process to refurbished and improved processing is already being taken up. Jowai Municipal Board has acquired a plot of land for construction of a scientific landfill site while the Williamnagar Municipal Board, the Baghmara Municipal Board and the Resubelpara Municipal Board had not proposed any processing facilities either by composting, vermi-composting or pelletisation as the quantity of the waste generation is only about 7 -15 MT/day, but yet has engaged consultants to prepare DPR for the safe disposal of waste and action plan is at Table I. Details of the compliance to Schedule I is at Table II.

TABLE- I IS ANNEXED HEREWITH AND MARKED AS ANNEXURE- A. TABLE- II IS ANNEXED HEREWITH AND MARKED AS ANNEXURE- B.

  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Dept.

4. That the status of compliance to the Criteria of Schedule II of the Municipal Solid Waste (Management and Handling) Rules 2000 is annexed at Table III.

**TABLE- III IS ANNEXED HEREWITH AND MARKED  
AS ANNEXURE- C.**

5. That on the Institutional Arrangements in the urban areas of the State, there are a range of functions required to be carried out by the Municipal Boards as per the Meghalaya Municipal Act, 1973. The major services are provision of water supply, sanitation, solid waste management, drainage, roads and bridges and street lights. However in Meghalaya except for Shillong where the functions are managed by the Shillong Municipal Board, the State govt. carries out capital work as well as maintenance of the urban services either by itself or through local institutions in other municipal towns and non municipal areas.

6. That it may be mentioned that the institutional arrangements for delivery of urban infrastructure and services varies among the urban centres and in the absence of clear cut demarcation of functions, there are gaps in responsibility, lack of accountability and fragmented responsibilities. Further coordination among these agencies becomes a severe constraint, hence the state government intends to develop suitable institutional arrangement in delivery of urban infrastructure and services.




*[Handwritten Signature]*  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Deptt.

7. That management of solid waste is perceived as a crucial service with great environmental implications. Insofar as the State of Meghalaya is concerned, every attempt is being made to comply with the Municipal Solid Waste Rules, 2000. The primary objective is to upgrade the existing Solid Waste Management services to make them scientific and more efficient and to adopt new methods based on the provisions of Municipal Solid Waste (Management & Handling) Rules, 2000. While considerable efforts have been made for Shillong city and Tura town to comply with the Rules within the stipulated time, the rest of the other towns are small towns and with the limited manpower and resources available with the local bodies, some difficulty is being faced in complying with the Rules in letter and spirit. However, the State Government is making all efforts to ensure compliance in these towns by identifying designated dumping places, financial assistance for augmentation of the waste collection machinery, DPR preparation, construction of processing plants, disposal sites etc.



8. That keeping all the above cited factors and the necessity to formulate a proper strategy and policy for solid waste management in all the towns of the State, it is proposed to engage consultancy firms with Solid Waste Management expertise with the following objectives:

- To provide the Long Term Plan (upto 2040) for addressing solid waste management issues by way of modernisation of the system along with environment friendly waste processing methodologies.

  
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Govt. of Meghalaya  
Urban Affairs Deptt.

- Introduction of two bin system for House to House collection of waste for segregation of bio-degradable and non- biodegradable wastes,
- Introduction of separate collection system for recyclables from the households and selling the same in local market, thereby generating the sizeable revenue to the urban local body,
- Introduction of smaller vehicles, called satellite vehicles for House to House collection. These vehicles will bring the wastes to established Transfer Points, which will be located within the area, thereby making more number of trips (at least 2-3 trips). This will help in increasing the collection efficiency by making the collection distance more economical to the transfer stations and minimizes traffic jam etc, as far as possible. This arrangement will reduce the gap between amount of waste generated and amount of waste collected (collection efficiency) which will pave the way for 90-95 percent of waste collection in course of time.
- Introduction of closed body Secondary collection vehicles like Refuse Compactor trucks (folding cover type) for transporting the waste from Transfer Stations to the landfill site, which will save time and fuel.
- Elimination of masonry bins, stage wise, and introduction of EN-standard bins so that the garbage will not be visible to the public.
- Supplying personal protective equipment to the conservancy staff and rag pickers.

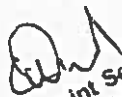


*[Signature]*  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Dept.

- Comprehensive plan for establishment of Biodegradable waste treatment facility such as a mechanical or vermi-compost plant and development of a scientifically designed Sanitary Landfill for accepting inert waste and compost rejects.
- Exploration of feasibility of waste-to-energy plants.
- Generation of revenue by collection of user charges through effective community awareness aimed towards sustainability of the system.



9. That it may also be stated that due to the undulating terrain and the distance factor as described in the paragraphs above, the cluster approach model is not feasible for the establishment of the treatment facility and landfill site for all the towns in the State, except for Shillong, where the waste disposal site of Shillong Municipal Board is at Marten, which is being used as a common waste disposal site in a cluster approach for all the towns covered in Shillong Urban Agglomeration. Site selection for MSW treatment and disposal facility is also a major challenge considering the availability of developable land and the complexity of institutional arrangement. Keeping the above constraints in mind, a MSW Action Plan town wise has been evolved along with the existing scenario which is given at Table I.

  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Deptt.

10. That with the implementation of the above plan, the following service level improvements may be achieved:

- The collection of waste at source will improve the environmental quality of the towns.
- Segregation of wastes into bio-degradable and non-biodegradable components at source will help better running of compost plant and will improve the quality of compost and reduce the load in the disposal sites.
- Transportation of wastes through covered vehicles will prevent littering of streets and areas through which vehicles pass and will help in maintaining the general cleanliness.
- Regular Community awareness for promoting garbage segregation at source (at household level) and zero littering on streets is very important in achieving the success.
- Compost from the treatment plant will serve as a market product locally through community based organization and become a source of revenue generation and in the process sustain the project viability.
- Imposition of user charges will help in the sustainability of the programme.




11. That this affidavit may kindly be taken up on record and the same may be treated as a part and parcel of the affidavit filed earlier on behalf of the State of Meghalaya in the aforementioned Original Application.

  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Deptt.




12. It is thus prayed accordingly.

  
DEPONENT  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Deptt.

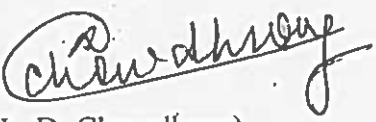
VERIFICATION

I, the deponent above named do hereby verify that the contents of this affidavit are true to my knowledge based on the records of the case maintained in the Department and the rest are my humble submissions and prayer before this Hon'ble Tribunal; nothing material has been concealed therefrom and no part thereof is false.

  
DEPONENT  
Joint Secretary  
Govt. of Meghalaya  
Urban Affairs Deptt.

Solemnly affirmed before me by the above named deponent on this the \_\_\_\_\_ day of July, 2015 at Shillong.

Identified by me,



(L. D. Chowdhury)

Advocate, Shillong.

  
  
30/7/15

MSW Action Plan

Name of the Town	Population	Per Capita Waste Gen kg/day	Waste generation MT/day	Estimated Cost INR Lacs	Action Plan			Duration		Remarks	
					Selection Of Consultant	Preparation of DPR and Bid Documents	Bidding Process and Award of Contract	(Month of Completion)			
								Execution of Landfill Site	Completion and Commissioning of Project		
Shillong Urban Agglomeration	354759		121.00	3821	Completed	Completed				Existing treatment facility	
Shillong Municipal			48.84	1543	Completed	DPR & Bid Docs are Completed for Bins, Collection vehicles, Landfill site (Ph-1 & 2). DPR for compost plant is being sent for MoUD's approval	Bidding process and Award of Contract is complete for Landfill site Ph-1 (6500 Sqm), Bins, Garage cum workshop, Collection vehicles. Bidding process is complete for Landfill site (Ph-2)	(i) Phase-I (6500 sq emergent landfill site) Under Construction (ii) Phase-II (€500 sqm additional landfill site under tendering process) (iii) Long term landfill site: Land identified but environment clearance held up due to public objection	(i) Phase-I Sept 2015 (ii) Phase-II July 2018 (iii) Long term landfill site: September 2020	Trenching ground (Waste disposal site) of 16 acres at Marten, Shillong which is being used as common waste disposal site in a cluster approach for all the towns covered in Shillong Urban Agglomeration.	100 TPD compost plant under operation & 50 tpd compost plant under construction
Outside Municipal	143229		68.06	2150	Completed	DPR & Bid Docs are Completed for Bins, Collection vehicles. Considered in the DPR & Bid Docs & are Completed for Landfill sites (Ph-1 & 2). DPR for compost plant is being sent for MoUD's approval	Tendering under process				
Shillong Cantonment	199600		4.07	128	Completed	Considered in the DPR & Bid Docs for Landfill site (Ph-1 & 2). DPR for compost plant is being sent for MoUD's approval	Completed	Completed	August 2015	Rongkhon Songghial covering an area of 8 bigha or 10702.43m <sup>2</sup>	40 tpd vermicompost under operation & 50 tpd compost plant under construction
2 Tura	74,858		65.00	644	Completed	6 Months (September 15)	8 Months (May 16)	Completed	Under Progress	Existing site at Mynkial new site also identified at Sabah, Muswang covering an 4.07 acres or 16470.77 m <sup>2</sup> but there is public objection	Open Dumping
3 Jowai	28,430		10.29	384	6 Months (September 15)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)	Mongponro covering an area 5 bigha or 6689.02m <sup>2</sup>	Open Dumping
4 Resubelpara	19,595		7.09	265	6 Months (September 15)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)	Old site is at Dobeikolgre covering an area of 6590 sq m. New proposed site is Upper Balsrightim (Samgonggre)	Open Dumping
5 Wilkannagar	24,597		8.90	332	6 Months (September 15)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)		Open Dumping

6	Baghmara	13,131	0.362	4.75	177	6 Months (September 15)	Completed	8 Months (May 16)	Completed	6 Months (November 16)	Under progress	August 2018	Damadarengre covering an area of 45 bigha or 60201.20m <sup>2</sup>	Open Dumping
7	Nongpoh	17,055	0.362	6.17	230	Completed	Completed	Completed	Completed	Completed	Completed	August 2015	Umshangling covering an area of 6,088 acres or 24636.62 sqm	15 tpd compost plant under construction
8	Nongsoin	28,742	0.362	10.40	388	6 Months (September 15)	8 Months (May 16)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)	August 2018	Open dumping	None
9	Mairang	14,363	0.362	5.20	194	6 Months (September 15)	8 Months (May 16)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)	August 2018	Open dumping	None
10	Umroi (CT)	8,198	0.362	2.97	111	6 Months (September 15)	8 Months (May 16)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	12 Months (November 17)	February 2018	Open dumping	None
11	Cherapunjee (CT)	11,722	0.362	4.24	158	6 Months (September 15)	8 Months (May 16)	8 Months (May 16)	6 Months (November 16)	6 Months (November 16)	18 Months (May 18)	August 2018	Open dumping	None
	<b>Total</b>	<b>5,95,540</b>			<b>6703.00</b>									

Note - Estimated Cost is based on the Per Capita Cost of Shillong City (INR 1077/-). An increase of 25 % is added due to smaller population (as compared to Shillong). The Per Capita Cost works out to be INR 1350/- . For Tura & Nongpoh it is considered as INR 860/capita as compost plants are under construction

**COMPLIANCE TO MUNICIPAL SOLID WASTE  
(MANAGEMENT & HANDLING) RULES 2000**

NAME OF THE CITY & STATE : MEGHALAYA  
Schedule 1.

Sl. No.	Compliance Criteria	Compliance Status					
		Shillong	Tura	Jowai	Williamnagar	Resubelpara	Baghmara
1.	Setting up of waste processing and disposal facilities	A 100 TPD compost plant was set up in 2003 with consent to establish and operate obtained from MSPCB. DPR to refurbish the plant approved by the MoUD. The refurbishment will be taken up under ADB/MoUD funded NERCCDIP.	40 TPD Vermi-Compost Plant for processing of Bio-degradable waste was set up and is functioning in Tura.  A 50 TPD Compost plant is under construction.	No processing facilities,			
2.	Monitoring the performance of waste processing and disposal facilities						
3.	Improvement of existing landfill sites as per provisions of these rules	1) Phase-I (6500 sq emergent landfill site) Under Construction (ii) Phase-II (8500 sqm additional landfill) site under tendering process)	Under Execution	No proposal for improvement yet			
4.	Identification of landfill sites for future use and making site(s) ready for operation	Long term landfill site: Land identified but environment clearance held up due to public objection.		Existing site at Mynkjal new site also identified at Sabah Muswang covering an 4.07 acres or 16470.77 m <sup>2</sup> but there is public objection	No site selected		

Schedule II

S. N. O.	Parameters	Compliance criteria	Compliance Status					
			Shillong	Tura	Jowai	Williamnagar	Resubelpara	Baghmara
1.	Collection of municipal solid wastes.	<p>1. Littering of municipal solid waste shall be prohibited in cities, towns and in urban areas notified by the State Governments. To prohibit littering and facilitate compliance, the following steps shall be taken by the municipal authority, namely:</p> <p>(i) Organizing house-to-house collection of municipal solid wastes through any of the methods, like community bin collection (central bin), house-to-house collection, collection on regular pre-informed timings and scheduling by using bell ringing of musical vehicle (without exceeding permissible noise levels);</p> <p>(ii) Devising collection of waste from slums and squatter areas or localities including hotels, restaurants, office complexes and commercial areas;</p> <p>(iii) Wastes from slaughter houses, meat and fish markets, fruits and vegetable markets, which are biodegradable in nature shall be managed to make use of such wastes;</p>	<p>House to House collection of waste is being carried out in about 70% of the Shillong Municipal Area. Pre-scheduled timings have been notified and distributed to all localities. In the rest of the areas, collection is being made from storage bins and trolleys.</p>	<p>In Tura and Jowai, house to house-collection is done in some localities while in other localities storage bins and trolleys are being used for collection</p>	<p>Storage bins and trolleys are being used for collection of waste.</p>			
								<p>Action will be looked into once the Consultants are being engaged for preparing DPR</p>

	<p>(iv) Bio-medical wastes and industrial wastes shall not be mixed with municipal solid wastes and such wastes shall follow the rules separately specified for the purpose;</p>	<p>Bio-Medical Waste are collected, transported, treated and disposed separately by the SMB as per provisions of the Bio-Medical Waste Management and Handling Rules 1998. A Bio-medical Waste Disposal Facility was set up in 2007 for this purpose and a separate van is being used exclusively for transportation of Bio-Medical Waste.</p>
	<p>(v) Collected waste from residential and other areas shall be transferred to community bin by hand driven containerized carts or other small vehicles;</p>	<p>In most of the residential areas waste is collected directly from the households by the primary collection vehicles and transferred to the secondary vehicles at the transfer points. Community bins have been removed in almost all residential areas.</p>
	<p>(vi) Horticultural and construction or demolition wastes or debris shall be separately collected and disposed off following proper norms. Similarly, wastes generated at dairies shall be regulated in accordance with the State laws;</p>	<p>Construction and Demolition wastes and debris is separately collected and disposed.</p>

	<p>(vii) Waste (garbage, dry leaves) shall not be burnt.</p>	<p>Press release prohibiting burning of waste is issued from time to time. (clippings enclosed)</p>
	<p>(viii) Stray animals shall not be allowed to move around waste storage facilities or at any other place in the city or town and shall be managed in accordance with the State laws.</p>	<p>Stray animals are being controlled as far as practicable.</p>
	<p>2. The municipal authority shall notify waste collection schedule and the likely method to be adopted for public benefit in a city or town.</p>	<p>Collection Schedule of Segregated waste from the households was notified and made public in all the localities.</p>
	<p>3. It shall be the responsibility of generator of wastes to avoid littering and ensure delivery of wastes in accordance with the collection and segregation system to be notified by the municipal authority as per para 1(2) of this schedule.</p>	
<p>2. Segregation of municipal solid wastes</p>	<p>In order to encourage the citizens, municipal authority shall organise awareness programmes for segregation of wastes and shall promote recycling or reuse of segregated materials. The municipal authority shall undertake phased programme to ensure community participation in waste segregation. For this purpose, regular meetings at quarterly intervals shall be arranged by the municipal authorities with representatives of local resident welfare associations and non-governmental organizations.</p>	<p>Awareness Programmes were conducted since 2012 under the NERCCDIP to encourage citizens to segregate waste at source. As far as community participation in segregation of waste at source satisfactory level of compliance</p>

<p>3. Storage of municipal solid wastes</p>	<p>Municipal authorities shall establish and maintain storage facilities in such a manner as they do not create unhygienic and insanitary conditions around it. Following criteria shall be taken into account while establishing and maintaining storage facilities, namely :-</p> <p>(i) Storage facilities shall be created and established by taking into account quantities of waste generation in a given area and the population densities. A storage facility shall be so placed that it is accessible to users.</p> <p>(ii) Storage facilities to be set up by municipal authorities or any other agency shall be so designed that wastes stored are not exposed to open atmosphere and shall be aesthetically acceptable and user-friendly;</p> <p>(iii) Storage facilities or 'bins' shall have 'easy to operate' design for handling, transfer and transportation of waste. Bins for storage of bio-degradable wastes shall be painted green, those for storage of recyclable wastes shall be painted white and those for storage of other wastes shall be painted black;</p> <p>(iv) Manual handling of waste shall be prohibited. If unavoidable due to constraints, manual handling shall be carried out under proper precaution with due care for safety of workers.</p>	<p>There is no intermediate storage of waste except in commercial areas, where wheeled containers are kept and unloaded by a hydraulic compactor. Except in certain unauthorized dumping spots, there is minimum manual handling of waste. PPEs have been made available to all waste management workers</p>
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<p>4. Transportation of municipal solid wastes</p>	<p>Vehicles used for transportation of wastes shall be covered. Waste should not be visible to public, nor exposed to open environment preventing their scattering. The following criteria shall be met, namely :-          (i) The storage facilities set up by municipal authorities shall be daily attended for clearing of wastes. The bins or containers wherever placed shall be cleaned before they start overflowing;          (ii) Transportation vehicles shall be so designed that multiple handling of wastes, prior to final disposal, is avoided.</p>	<p>Transportation vehicles are fully covered.</p>		
<p>5. Processing of municipal solid wastes</p>	<p>Municipal authorities shall adopt suitable technology or combination of such technologies to make use of wastes so as to minimize burden on landfill. Following criteria shall be adopted, namely :-          (i) The biodegradable wastes shall be processed by composting, vermicomposting, anaerobic digestion or any other appropriate biological processing for stabilization of wastes. It shall be ensured that compost or any other end product shall comply with standards as specified in Schedule -IV,          (ii) Mixed waste containing recoverable resources shall follow the route of recycling. Incineration with or without energy recovery including pelletisation can also be used for processing wastes in specific cases. Municipal authority or the operator of a facility wishing to use other state-of-the-art technologies shall approach the Central Pollution Control Board to get the standards laid down before applying for grant of authorization.</p>	<p>A compost plant was set up in 2003 with consent to establish and operate obtained from MSPCB. DPR is to refurbish the plant approved by the MoUD. The refurbishment will be taken up under ADB/MoUD funded NERCCDIP.</p> <p>The State Government is also exploring the feasibility of setting up other treatment and disposal facilities like waste to energy, pelletisation etc.</p>	<p>40 TPD Vermicompost Plant for processing of Bio-degradable waste was set up and is functioning in Tura.</p> <p>A 50 TPD Compost plant is under construction.</p>	

6.	Disposal of municipal solid wastes	<p>Land filling shall be restricted to non-biodegradable, inert waste and other waste that are not suitable either for recycling or for biological processing. Land filling shall also be carried out for residues of waste processing facilities as well as pre-processing rejects from waste processing facilities. Land filling of mixed waste shall be avoided unless the same is found unsuitable for waste processing. Under unavoidable circumstances or till installation of alternate facilities, land filling shall be done following proper norms. Landfill sites shall meet the specifications as given in Schedule-III.</p>	Phase-I (6500 sq emergent landfill Under Construction - (ii) Phase-II (8500 sqm additional landfill site under tendering process)	A landfill is under construction.			
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