CHAPTER 7

Plastics Manufacture and Usage

According to scientific researches, polythene/plastic takes more than 800 years to dissolve. Therefore, use of polythene contaminates soil, underground water and vegetation. GoUP had also circulated (July 2005) an excerpt of the judgement of the Allahabad High Court on the use of polythene.

7.1 Regulatory Frame Work, Policies and Strategies

The Plastics Manufacture, Sale and Usage Rules, 1999 (PM Rules) were framed under the provisions of EP Act, 1986 to regulate manufacture, recycling, use, collection, segregation, transportation and disposal of plastics. The PM Rules provide that no person shall manufacture carry bags or containers irrespective of its size or weight unless the manufacturer is registered with the State Pollution Control Board prior to commencement of production. PM Rules also provide that:

- No vendor shall use carry bags or containers made of recycled plastics for storing, carrying, dispensing, or packaging of foodstuffs;
- Carry bags and containers made of virgin plastic shall be in natural shade or white;
- The minimum thickness of carry bags made of virgin plastics or recycled plastics shall not be less than 20 microns;
- ➤ Carry bags and containers made of recycled plastic and used for purposes other than storing and packaging foodstuffs shall be manufactured using pigments colourants as per Bureau of Indian Standards (BSI) specifications; and
- Manufacturers shall print on each packet of carry bags as to whether these are made of "recycled material" or of "virgin plastic".

UPPCB is the authority for enforcement of the provisions of PM Rules. GoUP also enacted 'The Uttar Pradesh Plastic and other Non-Biodegradable Waste (Usage and Disposal Regulation) Act, 2000' effective from 1 November 2000, prohibiting disposal of plastic and non-biodegradable waste in the drainage and sewerage system. According to the State Act, LNN was made responsible for collection, segregation, transportation and disposal of plastic waste in City.

7.2 Planning and Implementation

To enforce the provisions of the PM Rules, UPPCB is required to prepare a comprehensive plan and programme and advise the State Government on any matter concerning the prevention, control or abatement of pollution. LNN should make action plans for collection, segregation, transportation and disposal of plastic waste in Lucknow City.

Scrutiny of records (July 2010) of UPPCB revealed that no comprehensive plan had been prepared except for the preparation of a Working Plan in December 2004 for conducting a special drive in which emphasis was laid on creation of awareness through leaflets, public address system, discussion in schools and organising rallies. Inspection of manufacturing and commercial establishments and banning use of plastic items under the PM Rules were also not planned as Regional Office, UPPCB had identified only 30 hotels and restaurants in City using plastic bags for foodstuffs while the DPR (February 2007) of MSW management had indicated that there were more than 470 such establishments²⁰ at that point of time. LNN had not taken concrete efforts in this regard.

Joint physical inspection (July 2010) conducted alongwith a representative of LNN, revealed that Gomtinagar drain was choked with plastic items and plastic waste collected at the STP, Daulatganj as shown in the photographs below:





Choking of Gomtinagar drain due to plastic items and waste collected at STP, Daulatganj

Thus, in the absence of proper segregation at collection point of MSW, stipulated disposal of plastic items waste was not effected.

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²⁰ Hotel: 150; Restaurants: more than 200; and unregistered Dhabas: 120.

7.3 Ineffective Initiatives for Recycling of Plastic Waste

CPCB directed (June 2008) UPPCB for adoption of Rajkot model of segregation of plastics from MSW for its recycling and disposal. It also directed to explore the possibility of use of plastic waste in cement kilns and blast furnaces. Besides, the proposal for using plastic waste for construction of roads, as was being done in Bangaluru, was under consideration (April-June 2010) before the Urban Development and Environment Departments.

The Government was silent on the audit observations at *paragraph 7.2* and *7.3* above but replied (August 2011) that UPPCB had identified 33 units under the provisions of the Plastic Waste (Management and Handling) Rules, 2011 effective from February 2011. Further, in compliance to the above rules and direction issued by Hon'ble Supreme Court, four units, involved in the packing of *Pan Masala*/Tobacco *Gutka* in Lucknow with plastic material, had been directed to close down.

7.4 Recommendations

- ➤ Proper and effective mechanism should be put in place for identification of manufacturers, sellers and users establishments of plastics by UPPCB and LNN; and
- *Proper segregation and disposal facilities should be set up in the City.*