18.10.2016 MoEF

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO. 199 OF 2014

IN THE MATTER OF:

Almitrah H. Patel & Anr. APPLICANTS

Versus

Union of India and Ors. RESPONDENTS

AFFIDAVIT ON BEHALF OF THE MINISTRY OF ENVIRONMENT, FOREST and CLIMATE CHANGE, RESPONDENT NO.1

I, Bishwanath Sinha, aged 48 years, S/o Shri P. N. Sinha, working as Joint Secretary to Government of India, Ministry of Environment, Forest and Climate Change (erstwhile the Ministry of Environment and Forests) having office at Indira Paryavaran Bhawan, Jorbagh Road, New Delhi- 110 003 do hereby solemnly affirm and state as under:

1) That this affidavit is being filed with approval of Secretary to Government of India, Ministry of Environment, Forest and Climate Change, New Delhi.

2) That I, in the capacity of Joint Secretary to Government of India, Ministry of Environment, Forest and Climate

Change, am fully conversant with the facts of the case and competent to swear this affidavit on behalf of Respondent No.1.

3) It is submitted that the Hon'ble Tribunal, vide order dated 22nd September, 2016 has directed this answering respondent to file the definite response in relation to the following:

a) The various suggestions submitted by the Applicants, Ms. Almitra H. Patel & Anr.

b) Secondly, as the National Policy or with reference to various suggestions, whether Waste to Energy, Waste to RDF plant, and RDF to power generation, which of the methodology would be acceptable on scientific basis, in various of parts of the country.

4) That the Miscellaneous Applications dated 6th May, 2016, 30th July, 2016 and the 7th September, 2016 filed by the Applicants were received in the Ministry from the Applicants on 22nd September, 2016. The careful examination of these applications reveals that the Applicant has made following suggestions:-

a) **Start Phasing out unnecessary short-life PVC** (especially from use & throw items where PVC free solution are readily available) like PVC hoardings and banners, PVC caps, labels of PET bottles, PVC packaging, stationery, footwear, toys and much more. The Applicant prays for directions from this Hon'ble Tribunal to the Consumer Affairs Department and

Bureau of India Standards (BIS) to review all their Standards and amend them to include a ban or phase out PVC and chlorinated plastics in short-life products. It is also prayed that the Union of India shall phase out with clear timeline the use of PVC in all packaging, hoardings/banners, use & throw and short-life items.

b) In respect of issues related to **Refuse Derived Fuel (RDF) to Cement**, the applicants have prayed to direct the Government of India to consider requiring cement companies to pay for city waste RDF at the same pro-rata basis on calorific content as coal.

c) In respect of **Buffer Zone around Landfill sites**, the Applicants pray to direct the Central Pollution Control Board to urgently publish Guidelines for Buffer Zones in a time bound manner as required under Rules-11(l) of the Solid Waste Management Rules, 2016.

d) In respect of **Tipping Fee,** the Applicants pray for direction regarding payment of support price or fee, wherein it is suggested that such fee should be paid to waste processor only on output of processed fractions like compost or RDF and not on intake tonnage of raw waste.

e) The applicants vide Application dated 30th July, 2016 pray for direction of the Tribunal in respect of processing of dry & wet waste and land filing needs to

be reiterated and Union of India shall be directed to phase out with clear timelines the use of PVC in all packaging, hoardings/ banners, use & throw and short life items.

f) The Applicants vide Application dated 7th September, 2016 have submitted a Chart comparing the various Waste Processing Options.

5) **MoEFCC Submissions on suggestions to Ban on Short Life PVC and Chlorinated Plastics:**

a) It is submitted that the chlorinated plastics or chlorine based plastics, *inter-alia*, include chlorinated polyethylene (CPE), chlorinated polyvinyl chloride (CPVC), chlorosulfonated polyethylene (CSPE), polychloroprene (CR or chloroprene rubber, marketed under the brand name of Neoprene) and PVC. That as per the information, PVC, is one of widely used commodity polymers in the world, and it is being used in various infrastructure applications (pipes, ducts, wires, cables, floorings, windows, roofing, etc.), automobiles, medical and healthcare, packaging, sports, etc. The management of PVC/ chlorinated plastic waste, and impact of PVC on the environment, including human health issues, have been discussed from time to time by various forums. However, the Ministry of Environment, Forest and Climate Change (MOEFCC) has no information about the country wherein a blanket ban or phasing out the use PVC has been imposed.

b) Further, as per the Solid Waste Management Rules, 2016, Refused Derived Fuel (RDF) means fuel derived from combustible waste fraction of solid waste like plastic, wood, pulp or organic waste, other than

chlorinated materials, in the form of pellets or fluff produced by drying, shredding, dehydrating and compacting of solid waste. This is to prohibit channelization of the chlorinated plastics for energy recovery. Regarding segregation, it is submitted that most of the PVC products have printed on them the Plastic No. ***"Plastic #3"*** and they can be identified from this number and segregated from a heap of plastic waste.

c) That for the control of pollution in particular generations of Dioxins and Furans from incineration of such plastics, the Solid Waste Management Rules, 2016 published by the Ministry, *inter-alia,* provide for phasing out the incineration of chlorinated plastics within two years. The limits for toxic emissions i.e. HCl, Heavy metals, Total Dioxins and Furans, etc. have been included in the standards for emission from incineration/ Thermal technologies for solid waste management treatment and disposal prescribed under the Solid Waste Management Rules, 2016.

d) That the Bio-medical Waste Management Rules, 2016 published vide Gazette Notification No. G.S.R. 343(E) dated 28th March, 2016, inter-alia, provide that every occupier shall phase out use of non-chlorinated plastic bags within two years from the date of publication of these rules. This is mandated after keeping in view that the suggested option for treatment and disposal of waste from such used bags under these Rules, 2016 is incineration or Plasma Pyrolysis.

e) Taking a note of wide usages of the chlorinated plastics including PVC (economic implications) and the disadvantages (environmental and health hazards) of short lived PVC based products, it is proposed to constitute a group of experts/ institutions, who should examine issues regarding PVC and its impact on the environment including the PVC industry and its

products in India, the additives in PVC products and the management of PVC wastes in particular the recycling and the incineration and recommend a range of policy options for all of the specific issues identified by the Group in a time bound manner.

6) **Submissions of MOEFCC in respect of issues related to Refuse Derived Fuel (RDF) to Cement:** It is submitted that MoEFCC for sustainability of the waste processing facilities, has already incorporated many enabling provisions in the Solid Waste Management Rules, 2016. Some of the relevant provisions are detailed as under:-

a) The Rules mandate for all industrial units using fuel and located within one hundred km from a solid waste based refused derived fuel plant to make arrangements within six months to replace at least five percent of their fuel requirement by refused derived fuel.

b) One of the duties and responsibilities of local authorities and village Panchayats of census towns and urban agglomerations is to give preference to de-centralised processing to minimize transportation cost and environmental impacts such as waste to energy processes including refused derived fuel for combustible fraction of waste or supply as feedstock to solid waste based power plants or cement kilns.

c) The Ministry of New and Renewable Energy Sources has been assigned with the responsibility to facilitate infrastructure creation for waste to energy plants and provide appropriate subsidy or incentives for such waste to energy plants.

d) The Ministry of Urban Development is required to formulate national policy and strategy on solid waste management including policy on waste to energy in consultations with stakeholders within six months. Urban Development Departments of States are also required to prepare State Policy and strategy on solid

waste management laying emphasis on waste reduction, reuse, recycling and recovery.

7) **Buffer Zone:** It is submitted that the Central Pollution Control Board is in the process of formulating the Guidelines for Buffer Zone around the waste processing and disposal facilities.

8) **Tipping Fee:** The Rule 2(50) of the Solid Waste Management Rules, 2016 provides the definition "tipping fee" and as per the rule, it means a fee or support price, determined by the local authorities or any state agency authorised by the State Government, to be paid to the concessionaire or operator of waste processing facility or for disposal of residual solid waste at the landfill. However, there is no further reference to this term in the Rules. The Ministry takes a note of the submissions of the applicant and would examine the issue on its merits in consultation with stakeholders.

9) **Submissions of MOEFCC in respect of application dated 30th July, 2016**- In respect of phasing out the short life PVC products, the MOEFCC reiterates its stand detailed in Para-5 above. In respect of other submissions made in this application, it is submitted that the Solid Waste Management Rules, 2016 have many enabling provisions to ensure that the mixed waste does not reach the Waste to Energy Plant. The Rules mandate segregation at source by the generators, transportation of the segregated waste to waste processing facilities by waste collectors/ local bodies. Also, the local bodies are required to facilitate construction, operation and maintenance of solid waste processing facilities and associated infrastructure on their own or with private sector participation or through any agency for optimum utilization of various components of solid waste by adopting suitable method/technologies. While doing so they are required to adhere to the guidelines issued by the Ministry of Urban Development from time to time and standards prescribed by the Central Pollution Control Board. Further, as per the Rules, the Ministry of Urban Development is required to

formulate national policy and strategy on solid waste management including policy on waste to energy in consultation with stakeholders within six months, and provide technical guidelines and project finance to States, Union Territories and local bodies on solid waste management to facilitate meeting timelines and standards.

10) **Submissions of MOEFCC in respect of application dated 7th September, 2016:** That the applicants vide this Application have submitted a comparison chart of various waste processing options. In this regard, it is submitted that the selection of technologies is based on many factors i.e. waste characteristics and quantity, degree of segregation, end-use requirements and environmental standards. Accordingly, the Solid Waste Management Rules give liberty to local bodies to utilize the method, which is best suitable for optimum utilization of the waste generated within their jurisdiction. While selecting the technologies, they are required to give preference to decentralised processing so as to minimize transportation cost and environmental impacts.

11) **Submissions of MOEFCC regarding query of this Hon'ble Tribunal i.e. As the National Policy or with reference to various suggestions, whether Waste to Energy, Waste to RDF plant, and RDF to power generation, which of the methodology would be acceptable on scientific basis, in various of parts of the country:-**

It is submitted that the culture in our country is a combination of several cultures and life styles, spanning across the subcontinent. Accordingly, the consumption pattern as well as the waste characteristics of the waste generated in eastern, western, northern and southern regions of the country varies a lot. In general, the biodegradable portion dominates the bulk of solid waste generated in urban and rural areas of our country. This is mainly due to food and yard waste. Further, with rising urbanization and change in lifestyle and food habits, the amount of solid waste has

been increasing rapidly and its composition has been changing continuously. At this stage of urbanization and growth, consumption of many new and multiple products packed in different kinds of packaging material is likely to increase without commensurate level of awareness among the producers, brand owners, consumers and waste managers about their environmental impacts and mode of disposal.

Further, there are number of treatment and disposal methods and the selection of a particular method depends upon many factors vis-à-vis waste composition, quality, quantity, environmental norms, technical knowhow, availability of finance and market etc. For example, besides conventional Waste to Energy method, new methods such as converting polymeric wastes to liquid fuel called "catalytic conversion of waste plastic to liquid fuel" and blending chopped plastic waste with molten bitumen for enhancing the strength of roads are also emerging. These methods can also be explored/ examined for gainful utilization of plastic wastes, which are not currently recycled.

It is, therefore, no single method for waste treatment and disposal can be recommended for adoption as a National Policy. It is due to this reason the Solid Waste Management Rules, 2016 notified by the Ministry emphasis on the creation of an optimal Integrated Solid Waste Management (ISWM) system. The objective is to reduce the volume of solid waste, which is going in to landfills and transforming it for gainful utilization. The Rules for solid waste management emphasize on processing of biodegradable wastes by composting or vermi-composting or anaerobic digestion or any other appropriate biological process. The dry recyclable waste containing recoverable resources shall follow the route of recycling. Incineration with or without energy recovery including pelletisation should be used for non-recyclable high calorific value waste as specified under the rules. The local bodies should allow only the non-usable, non-recyclable, non-biodegradable, non-combustible and non-reactive inert

waste and pre-processing rejects and residues from waste processing facilities to go to sanitary landfill.

In said the Rules, the local bodies are given liberty to adopt any suitable method, which may be one or a combination of more than one of following methods for creation of an optimum integrated waste management system within their jurisdictions:-

a) Bio-methanation for wet biodegradable wastes
b) Conventional microbial windrow/mechanized/ vermi composting for wet biodegradable wastes
c) Preparation of briquette/ pellets/ fluff as Refuse Derived Fuel (RDF) from dry high-calorific value combustible wastes
d) Incineration / Gasification / Pyrolysis for dry high-calorific value combustible wastes
e) Plastic wastes to fuel oil

12) That in view of the submissions made in the para(s) above, the Hon'ble Tribunal may issue direction to the stakeholders in particular to State Governments, Local bodies, Producers, Brand Owners, Institutional Generators to initiate action and take steps for implementation of the waste management Rules in a time bound manner.

DEPONENT

VERIFICATION:

Verified at New Delhi on this 18th day of October, 2016 that the contents of paras 1 to 12 of the above affidavit are true and correct to my knowledge derived from official records and nothing material has been concealed there from.

DEPONENT