



**Agenda for 213<sup>th</sup> meeting of  
Finance and Contract Committee,  
Municipal Corporation Chandigarh**

**Date: 30.11.2011**

**Time: 03.30 p.m.**

**Venue: Committee Room**

**AGENDA ITEM NO. 1**

**Subject: Confirmation of the minutes of 212<sup>th</sup> meeting of the Finance and Contract Committee held on 17.10.2011 at 3.00 p.m. in the Committee Room of the MC, Chandigarh.**

## **AGENDA ITEM NO. 2**

### **CONCEPT PAPER BASED ON ADVICE & PRESENTATIONS BY EXPERTS DURING NATIONAL WORKSHOP ON BEST PRACTICES OF MSW MANAGEMENT IN INDIA HELD ON NOVEMBER 3, 2011 AT PEC UNIVERSITY OF TECHNOLOGY CHANDIGARH**

A workshop on Best Practices of MSW Management in India was held on November 3, 2011 at PEC University of Technology Chandigarh. A number of issues came up which are put down in the form of concept paper for further discussion and appropriate decision.

#### 1. **Perspective on Garbage, Waste & Resources**

Total garbage	:	340 MTPD
To garbage processing Plant	:	270 MTPD
To Dumping Ground	:	70 MTPD
Hotel Waste	:	10 MTPD
Mandi Waste	:	15 MTPD
Inerts & Rejects from Garbage Processing Plant		
to Dumping Ground	:	95 MTPD
Preprocessing Rejects	:	27 MTPD
Post Processing	:	68 MTPD

Out of this 68 MTPD, 40 MTPD shall be lifted as actual inerts & rejects and 28 shall be consumed in new Hot Gas Generator.

Garbage expected from proposed area at para-4 230 MTPD

MCC does not have the resources to lift all garbage from Mani Majra

Manimajra lifted	35 MTPD
Generated	80 to 90 MTPD

Vehicles and bins expected to be freed on implementing proposed at para-4

Bins : 300

Dumper Placers : 20

<b>Cattle</b>	<b>Chd Total</b>	<b>MCC Area</b>
	20,000	5000

Average cow dung per cattle 8 kg per day

<b>Total Cow dung</b>	160 MTPD	40 MTPD
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Average Mortality 10 per day 2 in cattle pound & Gaushalas, 8 out of Privately owned cattle

Bird slaughter 15000 per day

Average wt. of waste 200 gms per bird

Total per day 3 MTPD

(Most of it is taken by manufacturers of fish feed in an organized manner)

## 2. Composition of Garbage

Garbage and waste in the city can be classified mainly as

### (a) Regular Waste

- i) Kitchen Waste
- ii) Other biodegradable waste (Card board paper, cloth discards etc.)
- iii) Non Bio Degradable waste recyclable waste like PET, Plastic, Thermoplastic, Polybags, rubber discards, cans and CFC cans.
- iv) Non Bio Degradable non recyclable waste like Glass, Ceramics, Crockery, Fibre Glass, CFL's, Bulbs, Tube lights

- v) Horticulture waste like, Grass trimmings, leave cuttings, flower discards, plant cuttings, leave fall, seedings from trees, wood, plywood, Board, Wood based pancllings
  - vi) Cow Dung
  - vii) Carcasses
  - viii) Bird Slaughter and Fish market waste
  - ix) Construction Debris/Malba
  - x) Dirt and Silt from road sweeping
  - xi) Pre & Post processing rejects of garbage processing plant.
- b) Periodic Waste
- i) Waste from cleaning of Bio Methenation plant at Slaughter house.
  - ii) Ash from Bio Medical Incineration facility

3. **At present, this garbage and waste is being disposed off in the following ways.**

- a) Garbage dump
- b) Garbage processing plant
- c) Construction and Malba dumping sites

4. **Door to Door Collection from House Holds in Sectoral Grid and Commercial Establishments certain areas of Manimajra alongwith commercial establishments excluding Villages, Colonies, Restaurants, hotels & eateries.**

There was unanimity that Door to Door Collection of garbage should be done by an appropriate mechanized vehicle, thereafter directly sent to the disposal facility. Basically this means that the intermediate step of collecting this garbage by tricycle borne collectors, its transfer to Garbage Bins at the SSKs/Garbage Bin locations should be stopped i.e. there should be no intermediate handling of house hold garbage between collection and its deposition at the disposal facility. Time has come to move on from the present system of Garbage collection to this recommended step. At present Introducing this concept in villages, colonies and left over areas of Manimajra except those given below shall be difficult. We may introduce this concept in the houses in the

sectoral grid of Chandigarh including community centers, Exhibition Grounds, Parks where religious, social or other such like functions are held. . Following areas of Manimajra comprising of house holds and commercial establishments including community centers, Exhibition grounds and parks where Religious, social and other such like funds are held. All Govt. and associated offices included in the above areas of Chandigarh and Manimajra. Exceptions being Hotel, Restaurants and Eateries, Villages and Colonies: -

- i. Indira Colony
- ii. Modern Housing Complex
- iii. Shivalik Enclave
- iv. Gobindpura Township Pocket No. 1 & 2.
- v. Mauli Complex
- vi. Vikas Nagar
- vii. Pipliwala Township
- viii. Shanti Nagar
- ix. Motor Market
- x. Show room on Kalka Road.

The above Collection activity in these area should be outsourced with the private party being responsible for collecting garbage from House holds and commercial establishments. The company would also be responsible to lift the Horticulture waste from house holds and clean the parks and lift horticulture & other waste from them in a segregated form within the sectoral grid, without mixing with other garbage. It shall be responsible to segregate the household garbage as shown later.

**5. Waste from Restaurants, Hotels (other than Big Hotels) and eateries including Manimajra.**

These Hotels, Restaurants & Eateries shall be required to deposit their waste duly segregated including any off site facility in villages colonies from which semi prepared food is sourced. The above establishments shall inform the MCC regarding the location of such off site facilities.

With the proposed door to door collection system SSKs would become free. These entities shall be required to deposit their garbage in the designated SSKs in bins which would be appropriately colour coded for identification so that the correct type of garbage goes into the appropriate bin. Raw Meat waste as well as table meat waste shall be deposited in black polythene bags separately in the bin designated. The depositing hours shall be fixed and the depositing shall be done under supervision of MCC staff to ensure that segregation as shown later has been done.

**6. Big Hotels including Manimajra.**

Big Hotels would also be directed to follow the same process as at para-5. They shall be provided individual colour coded bins as mentioned above. The timings would not be fixed for the Big Hotels as they are provided with Bins at their premises.

**7. Waste from Mandies, Apni Mandies & Vegetable markets including Manimajra.**

At present the waste is heterogeneous and therefore, it is being sent to Garbage dump. It is proposed that Garbage from the Market Committee and Apni Mandies and vegetable markets be segregated as shown later.

**8. Garbage from Colonies/Manimajra (except those areas covered earlier at para 4)/villages**

At present it may not be possible to introduce the envisaged door to door garbage collection system through a private party. The present Garbage collection system may continue with modification as below:-

Segregation by MCC staff/Contractual staff into streams as shown later.

**Cow dung.**

There 20,000 cattle in Chandigarh out of which 6000 are in the Municipal Area. Even if a conservative estimate of 8 Kg of cow dung per animal per day is taken into account it works out to 160 MT per day for Chandigarh and 48 MT per day for Municipal Area. Presence of cattle also creates problem of carcasses. At present an average of 10 carcasses are dealt with daily, 2 being from cattle pound/Gaushalas and 8 from public owned cattle. Cattle Bye Laws be enforced or cow dung dealt with in a systematic manner by composting/biomethenation. The reduction in cattle on enforcing cattle byelaws shall also lead to rethink on the need of a carcass incineration facility/its size. The site earmarked in sector can be used for a central non biodegradable waste collection centre, washing plant etc. Another solution can be that carcass incineration facility and central Bio Medical Waste Incineration facility also planned in Sector-25 should be common/collocated.

#### 9. **Institutions**

There are large institution in Chandigarh which have residential area as well as offices, messes and public facilities namely:-

- (i) PGI
- (ii) GMCH
- (iii) Police Lines,
- (iv) ITBP Complex.
- (v) Punjab and Haryana High Court.
- (vi) State Guest Houses
- (vii) Raj Bhawan
- (viii) Golf course
- (ix) Golf Range
- (x) National Institute of Microbial Technology.
- (xi) Bus Stands
- (xii) Railway Station.

While their residential areas shall be covered in the new door to door collection system as at para-4, there shall be garbage from their common areas which will also have to be segregated as show later:

The institution authorities shall be responsible for segregation.

**(Note: Bio medical waste shall continue to have processed in its own manner.)**

**10. Cow Dung from the Cattle Pound and Gaushaalas**

We may consider the following 2 options:-

- a. Horticulture Wing undertakes composting of the Cow Dung.
- b. Biomethenation of cow dung.

**11. Dirt & Silt Collected from Road Sweeping:** Separate designated points should be fixed for deposit at appropriate distances on the road side. This dirt/silt shall be collected and disposed of at Malba dumping sites /low lying areas designated by MCC.

**12. Constructions, Debris and Malba**

There has not been enough regulations of constructions of Malba waste due to which it is finding its way into the garbage bins. With the proposed changed system of collection of garbage at para-4, there would be no bins where the above is disposed off. We need to enforce the regulations strictly. Building renovation and construction are lengthy processes which can not be done over night. All Sanitary Jamadars should be given a copy of a notice specifying the sites where constructions waste can be dumped. The penalty associated with non-compliance and the penalty should be stringent and made recoverable with water bill of the owner. The Sanitary Jamadar of the area shall be responsible to notify the owner of the building with a copy of the notice and kept record. This should act as a deterrent for improved disposal.

The owner on disposal shall certify the date, time, place and means used for disposal to the Sanitary Jamadar.

**13. Horticulture Waste other than areas covered at para 4:** The Horticulture waste is in the form of leave, small branches and seed droppings of trees. The areas shall include parks outside sectoral grid (covered at Para 4), open areas, road side trees, colonies, village and left out areas of Manmajra (as at Para 4). The areas fall under MCC, CEUT & BDPO. They shall be responsible to have the horticulture waste collected and transported to Garbage Processing Plant without mixing with other garbage.

**14. Plastic Waste & other non biodegradable waste.**

There should be a centralized collection facility where this type of waste is collected, sorted and disposed off. Details are shown later.

**15. Cleaning of Garbage Bins carrying biodegradable kitchen and raw vegetable waste.**

This issue was also raised during the workshop. A central Non-Biodegradable waste collection facility has been proposed. This should also be located in Sector-25. As all bins carrying the above waste shall be going to sector-25. After emptying the bins carrying biodegradable waste shall be washed once a day at this facility. Washing facility shall be set up this purpose.

**16. Keeping the vehicles and Garbage Bins in the presentable conditions.** A new Motor Pool is being constructed in the Industrial Area Phase 1, Chandigarh. The repainting of Bins and vehicles should be contracted out to be done twice a year at the above motor pool. The Municipal Corporation, Chandigarh will provide appropriate area and room at the above Motor Pool. The contractor shall be responsible to do the painting and any written material to be written on the vehicle and the Bins. The technical specifications of the painting can be worked out independently.

**17. Utilization of SSKs**

The SSKs concept had brought a great change in the way garbage is managed within the city. However, SSKs have been resisted by the residents living nearby. As per the latest practice time has come to adopt the practice list at para-4 with the new system. SSKs would no longer be required. We should stop construction of any new SSKs except where required to manage hotel, restaurant and Eateries' waste

The Present SSKs can be suitably modified to fulfill the requirement of small office spaces and stores being received from the office of MOH or other office of the engineering department of MCC. Some of the SSKs depending upon the suitability of their location can be kept operational for depositing of waste by Hotels (other than Big Hotels), Restaurants and eating joints, and their off site facilities from which semi prepared food is sourced, if need be constructed to suit this need.

**18. Management of inerts/rejects generated by the Garbage Processing Plant.**

Any cross contamination of garbage stream shall be handled by transshipping it for disposal to the Garbage dump/Malba Dumping site/proposed centralized collection facility for non biodegradable waste.

**19. Inerts and Rejects from the Plant.**

There are two types of inerts/rejects generated by the plant

- (a) Pre Processing
- (b) Post Processing

The plant authorities have assured that with operationalisation of the new hot gas generator the post processing inerts /rejects shall be consumed completely.

### **Pre processing Rejects**

These rejects consist of

- (a) Rotting Garbage
- (b) Construction Debris
- (c) Waste which is partially burnt.
- (d) Plastic Waste
- (e) Meat waste from unorganized slaughter and carcasses of small animals
- (f) Cow dung.

- (a) **Rotting Garbage**: - This would be addressed by daily lifting of all garbage. This is a major portion of Pre Processing rejects.
- (b) **Construction Debris**:- The plant authorities should segregate it. This problem shall be tackled in a major way by enforcement of malba bye laws. If still some such material finds its way into garbage it should be segregated and disposed off at garbage dumping ground/malba dumping sites.
- (c) **Waste which is partially burnt**:- the new system proposed should negate this how ever if any partially burnt garbage does come it should be sent to the Garbage Dumping Ground.
- (d) **Plastic Waste**: - To be segregated and disposed off in an organized manner after depositing at Centralised Collection Facility.
- (e) **Meat Waste from unorganized slaughter and Carcasses of small animals**: - This bird slaughter bye laws should be enforced. If any meat waste/carcass is still found it should be segregated for disposal at the Carcass Incineration Centre. Though plant authorities have complained of this but waste of bird slaughter is sold to companies for fish feed and thus the possibility of this being present in garbage is negligible.

### 20. **Garbage Bin Points.**

At present the garbage bins are put up at open spaces. The garbage is deposited by residents into these bins in an indifferent manner. Coupled with

this is the inability of MCC to lift every bin everyday creating unhygienic conditions.

To improve it is suggested that the bins should be placed on a concrete platform with appropriate drainage so that the location can be washed and sanitized everyday. With the new garbage collection system proposed at para 4 considerable machinery and manpower would be come available to lift each garbage bin having biodegradable waste everyday.

**21. Proposed Segregation, Responsibility, Intermediate Handling of Garbage and its Streaming.**

With the proposed segregation it shall be possible to lift all bins having Kitchen, Vegetable, Fruit and such like waste as well as other biodegradable waste on daily basis. Horticulture waste in bins and non biodegradable waste (this type of waste is stable) can be lifted once or twice a week.

**22. Flow Chart Garbage Segregation Stream, Responsibility, Intermediate Step and Final disposal**

Sl. No.	Source	Segregation stream	Responsibility for collection/ segregation depositing in bins	Intermediate step	Frequency of lifting & disposal
a.	House-holds in Sectoral Grid except Villages & Colonies. Certain areas of Manimajra in para 4 including Commercial Establishment, Govt. Offices. Excluding Hotels, restaurants, Eateries and their off site facilities from which semi prepared food is sourced.	a) Kitchen & other bio-degradable waste	Contractor as at Para 4	Nil	Garbage Processing Plant Daily
		b) Horticulture waste			Garbage Processing Plant Once or twice a week
		c) Non biodegradable waste			Centralized Collection Centre Once or twice a week
b.	Restaurants, Hotels(Other than big Hotels) eateries including Manimajra and their off site from which semi prepared food is sourced irrespective of their location be it villages, colonies, etc.	a) Bio-degradable waste like paper, cardboard napkins, cloth, packing material etc.	Person running the facility	Colour coded Garbage Bins of MCC at fixed timings at designated SSKs in Chandigarh and points in Manimajra. Transportation of bins by MCC. Raw meat and table meat waste in separate black polythene	Garbage Processing Plant Daily
		b) Horticulture			Garbage Processing Plant Once or twice a week

				bag before depositing in bin for kitchen waste.	
		c) Kitchen waste. Raw Meat and table meat waste in separate black polythene bag.			Dumping Ground Daily
		d) Non biodegradable			Centralized Collection Facility Once or twice a week
<b>Sl. No.</b>	<b>Source</b>	<b>Segregation stream</b>	<b>Responsibility for collection/ segregation depositing in bins</b>	<b>Intermediate step</b>	<b>Frequency of lifting &amp; disposal</b>
c.	Big Hotels including Manimajra	Same as above	Same as above	Colour coded Garbage Bins in premises of Hotels. Transportation of bins by MCC	Same as above
d.	Vegetables & Grain Market, Sector-26 Vegetable & Fruit Markets Manimajra Apni Mandis	a) Packing material like straw, paper cardboard boxes, cloth, sacks etc.	Vegetable & Grain Market, Sector 26 Market Committee, Chandigarh	Colour coded Garbage Bins	Garbage Processing Plant Daily
		b) Vegetables, fruits & plant based discards grain etc.	Others		Dumping Ground Daily

			MCC Chandigarh		
		c) Non biodegradable waste			Centralized Collection Facility Once or twice a week
e.	Colonies, Villages of Chandigarh and Manimajra Old Abadi Area. Villages under Chandigarh Administration.	a) Bio degradable waste like kitchen, paper, cardboard etc.	Colonies, MCC Villages & Other areas of MCC by MCC Villages under Chandigarh Administration by BDPO	a, b & c in colour coded bins d) by tippers	Garbage Processing Plant Daily
		b) Horticulture			Garbage Processing Plant Once or twice a week
		c) Non biodegradable			Centralized Collection Facility Once or twice a week
		d) Cow Dung			Composting/ biomethanation To be decided or enforcing cattle bye laws.
<b>Sl.</b>	<b>Source</b>	<b>Segregation stream</b>	<b>Responsibility for collection/ segregation</b>	<b>Intermediate step</b>	<b>Frequency of lifting &amp; disposal</b>

No.			depositing in bins		
f.	Institutional areas other than residential areas	a) ) Bio-degradable waste like paper, cardboard napkins, cloth etc.	Institutional Authorities	In colour coded bins	Garbage Processing Plant Daily
		b) Horticulture waste			Garbage Processing Plant Once or twice a week
		c) Kitchen & vegetable waste. Raw meat and table meat waste to be put in the black polythene bag before the same is put in the garbage bin.			Dumping Ground Daily
		d) Non-biodegradable waste			Centralized Collection Facility Once or twice a week
g.	Cow dung from Cattle Pound and Gaushalas	NIL	MCC	NIL	Composting/biomethanation  To be decided or enforcing cattle bye laws
h.	Dirt and Silt from Road Sweeping	NIL	MCC/CEUT.	At convenient distances on road side	Construction/Debris/Malba dumping sites on regular routine.
i.	Construction Debris and Malba	NIL	MCC to enforce	NIL	Designated site as per generation.

j.	Horticulture Waste except from House-holds in Sectoral Grid, and Commercial establishments, Hotels, Restaurants, eateries, areas of Manimajra at Para 4 including commercial establishments.	NIL	MCC, CEUT, BDPO, Market Committee	NIL	Garbage Processing Plant as required depending on quantity. Should have a regular daily programme of areas to be covered.
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23. In the Segregation and disposal stream at Para 22. Three Distinct disposal streams have been shown

- (i) Garbage Processing Plant
- (ii) Garbage dump
- (iii) Centralized Collection Facility for non biodegradable waste.

24. **Further Steps to process waste going to Garbage Dump directly as an interim measure.**

In the proposed stream of Garbage flow the following garbage has been proposed to be sent to the garbage dump as an inter mediate step.

Type	Source
a. Kitchen Waste with raw meat waste and table meat waste in separate polythene bag.	Hotel, eateries, restaurants, etc. including their off site facilities wherever located.
b. Vegetable, Fruit and Plant based discards	Vegetable and Grain Market, Sector 26, Apni Mandis, Vegetable and Grain Market, Manimajra.
c. Kitchen and Vegetable Waste	Institutional Areas

25. **Technologies to treat the above waste**

Technologies need to be explored for treating this waste, some of which can be;

- a. Composting
- b. Biomethenation

a. **Compositing**

Compositing is the most eco friendly method of treating such waste. However, it is associated with the garbage in open area open to the air and there is issue of foul smell associated with it. There are no open areas available in Chandigarh which are away from the residential area. This may not be an appropriate method of treating.

b. **Biomethenation.**

Biomethanation is an industrial type of process in which the environment can be carefully controlled. The by product of Biomethenation are methane and residue left in the Tanks. This methane on burning converts carbon dioxide and water. The residue which requires to be periodically cleaned from Tanks can be used as fertilizers and soil enricher. The methane so produced can be used in the following manner.

- a. Generation of Electricity; which can be either be feed to the electric grid or energizing partly the Garbage Processing Plant.
- b. The other use of methane can be as an energy source in the Carcass Incineration facility/biomedical waste Incineration facility. If such a use is contemplated then these facilities shall have to have oil firing/reserve tanks of methane as a standby so that the facility can operate uninterrupted in case the methane runs out.

26. **Integrated Municipal Solid Waste Management Complex.**

a. The following facilities which are closely interlinked in existence/proposed which are shall be handling waste and shall be connected with it.

- i) Biomedical Waste Incineration Facility; for which site near the Garbage Processing Plant, Sector 25 has been earmarked.
- ii) Proposed Carcass Incineration Facility; for which the site near the Garbage Process Plant has been earmarked.
- iii) Proposed Biomethanation plant for waste mentioned at para 25.
- iv) Proposed Centralized non biodegradable waste handling facility
- v) Daily Washing facility for Garbage Bins carrying Kitchen and other biodegradable waste in bins.
- vi) Motor Garage and office space for private contractor proposed at para 4.
- vii) Garbage Processing Plant, Sector 25, which is in existence.
- viii) Garbage Dumping Ground, Dadumajra Opposite the Garbage Processing Plant which is in existence.
- ix) A weigh bridge to weigh the vehicles of contractor proposed at para 4 located at Garbage dump capping site on the road.

These facilities mentioned above are interlinked as below

- (a) The proposed biomedical waste incineration facility and carcass incineration facility are handling similar type of waste.
  - (i) Can a single facility handle both? Saving financially as well as land required.
  - (ii) If not can they be co-located in the same complex? Capable of handling each others waste leading to saving on land and also providing a redundancy factor.
  - (iii) PGI is doing heat recovery from its bio medical waste incineration facility and using it to heat water which is used at their laundry. Can a similar heat recovery be done to generate hot water which can be used for daily washing of bins mentioned at para 15.

- (iv) These proposed facilities can be gas fired with gas from proposed Biomethanation plant, having an alternative source as methane tank/dual fuel in the form of oil fired so that facility can operate uninterrupted in case biomethane runs out.
  - (v) Or in proposed biomethanation plant to speed up the process?
- (b) Despite the proposed segregation stream cross continuation of garbage like biomedical waste, carcass, non biodegradable waste finding its way to non designated facility cannot be ruled out and shall required to be redirected to the appropriate facilities.
- (c) **Vehicle streaming.** The vehicle streaming for Garbage bins shall be to their respective facilities. Vehicles carrying bins with Kitchen waste and other biodegradable waste shall thereafter proceed to the bins washing facility for washing of bins.
- (d) **Other issues;**
- With increase in number of vehicles carrying garbage the road from crematorium sector 25 round about towards Mullanpur check point shall get chocked. This road shall need to be widened. The bridge over Patiala ki Rao also need to be widened.
- (e) What happens to the present door to door collectors employed in an unorganized way?

**27. Preferred location of proposed integrated Solid Waste Management Complex**

**Management Complex:** About 20 to 25 acres of land shall be required. Ideally the site should be located adjoining the Garbage Processing Plant on its rear side. The other location can be diagonally opposite the Garbage Processing Plant across Patiala Ki Rao.

**28. Centralized Collection Facility for non biodegradable waste**

All non biodegradable waste shall be deposited at such a facility where recyclables and reprocessables shall be recycled and inerts put at land fill site /Duping Ground or at Malba Dumping Ground.

Location of such a facility should be at Sector 25 as all Garbage will flow there. This would allow a washing plant to be co-located where all Bins and vehicles can be washed and sanitized daily.

Modalities of running such a facility, land and infrastructure required and financial implication need to be discussed.

#### 29. Garabge Generator should Pay

As discussed in the presentation, the handling on garbage should not put undue financial burden on the local body.

MCC is already running the Garbage Processing Plant. The proposed system as at para 4 above, would require and out go as below:-

Garbage expected to be collected from area proposed at para 4,	230 MTPD
Cost (a figure of Rs.1200 per MT was discussed but it should be lower taking into account organized layout of Chandigarh and compact Geographical area.)	Rs.1000/- Per MT
Total outgo	Rs.2,30,000/- per day
Annualized	Rs.8,39,50,000/-

This can be recovered by way inclusion in water bill. Commercial and Industrial entities should pay more. Institutions, Hotels, Restaurants and eateries should face a higher burden as the only Garbage going to dumping ground is from them. Most of them have off site facility from where semi prepared food is sourced. The main garbage is generated there. These should also be surveyed.

The following issues need to be discussed.

- a. Who is to provide garbage bins and dumper placers for lifting in the concept presented for ?
  - (i) Grain and Vegetable Market, Sector 26  
(At present lifting is done by Market Committee)
  - (ii) Villages under Chandigarh Administration.
  - (iii) Horticulture waste from areas under Chandigarh Admn.
  - (iv) Institutions
- b. Imposition of Cattle Byelaws and bird slaughter bye laws strictly.
- c. Can a census type operation done regarding garbage by the administration to monitor, control, educate and publicize, so that the system proposed is a success? Can MCC given an honorarium for personnel deployed on this?

**AGENDA ITEM NO.3**

**Subject: Action taken by Municipal Corporation Chandigarh on the directions issued by the Hon'ble High Court of Punjab & Haryana dated 11.3.2011 in LPA No. 249 of 2010 Sanawar Montessori School Versus Chandigarh Administration & Ors.**

In view of the directions issued by the Hon'ble High Court on 19.9.2011 in LPA No.249 of 2010, the matter was discussed in detail in a meeting on 14.10.2011 in the office of Home Secretary-cum-Secretary Local Government, Chandigarh Administration at the level of higher officers of Municipal Corporation, Chandigarh and Chandigarh Administration. Thereafter the Home Secretary-cum-Secretary Local Govt. Chandigarh Administration vide memo No. PS/HS/2011/18681 dated 18.10.2011 issued directions to the Commissioner, Municipal Corporation, Chandigarh to initiate a Pilot Project in one Sector for door to door collection of garbage.

In compliance to the above directions, an Agenda was placed before the General House of Municipal Corporation, Chandigarh in its meeting held on 25.11.2011 with the proposal that Sector 22 may be selected for the pilot project for door to door collection of garbage as this Sector is centrally located Sector and solid waste of mixed composition is collected from this Sector i.e. residential waste, commercial waste and hotel waste etc.

There will be monthly expenditure of Rs.6.00 lacs approximately (hiring of 9 tractor trolleys @ approx. Rs.2150/- per tractor trolley per day for 30 days) for lifting door to door garbage in the said Sector, in case the work is executed by the Municipal Corporation. 9 No. of tractor trolleys along with driver/ POL/ manpower/ repair will be required i.e. 8 for inner areas (2 trolleys for each Sub Sector A, B, C & D) of Sector 22 and 1 for outer roads/ market. At present tractor trolleys along with driver/ POL/ manpower/ repair @ Rs.2150/- per day 8 hours per tractor trolley are being hired. This pilot project can either be got done through the existing Agency after having their consent or by calling afresh tenders.

The General House approved the proposal and decided that Agenda may also be placed in the Meeting of the Finance & Contract Committee for approval of terms and conditions. The proposed terms and conditions for hiring tractor trolleys are as under:

**Terms & Conditions for hiring tractor trolleys for lifting of door to door garbage from Sector 22 only.**

1. 9 No. of tractor trolleys having minimum size of 11 ft length, 6 ft. breadth and 2 ft depth along with P.O.L./repairs/maintenance etc. along with manpower consisting of driver with minimum of 5 No. of labourers and sanitation material i.e. pally, panja, kassi etc. are initially required for one month to be provided to each tractor trolley by the firm/contractor for door to door lifting of Municipal Solid Waste daily to be sent to the Garbage Processing Plant/ dumping ground as the case may be.
2. The rates quoted shall be valid for a period of 1 month from the date of acceptance of the tender and no increase will be allowed during the said period.
3. The tractor and trolley should be insured for 3<sup>rd</sup> party and the same should be renewed as and when the same is expired during the period of contract for any liability arising during the period of contract.
4. The firm/contractors quoting their rates for the supply of tractor trolley as per Condition No.1 are required to quote flat rate for each trip for lifting of door to door Municipal Solid Waste and to sent at the ear-marked Dumping Ground/ Garbage Processing Plant as the case may be.
5. Each tractor trolley is required to be covered with sheet i.e. tarpauline/ plastic etc. covering the complete length & breadth of trolley so that the waste is not visible to the naked eyes and does not litter the city streets/roads/lanes during the movement of tractor trolley.
6. The firm/contractors approved for supplying the tractor trolleys are required to comply with the Municipal Solid Waste (Management & Handling) Rules, 2000 and will be liable for any action due to breach of the conditions stipulated thereof.

7. The tractor trolleys are required to report in the Motor Garage Sector 20 or any other designated place as intimated by the office on daily basis at 7.30 A.M. The tractor trolleys are required to perform the duty for a period of 8 hours and making minimum of 3 trips daily from Sector 22 to the Garbage Processing Plant/dumping site in Chandigarh as the case may be.
8. The contractor/ firm will collect the garbage from each floor by deploying the labour with the tractor trolley.
9. The tractor trolleys are required to get the trip entered in the Dumping Ground/ Garbage Processing Plant as the case may be and only on reconciliation the trip will be counted towards the work performed.
10. The hiring of tractor trolleys can be distributed among the firms/contractors willing to supply the same in case the same is not supplied by any single firm/contractor on the rates quoted by L-1.
11. The area Councilor and concerned Chief Sanitary Inspector/Sanitary Inspector will certify that complete door to door garbage has been lifted daily and there is no complaint from the residents.
12. An earnest money of Rs.12,000/- (Rs. twelve thousand only) in the shape of D.D.R. on any commercial bank in favour of Medical Officer of Health, Municipal Corporation, Chandigarh should be attached with the tender and tenders without earnest money will be rejected. The E.M.D. of unsuccessful bidders will be returned after the finalization of the tender.
13. Consequent upon the allotment of work, the supplier/firm shall deposit security amount for the No. of tractor trolleys being hired within 7 days equivalent to 10% of the total amount for which the contract is awarded in the form of D.D.R. duly pledged in the name of Medical Officer of Health, Municipal Corporation, Chandigarh.
14. **Penalty clause:** The firm/contractor to whom the contract is awarded is required to make 100% availability of tractor trolleys on daily basis. However, the firms/contractors are required to keep one tractor trolley spare in order to meet any breakdown/exigency/ emergency at their level

failing which they will be penalized for double the amount to be paid for the day's work on his risk and cost.

15. In case of continuous breach for non supply of tractor trolleys with manpower etc. for a period of more than 7 days, the contract will be terminated and security amount will be forfeited. The firm/contractor can be blacklisted after reviewing the circumstances.
16. The firm/contractors quoting their tenders will give an Affidavit that the firm/contractor has not been blacklisted by any Govt./ semi-Govt./ Board/ Corporation. In case the same is proved during the period of contract, the security deposit will be forfeited and will be debarred from taking any contract with the Municipal Corporation Chandigarh.
17. The tractor trolleys are required to be given a coat of "Green Colour" and to be painted on both sides of trolleys "ON CONTRACT WITH M.C.C."
18. Attested copy of original documents i.e. valid registration of firm/contractor/tractor and list of satisfactory consumers may also be attached with the tender forms. However, original documents will be required to be produced at the time of verification to the M.O.H. office.
19. Any loss/ damage/ theft caused to the public property/ MCC/ Residents by the vehicles/ manpower engaged shall be sole responsibility of the contractual agency.
20. The Municipal Corporation reserves the right to accept/reject any bid without assigning any reason.
21. Any liability arising out of the tractor trolley/manpower etc. under the provisions of any Act i.e. Motor Vehicle Act, Labour Act, or any other Act as applicable will be the sole liability of the firm/contractor.

The matter is placed before the Finance & Contract Committee for its consideration and approval please.

**M.O.H.**