

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 1011/2018

IN THE MATTER OF:-

Jagdish Kumar

.....Applicant

VERSUS

State of Haryana

.....Respondent

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Place: Chandigarh
Dated: 29 April 2022


District Attorney
for Chief Secretary to Govt. Haryana

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**Status report of Sanjeev Kaushal, Chief
Secretary to Government Haryana, on behalf
of State of Haryana in compliance of order
dated 23 September 2021 of the Hon'ble
NGT.**

RESPECTFULLY SHOWETH:-

1. That I, in my official capacity as Chief Secretary to Government of Haryana, am well conversant with the facts and circumstances of the present case and competent to file the present status report on behalf of State of Haryana, on the basis of record/information made available by the Urban Local Bodies Department.

2. That the status report is being filed with respect to the directions dated 23 September 2021 issued by this Hon'ble Tribunal and are to be complied with by the Municipal Bodies in the State of Haryana. Relevant part of the said order dated 23 September 2021 is reproduced hereunder:-

“In view of above, non-compliance of statutory rules cannot be appreciated. Timeline being statutory and violation being criminal offence under the law of the land, the Tribunal cannot allow what is prohibited in law. Prayer for extending the time beyond the statutory date has, thus, to be rejected. The State may take further action to uphold the law, including against the violators, record adverse ACRs against the officers responsible for delay and deposit compensation as already directed. The Chief Secretary, Haryana may file a further status report within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF. The CPCB and Haryana State PCB, with State PCB as nodal agency for coordination and compliance, may jointly verify some of the sites where biomining has been taken up to ascertain whether the guidelines/SOP prepared by CPCB are being followed and ensuring that the material recovered/rejects arising out of biomining process are properly routed to the authorized user/recyclers. It may also be ascertained as to how much

land has been recovered out of the biomining process. Joint report may be filed before the Tribunal within three months with its copy to the Secretary, Urban Development, Haryana by 30.12.2021 for response of the Chief Secretary to the observations, if any, requiring response.”

3. That vide aforesaid orders, Joint Committee of CPCB and HSPCB was constituted to verify some of the sites where biomining was taking place to ascertain whether the guidelines/SOPs prepared by CPCB are being followed and to ensure that the material recovered/rejects arising out of biomining process are properly routed to the authorised user/recyclers and also to ascertain how much land has been recovered out of the biomining process.
4. That the report of Joint Committee was forwarded to the Urban Local Bodies Department to take requisite steps in view of the observations and recommendations made in the Joint Committee Report.
5. That the Directorate of Urban Local Bodies has informed that all the ULBs have already been directed to take requisite steps in view of observations and recommendations of Joint Committee with immediate effect vide letter/memo No. Tech/NGT/DULB/2022/2223 dated 22 April 2022
(Annexure R-1).

6. That the Directorate of Urban Local Bodies has also informed that a response to the observations of Joint Committee has been submitted to CPCB vide letter memo No. Tech/NGT/DULB/2022/2233 dated 25 April 2022 **(Annexure R-2)**.
7. That from the perusal of the data as mentioned in Annexure R-2, it is clear that almost 40.72 lakh metric tonnes (52%) of legacy waste has already been processed in 37 Municipalities upto 31 March 2022. It is also relevant to mention here that MCs mentioned at Sr. No. 35-37 in Annexure R-2, where zero quantity of legacy waste is shown as processed is due to the recent award/finalization of the contracts. However, the requisite machineries have been installed at these dumpsites and processing of waste shall start very soon.
8. That Urban Local Bodies Department and Haryana State Pollution Control Board have been directed to take requisite steps in the light of observations and recommendations of the Joint Committee in accordance with the law and policy of Pollution Control Board. The status of compliance of the observations and recommendations of Joint Committee shall be considered in the next monitoring meeting to be held as directed by Hon'ble NGT in O.A. No. 606.

9. That the State of Haryana is taking sincere and effective steps to comply with the directions of Hon'ble NGT in its letter and spirit. The aforesaid status report may kindly be accepted and may be allowed to be taken on record of this Hon'ble Tribunal.

Respondent



(Sanjeev Kaushal)

Chief Secretary to Govt. Haryana
on behalf of State of Haryana

Place: Chandigarh
Dated: 29 April 2022

VERIFICATION:

Verified that the contents of Para 1 to 9 of the status report are true and correct to my knowledge derived from the official record. No part of it is false and nothing material has been concealed therein.

Respondent



(Sanjeev Kaushal)

Chief Secretary to Govt. Haryana
on behalf of State of Haryana

Place: Chandigarh
Dated: 29 April 2022



MOST URGENT

To,

1. All the Commissioners of Municipal Corporations in the State of Haryana.
2. All the District Municipal Commissioners in the State of Haryana.
3. All the Executive Officers/Secretaries of all the Municipal Councils/Committees in the State of Haryana.

Memo No: Tech/NGT/DULB/2022/ 2223

Dated: 22-04-2022

Subject: Order dt. 23.09.2021 passed by Hon'ble NGT in the matter of OA No. 1011/2018 Jagdish Kumar Vs State of Haryana.

Kindly refer to the following:-

- i. This office letter memo No. Tech/NGT/DULB/2022/1582 dated 21.03.2022.
 - ii. This office letter memo No. Tech/NGT/DULB/1751 dated 28.03.2022.
 - iii. Meeting held in Conference Hall, DULB on 01.04.2022.
 - iv. This office letter memo No. Tech/NGT/DULB/2022/1993 dated 08.04.2022.
2. The subject cited matter pertains to the issue regarding remedial action for remediation of legacy waste & restoration of the dumpsites in the State of Haryana.
 3. A Committee was constituted by Hon'ble NGT vide order dated 23.09.2021 to verify some of the sites where biomining has been taken up to ascertain whether the guidelines/SOP prepared by CPCB are being followed and ensuring that the material recovered/rejects arising out of biomining process are properly routed to the authorized user/recyclers and also to ascertain how much land has been recovered out of the biomining process.
 4. The joint committee visited the sites in Panchkula, Ambala, Yamunanagar, Gohana, Jind, Kaithal, Karnal & Gurugram and submit its report on 15.03.2022 (copy enclosed). Joint Committee has pointed out some observations in its report and also gave some recommendations. The observations and recommendations of joint committee are not limited to the sites where the joint committee visited rather the compliance w.r.t. observations and recommendations is to be done at all the dumping sites in the ULBs.
 5. Therefore, you are hereby directed to ensure compliance w.r.t. observations and recommendations of joint committee with immediate effects. It is also intimated that in case of any non-compliance, the concerned Commissioners and District Municipal Commissioners will be solely responsible by name for the consequences and adverse remarks in future.

Kindly treat this matter as the MOST URGENT and time bound.

DA: As Above.


 Director,
 Urban Local Bodies,
 Haryana, Panchkula.

CC:-

1. PS to W/PSULB for kind information of W/PSULB, Haryana.

To,

Member Secretary,
Central Pollution Control Board,
New Delhi.

Memo No: - Tech/NGT/DULB/2022/ 22-33

Dated: 25/04/2022

Subject: Response to the observations of the Joint Committee constituted by Hon'ble NGT in the matter of OA No. 1011/2018 titled as Jagdish Kumar Vs State of Haryana.

On the subject cited above.

1. Please find enclosed herewith the responses to the observations of the Joint Committee constituted by Hon'ble NGT in the matter of OA No. 1011/2018 titled as Jagdish Kumar Vs State of Haryana for information please. If any further verification is to be done, requisite assistance shall be provided with the relevant data and record.
2. Further, vide this office letter memo no. Tech/NGT/DULB/2022/2223 dated 22.04.2022, the report of joint committee has been forwarded to all the ULBs with the directions to take requisite steps in view of observations and recommendations made in joint committee report with immediate effect. Recommendations made in report concerning with MC may be complied with.

DA: As above.


for Executive Engineer,
Director, Urban Local Bodies,
Haryana, Panchkula.

CC:

1. PS to W/CS, Haryana for kind information of W/CS, Haryana.
2. PS to W/PSULB for kind information of W/PSULB, Haryana.
3. PA to W/DULB for kind information of W/DULB, Haryana.

Response to the observations of joint committee constituted by Hon'ble NGT in the matter of OA No. 1011/2018 titled as Jagdish Kumar Vs State of Haryana.

1. Vide order dated 23.09.2021 a Joint Committee of CPCB & HSPCB was constituted by Hon'ble NGT in the matter of OA No. 1011/2018 titled as Jagdish Kumar Vs State of Haryana. The joint committee submitted its report on 15.03.2022. The response to the observations of the Joint Committee are tabulated as under:-

Sr. No.	Observations of joint committee	Response
1.	No land has been recovered and what land was recovered in case of MC, Kaithal is used for dumping the fresh waste.	The total 4.74 acre land was occupied by legacy waste in Kaithal out of which 1.5 acre land has been recovered. As no suitable alternate land is available for processing of fresh waste in MC, Kaithal, the fresh waste is being processed at same site separately. Further, approximate 60 acre land has been recovered in the ULBs after processing of legacy waste. In some of ULBs the same sites are being used for processing/management of fresh waste due to land constraints.
2.	Very slow progress due to plant and machinery installed are not in proportionate to the estimated quantity of waste.	Approximate 40.77 Lakh MT legacy waste has already been processed out of the total 82 Lakh MT. ULB Department has also issued detailed directions/guidelines vide letter No. Tech/Sect-I/DULB/2021/8283 dated 25.01.2021 (Annexure-A) regarding processing of legacy waste. However, the ULBs have been directed to take requisite steps in view of observations and recommendations of the joint committee with immediate effects vide letter dated 22.04.2022.
3.	Inaccurate and unscientific estimates used for tendering process have resulted in revision of tender caused	The density of waste is the major component which affects the quantity of legacy waste. At the time of

Sr. No.	Observations of joint committee	Response
	delayed in achieving the objective.	tendering, standard density @600 kg/Cum was taken for estimation purpose. However, when the revised assessment of legacy waste was got done at all the sites, at some of the sites, the quantity of legacy waste is found to be more than the earlier estimated quantity because of variation in density and depth of the legacy waste. At present contracts have been awarded in respect of all concerned ULBs and work is in progress as per table given in para no. 2 below.
4	The CPCB guidelines for processing and managing legacy waste found to be not followed specifically in collection & treatment of leachate and run-off, ground water and ambient air monitoring in and around the sites besides to undertake bio seed test of soil or compost segregated and disposed in farming for safeguarding against any impact on farming.	The leachate treatment plants have been installed at 17 sites out of 37 sites and remaining are in process to install the LTP. The sampling of ground water, soil enricher/compost recovered after processing of legacy waste and air quality monitoring is being done at legacy waste sites on regular intervals. The soil enricher/compost is being disposed off only after proper sampling. ULB Department has also issued detailed directions/guidelines defining the process to be adopted for bio-remediation of legacy waste vide letter No. Tech/Sect-I/DULB/2021/8283 dated 25.01.2021 (Annexure-A) . Compliance of CPCB guidelines will be ensured at legacy waste sites.
5	The cost of processing the legacy waste from Rs. 637/- per MT for MC, Gohana, Rs. 678/- per MT for MC, Jind, Rs. 615/- per MT for MC Karnal, Rs. 947/- per MT for MC, Panchkula and Rs. 695/- per MT for MC Kaithal with almost similar plant and machinery installed	The State has adopted online tendering for all type of works for fare participation and competitive rates. The works of bio-remediation of legacy waste have also been allotted after following the e-tendering process and there was

Sr. No.	Observations of joint committee	Response
	following same technology across sites. No scientific explanation made available.	enough participation in the bids. The rates may vary from site to site depending on the local conditions. CPCB vide its guidelines has also mentioned that the cost of bio-remediation of legacy waste may varies from Rs. 400 to 700 per cubic meter (Rs. 1132 to 1981 per MT) irrespective of capital cost. The case by case cost of moving screened fractions offsite will be extra and variable, depending on distance of farmers, cement plants etc.
6.	The legal requirements are not fulfilled. Out of inspected sites, only 02 sites have obtained consent to operate (CTO). This is therefore concluding non-compliance on part of the MC as all the dumps sites are being operated unscientifically with no proven records of waste processed and disposed	Permission from HSPCB has been taken for 07 sites and applied for 03 sites. The remaining ULBs have already been directed to fulfill the necessary legal requirements. The record of processing of legacy waste as well as disposing of the recovered fractions is being maintained by the concerned ULBs at sites.

2. The updated status of bio-remediation of legacy waste is as under:-

Sr. No.	Name of MC	Estimated Quantity of legacy waste (In Lakh MT)	Status of work	Quantity of waste processed upto 31.03.2022 (in Lakh MT)
1	Gurugram	33.00	Work in Progress	17.64
2	Ambala	5.43	Work in Progress	5.20
3	Panchkula	3.96	Work in Progress	1.28
4	Rohtak	8.00	Work in Progress	5.17
5	Bahadurgarh	2.1	Work in Progress	1.32
6	Hisar	1.30	Work in Progress	0.35
7	Karnal	0.95	Work in Progress	0.35
8	Narnaul	1.88	Work in Progress	0.59
9	Kaithal	0.99	Work in Progress	0.80
10	Gohana	1.19	Work in Progress	0.42
11	Sirsa	2.43	Work in Progress	0.45
12	Panipat	4.1	Work in Progress	1.38
13	Palwal	0.22	Work Completed	0.22
14	Meham	0.14	Work in Progress	0.09
15	Yamunanagar	1.26	Work in progress	1.20
16	Fatehabad	0.62	Work in progress	0.47
17	Gannaur	0.25	Work Completed	0.25
18	Rewari	1.02	Work in Progress	0.79
19	Assandh	0.21	Work in Progress	0.153
20	Cheeka	0.18	Work Completed	0.18
21	Mandi Dabwali	1.17	Work in Progress	0.29
22	Jind	1.00	Work in Progress	0.57
23	Kharkhoda	0.24	Work in Progress	0.21

Sr. No.	Name of MC	Estimated Quantity of legacy waste (In Lakh MT)	Status of work	Quantity of waste processed upto 31.03.2022 (in Lakh MT)
24	Gharaunda	0.28	Work in Progress	0.20
25	Bhiwani	1.15	Work in Progress	0.13
26	Nilokheri	0.19	Work in Progress	0.11
27	Nissing	0.22	Work in Progress	0.15
28	Taraori	0.087	Work in Progress	0.085
29	Charkhi Dadri	0.26	Work in Progress	0.24
30	Manesar	1.20	Work in Progress	0.12
31	Pataudi	0.16	Work in Progress	0.11
32	Sohna	0.54	Work in Progress	0.07
33	Hathin	0.0324	Work in Progress	0.016
34	Farukh Nagar	0.12	Work in Progress	0.118
35	Ellenabad	0.12	Machinery Installed	0
36	Jhajjar	0.0923	Machinery Installed	0
37	Hodal	0.06	Machinery Installed	0
	Total	76.15	Total	40.72

On perusal of the aforesaid data, it is clear that almost 40.72 lakh metric tonnes (52%) of legacy waste has already been processed in the above mentioned Municipalities upto 31.03.2022. It is also relevant to mention here that MCs mentioned at Sr. No. 35-37 above where zero quantity of legacy waste is shown as processed is due to the recent award/finalization of the contracts. However, the requisite machineries have been installed at these dumpsites and processing of waste shall start very soon.

- Further vide this office letter memo no. Tech/NGT/DULB/2022/2223 dated 22.04.2022, all the ULBs in the state of Haryana have been directed to take requisite steps in view of observations and recommendations of joint committee with immediate effect.

शहरी स्थानीय
निकाय निदेशालय
हरियाणा



DIRECTORATE OF URBAN
LOCAL BODIES
HARYANA

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To,

1. All the Commissioners of Municipal Corporations in the State of Haryana.
2. All the District Municipal Commissioners in the State of Haryana.
3. All the Executive Officers/Secretaries of the Municipal Councils/Committees in the State of Haryana.

Memo No. Tech/Sect-I/DULB/2021/8283

Dated:- 25-01-2021

Subject: Directions regarding the monitoring of the works of bioremediation of legacy waste being executed in various MCs of the State.

On the subject cited above.

2. In compliance of the orders of Hon'ble NGT the ULBs are in process of execution of the works of bioremediation of legacy waste. Since, the work of the bioremediation of the legacy waste is to be carried out with the latest technologies and different from the works with standard specification following points/aspects in addition to the already issued directions, scope of work mentioned in RFP, CA etc. are required to be taken in account during the execution of the work in a transparent manner and for optimum output:-
 - i. Commissioner/DMC shall ensure that no payment for the processing of legacy waste/waste be made to the agency, which has been collected at the dumpsite without processing during the period in which the processing of daily generated fresh waste was under the obligation of the contractor of door to door collection of waste work or any other contract.
 - ii. To avoid the incidents of addition of the quantity of unprocessed waste in to the legacy waste present at the dump site and to prevent the chances of duplicity of weighing the processed waste, MC shall ensure that there should be one entry as well as exit gate which should be remained closed all the time, except for a suitable time interval as decided by the concerned ULBs, during which the entire processed shall be transported/ dispatched out from the processing site after duly weighing in the presence of officer not below the rank of ME under surveillance of the IP based CCTV cameras.
 - iii. MC Shall ensure that during the payment of the bills of the work executed by the agency following enclosures be verified in true letter and spirit:-
 - a. Real time photographs reflecting the area/land reclaimed by processing of the existing legacy waste. Permanent Mile stones shall be installed at the boundaries of the reclaimed land and no further waste shall be allowed to be dumped at the reclaimed land.
 - b. Contour sheets prepared with the help of total stations / drones or with latest available technologies, reflecting the volume of waste reduced by bio remediation and the same should be tally with the quantity of weight processed taken in the bills.
 - c. Weigh Slips of the processed waste weighed on the weighbridge and in the presence of officer not below the rank of ME and signed at the site under surveillance of the IP based CCTV cameras. Time recorded by the officer on the weigh slip shall be verified from the video footage of



- IP based CCTV cameras and during the payment of the bills, certificate of verification of the same shall be recorded by the Engineer in Charge.
- iv. As provided in the Work Contract MC shall appoint a third-party consultant firm/individual consultant with requisite technical expertise, knowledge and experience in remediation & reclamation works as the "Independent Assessment Agency" for the Project (the **IAA**). The IAA shall assist the MC in supervising the O&M of the Processing Facility and shall support the MC to monitor compliance with the KPIs. No payment of the work be made to the contractor unless the MC and IAA satisfy that the work executed by the contractor is as per the norms.
- v. MC shall keep a real time check on the quantity of the legacy waste being remediated/ processed by the agency and shall also ensure that no fresh waste is dumped into the site where the processing of legacy waste is being carried out by the Contractor.
- vi. Land being reclaimed/ cleared by the processing of the Legacy waste should be clearly demarcated with the mile stones and no legacy /fresh waste should be allowed to dumped into the land once cleared/ reclaimed.
- vii. Before every payment to the contractor for the work done, MC shall obtain the real time contour mapping survey report carried out by drone mapping as well as with Total Station, to check the volume of legacy waste reduced by the way of Bio remediation.
- viii. MC shall ensure that the Sanitary Landfill Site (SLF) being developed for the disposal of inert is constructed as per the Norms/specifications prescribed by Central Public Health and Environmental Engineering Organisation (CPHEEO) /Central Pollution Control Board (CPCB).
- ix. MC shall ensure fraction arising out of the processed waste such as RDF, compost/soil enriches, C&D waste and inert are being disposed off scientifically as per the Norms of CPCB. Due sampling of the soil enriches/compost etc. is being done by the contractor as per CPCB norms.
- x. MC shall ensure that proper record of quantity of the processed waste is being maintained on daily basis and the same is dully recorded in the measurement book by the concerned junior engineer and checked by AE/ME/XEN.
- xi. Concerned Executive officer/Secretary of the MC shall ensure that the fractions arising out of the processing such as RDF, Soil enriches, inert and C&D waste is disposed off as per the SWM Rule-2016.
- xii. All the senior functionaries involved in dealing this matter of MC shall ensure that the RDF is being utilized in the Industries/Plants where the conventional fuel can be replaced with RDF as prescribed by CPCB/SPCB. Executive officer/Secretary, MC shall submit a declaration that the fraction arising out of the processed waste is not being dumped in open areas unscientifically by the contractor within or outside the MC limit and every payment of the contractor be release after obtaining the declaration.

3. **MCs shall ensure obligations of contractor are being complied:-**

- i. After taking over of site from the Municipality, the contractor shall carry out the actual measurement of legacy waste present at site by adopting the latest technologies available in the market such as Multi-layer Analysis of Surface Waves (MASW), Resistivity imaging etc. or any other suitable technology.

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- ii. In the process of bio mining/bioremediation the contractor shall prepare and submit a plan in prescribed format Annexure-J given in the Model RFP to initiate the mining of the legacy waste after due calculating the shear strength of the legacy waste according to its height.
- iii. After planning the mechanism of excavation of waste in a planned manner so as to prevent the collision of the hump of the legacy waste shall start preparation of path/pavement and start the excavation accordingly. Permanent milestones shall be installed from the day of start of the work and on every stage of the payment shall install the further milestone at the area cleared by the way of Bio remediation/ processing of the legacy waste.
- iv. The contractor shall set up the necessary infrastructure, machineries, Plant of such as capacity to process the legacy waste of such as quantity to meet the completion of the work before the timelines given by Hon'ble NGT. In no case the capacity of the Plant should not be less than 1000 TPD.
- v. The Contractor shall provide weighbridge to measure quantity of various components of Waste at dumpsite is processed in terms of sorting and segregated materials, RDF, compost material, and inerts going out of the Dumpsite.
- vi. The Contractor shall ensure that weighbridge is fully online, electronic, where in data of weighment facility shall be maintained for the entire Term with backup server facilities, daily online reports should be generated. Online data shall be provided to the Authority as & when required, but mandatory on monthly basis. It should also have online CCTV surveillance system.
- vii. A website should be developed so that public can view the online data whenever required, to ensure high transparency.
- viii. Weighbridge should be calibrated as and when required and monthly reviewed by Authority. In case of breakdown of the weighbridge, it should be rectified within 24 hr. During this period, weighing should be done at private weighbridge approved by the Authority.
- ix. The contractor should secure the dump site land by fencing the perimeter of the site handed over to him so that no fresh waste is dumped.
- x. Contractor shall develop the Sanitary/Scientific Landfill Site (SLF) in accordance with the guidelines of CPCB of such a capacity equal to the inert generation out of the processed legacy waste.
- xi. Contractor shall manage the leachate arising out of legacy waste by collecting, storing & treating the same by using suitable technology such as by setting up of ETP, DTRO etc. as per the quantum of leachate.
- xii. The Contractor shall provide a quality control laboratory fully equipped with latest equipments adequate to carry out the tests pertaining to municipal solid waste analysis and characterization, leachate quality, air quality, ground water quality, soil enricher quality, maturity test for residual inert matter, etc. as per the Solid Waste Management Rules, 2016 along with the qualified lab technician expert in carrying out such tests. The samples for the above said tests shall randomly be got tested from any other registered laboratory under Applicable Laws for the authentication of the results.
- xiii. The contractor shall produce the agreement with the consumer of RDF such as Cement Industries, Power Plants & other Units where the conventional fuel can be replaced with the RDF within 15 days of start of the processing & he shall make the arrangements for the storage of RDF after duly compacted the RDF through bailing machine to reduce the size of RDF.
- xiv. The Contractor shall arrange the electricity connections on the site and he shall also ensure the backup facilities on the site i.e. Generator. The

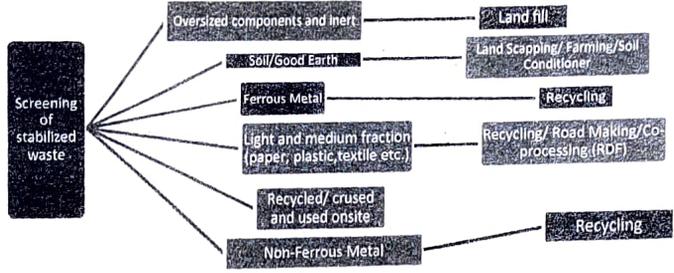


cost of any additional infrastructure required for installation of segregation machinery includes platforms, power supply, transformers, cabling and any other such allied requirements shall be borne by the contractor.

- xv. The Contractor shall carry out necessary geotechnical surveys for considering the hydrological and flooding potential at Dumpsite, in order to mitigate any effect on the activities during Bio-Mining in terms of leachate transport.
- xvi. Contractor shall ensure the monitoring of ground water quality, work zone air quality and ambient air quality monitoring within the site from authorized laboratories/agencies and submit the report on monthly basis.

Indicative process to be adopted for the work of bioremediation is as under:-

- i. First of all the topmost 150 mm layer of legacy waste gets repeatedly loosened by using a tractor-tiller.
- ii. Mist-spray the waste lightly with bio-cultures to control odour and get the decomposing microbes dispersed into the waste.
- iii. Hand-pick out large objects like rocks or coconut-shells or long pieces of cloth.
- iv. Form the waste into wind-rows using a Bob-cat or JCB or similar earth-moving equipment. Turn these wind-rows every 5 days. Move the waste to form several long parallel windrows. Turn these weekly with a JCB. Often at the second or third turning, one heap can be combined with a second one as their volumes decrease. Windrows can be aerated either by moving all the waste to form a new parallel windrow, with the innermost waste on the outside for aeration, or by moving all the waste forward in small steps while dropping it from a height for aeration.
- v. After 2-3 weeks when the heaps are free-flowing enough for screening, the waste shall be weighed in the weighbridge and the record/accounting of the same shall be recorded in the logbooks by Engineer-in-Charge and the online monitoring of such weight on the weighing bridge shall be maintained by the Engineer-in-Charge. Payment to the contractor shall only be released for the weight of the waste weighed after forming the windrows of two-three weeks.
- vi. After weightment of the waste as prescribed in para no. 19, the waste shall be put up in Trammels and/or Horizontal Screens or other types of screens for the purpose of screening. Screen the stabilized waste in a rotary screen or gravity screens of different size openings. A fan can blow out the plastic fraction for use by recyclers.
- vii. Even after the process of making windrows for drying, the legacy waste still consists of moisture the same shall be passed through Rotatory Hot Air Blowers to achieve the desirable moisture contents.
- viii. Appropriate numbers of excavators, back hoe loaders, dumper placer and workers will be required to execute the work.
- ix. The contractor shall appoint a qualified Environment Engineer on site who shall be ensure the processing of waste as per the Guidelines/Norms of CPCB.
- x. After processing the waste following fractions shall come out from the processed waste :-



- xi. Usually the finest fraction will be organic matter plus fine soil, called 'bio-earth'/Soil enricher, which can be used as soil improver. For the soil enricher/bio-earth or good earth finest fraction, test periodically for heavy metals, then look for farmers willing to accept it. It is excellent for reclaiming salt-affected soils and for restoration of mining overburden areas if any are nearby. There is a cess for restoration of mined areas, which is normally unspent as forest departments are supposed to re-vegetate them. But this is unviable in barren rocky soil by planting and watering saplings. Re-vegetation is instead possible and effective by mixing grass seed with the good earth fraction and spreading it on the overburden to start a natural succession of grasses, herbs and shrubs.
 - xii. The second component will be Legacy C&D waste, sorting/segregation and final disposal of such legacy C&D Waste shall be the sole responsibility of the Contractor. The Contractor shall be free to explore alternate uses for C&D waste as per the C&D Waste Rules, 2016.
 - xiii. Hazardous waste such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive waste, if found, during excavation, sorting or segregation shall be handled as per the Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 & the contractor shall be fully responsible for this.
 - xiv. There may be some (maximum 10-20% of total) left over waste including lumps of heterogeneous nature. This waste is called inert. The waste may be soaked with leachate or hard and difficult to disintegrate. This waste can be sent to scientific/sanitary landfill for disposal (near zero residues). The development of Sanitary/scientific Landfill site for the disposal of inert arising out of processed waste as per CPCB norms shall be obligation of the contractor.
 - xv. The recyclables like plastic, glass, metals, rags, polythene, cloths and other combustible material recovered from the waste during screening shall be sorted out and preferably cleaned before sending to recycling industries or as RDF. The RDF shall be bailed out with bailing machine and stored/transported in the compacted manner/briquette to the Cement Industries/Power Plants/other units where the conventional fuel could be replaced with RDF.
 - xvi. The light fractions in the form of RDF, recyclables, plastic etc. arising out of the processing of the legacy waste shall be transported/stored after compacted, properly bailed in cubical manner through bailing machines and tied with hard wires.
4. The guidelines/instructions prepared above as well as mentioned in the RFP, CA have been prepared after discussing the best practices being adopted by other States. Efforts are made to cover almost every aspect which may be beneficial for stopping any kind of wrong/bogus payment or mis-utilisation of the funds. As and when the need of any addition in the guidelines/instructions is required, the same shall be issued separately.

शहरी स्थानीय
निकाय निदेशालय
हरियाणा



DIRECTORATE OF URBAN
LOCAL BODIES
HARYANA

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5. In view of above, I have been directed to request you that the above said instructions/guidelines in addition to the directions issued earlier regarding subject cited works and scope/mechanism provided in the RFP, CA be where the subject cited works are being carried out or required to be carried out in near future be followed in its true letter and spirit.
6. This issues with the approval of Additional Chief Secretary to Govt. Haryana, Urban Local Bodies Department.

Chief Engineer,
For Additional Chief Secretary to Govt. Haryana,
Urban Local Bodies Department.

CC:-

1. SS to W/ACS, ULB for kind information of W/ACS, ULB, Haryana.
2. PA to W/DULB for kind information of W/DULB.
3. Steno to CE (HQ) for kind information of CE (HQ), ULB.