

CLUSTER ULBS

“Cluster” or “GMADA Cluster” includes the Urban Local Bodies, as listed below, which together form a cluster Setting up of MSW Processing Facilities and Sanitary Landfill Facilities.

As shown below, GMADA Cluster includes the Municipal Corporation of Mohali/Sahibjada Ajit Singh Nagar and 14 Other Cluster ULBs.

“Cluster ULB” means any ULB included in GMADA Cluster as shown in the list below.

“Other Cluster ULBs” mean the ULBs in GMADA Cluster except the Municipal Corporation of Mohali.

S.No.	Concessi ng Authority	Cluster ULBs	Assured Quantity of MSW (MT, in Base Year)	Minimum Assured Quantity of MSW (MT, in Base Year)	Respective ULB’s Obligated Quantity (MT in Base Year)
1	Municipal Corporation of Mohali	Municipal Corporation of Sahibjada Ajit Singh Nagar (Mohali)	112	90	134
2		Rupnagar- Municipal Council of Rupnagar	25	20	30
3		Morninda- Municipal Council of Morinda	8	6	10
4		Gobindgarh- Municipal Council of Gobindgarh	33	26	40
5		Sirhind- Municipal Council of Sirhind/Fatehgarh Sahib	20	16	24
6		Bassi Pathana-Municipal Council of BassiPathana	7	6	8
7		Kharar-Municipal Council of Kharar	43	34	52
8		Kurali-Municipal Council of Kurali	12	10	14
9		Zirakpur-Municipal Council of Zirakpur	87	70	104
10		DeraBassi-Municipal Council of deraBassi	10	8	12
11		NayaGaon-Nagar Panchayat of NayaGaon	21	17	25
12		Banur-Municipal Council of Banaur	6	5	7
13		Rajpura-Municipal Council of Rajpura	40	32	48
14		Chamkaur Sahib-Nagar Panchayat of Chamkaur Sahib	5	4	6
15		Lalru-Municipal Council of Lalru	7	6	8
		TOTAL	436	350	522
					Obligated Quantity of MSW =

Note(s) :

- The Assured Quantity of MSW will increase by 1.5% per annum, starting from base year 2017.
- Obligated Quantity of MSW (in Base year) = 523.2 TPD

MSW PROCESSING AND SCIENTIFIC DISPOSAL SYSTEM

The Project includes processing and scientific disposal of MSW of MSW Supply Area and Authority Supply Area.

The details of MSW processing and scientific disposal system to be developed for the Project are as below:

1.0 Project Facilities

“**Project Facilities**” means the physical infrastructure to be created by the Concessionaire to carry out the activities included in its Scope of Work. The Project Facilities shall be as given below. Technical Specifications of these Project Facilities have been given in **Annexure 3**:

i. Processing Facilities

Processing Facilities shall mean the infrastructure to be created for processing of MSW prior to its final disposal at Sanitary Landfill Unit.

Processing Facilities for the Project shall be developed at Site indicated in **Annexure 5**. More details related to the Site are available in **Annexure 5**. The Processing Facilities shall be of a capacity that is able to process the MSW generated from all Cluster ULBs during the Term of the Agreement.

ii. Sanitary Landfill Unit for disposal of Residual Inert Matter

Sanitary Landfill Facility shall be developed at the P&D Site indicated in **Annexure 5** for disposal of processing rejects and Residual inert Matter.

SCOPE OF WORK

3.1 Scope of Work

The broad scope of the project shall mean work including but not limited to the following in accordance with Solid Waste Handling Rules 2016:

- a) Setting up of Processing facilities (“Processing Facilities”) which will process MSW/ Solid Waste from Cluster ULBs;
- b) To construct and operate the Sanitary Landfill Facility at designated Site as per **Annexure 5**, during the Concession Period, as per the specifications given in Solid Waste Management Rules 2016;
- c) To process MSW at the Processing Facilities. In this regard, it is to be ensured that MSW parameters and other Performance Parameters are met in all seasons so as to meet the stipulations under Solid Waste Management Rules 2016.. .
- d) To transport and dispose-off the inert matter/Residual Inert Matter/processing rejects from Processing Facilities or elsewhere to the Sanitary Landfill Facility, subject to the same meeting the specified norms;

3.2 Technical Specifications

Project Facilities shall be adequately designed to meet minimum criteria as per Applicable Laws and Solid Waste Management Rules 2016 and should be able to cater to scope of the Project specifically including, but not limited to the activities herein-mentioned below:

- (1) Weigh Bridge Facility;
- (2) MSW storage facility ;
- (3) MSW Processing Facilities;
- (4) Sanitary Landfill Facility with reject fill area and contours (base and top), surface water control works, onsite roads and structures, liner system, leachate collection system, treatment and disposal system, landfill gas control work and final cover design;
- (5) Monitoring facilities for ground water, leachate, surface water and air emissions
- (6) Analytical Laboratory for MSW characterization ,water, effluent quality and environmental monitoring parameters;
- (7) Contingency plan for leachate control;
- (8) Site closure and Post Closure Activities;
- (9) Ancillary facilities and utilities like administration building, approach road, water supply, sanitation, standby power, parking, vehicle cleaning facility, garage etc.

Detailed specifications for above are as follows:

3.2.1. Waste Reception Facility

The Weighbridge facility shall be provided at the Processing Facilities and Sanitary Landfill Facility Site.

The waste reception facilities shall primarily comprise of the following:

- (a) Heavy duty scale deck;
- (b) Concrete foundation, approach ramp, platforms, guardrail and traffic light system
- (c) Loads cells, and electronic digital weight indicator;
- (d) An approach road to permit two way traffic, metalled and of adequate length to permit the queuing of vehicles;
- (e) Site notice board displaying license conditions, hours of operation and site regulations;
- (f) Secure, lockable gates at the entrance to the site;
- (g) Cattle grid at the entrance to the waste reception area;
- (h) A weigh bridge of 50 ton capacity capable of weighing 30-35 vehicles per hour;
- (i) Weigh booking office with all amenities and preferably computer logging facilities;
- (j) By pass lane for non-waste vehicles and Emergency services.
- (k) The Concessionaire shall construct, operate and maintain a Weighbridge at the Site which should have suitable systems to determine the quantity of Municipal Solid Waste being received at the Processing Site. Weighment data with the date and time, should be system generated
- (l) The Concessionaire shall have video surveillance, recording and backup facility at the Processing Facilities. He will also keep the backup of video data for at least 3 months. These records are to be produced on demand of Concessioneing Authority.
- (m) The measurement equipment at the Receipt Point shall be operated and maintained by Concessionaire, at no cost to Concessioneing Authority.
- (n) The measurement equipment at the Receipt Point shall be monitored and inspected regularly to ensure its due calibration and accuracy and any errors shall be rectified immediately.
- (o) The weight of MSW, as recorded by the measurement equipment at the Receipt Point shall be recorded on a daily basis. This daily record shall be referred to as "The Daily Weight Sheet". The Daily Weight Sheet shall be final and binding on the Parties. Concessionaire shall also be liable to provide Monthly Weight Sheets (consolidated Daily Weight Sheets for a month) to Concessioneing Authority at the end of every calendar month.
- (p) Weighbridge should be periodically calibrated as per BIS/ Weight & Measures act norms.
- (q) Successful bidder should provide Vehicle No. and ownership details (MSW C&T operator appointed by MC or MC owned vehicles or MC hired vehicles) of vehicles deployed in C&T operations to municipality

In addition, the Concessionaire is free to install on its own cost, any other equipment/system/software at the weigh-bridge facility or any other Project Facility which the Concessioneing Authority feels is necessary for monitoring those operations that affect the Concessioneing Authority's interest in the Project.

3.2.2 Storage

- (1) The storage area shall be designed, constructed and operated to prevent any migration of wastes or leachate out to soil groundwater or surface water at any time and should be capable of detecting and collecting releases and leachate until the collected material is removed.
- (2) The storage at Processing Facilities should minimum meet following specifications:

- (a) Storage area must have sufficient capacity to store about 3days of MSW received at the Processing Facilities and 7 days for any byproducts made from MSW Processing.
- (b) After unloading MSW on the tipping floor/pits, it must be sprayed with herbal microbial culture to prevent further degradation and odour.
- (c) The storage building shall be completely enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g precipitation, wind, run-on).
- (d) The storage areas shall be provided with floor base free of cracks or gaps and is sufficiently impervious to contain leaks, spills and leachate.
- (e) It should be constructed of lined material that are compatible with the wastes and must have sufficient strength and thickness to support themselves, the waste contents, any personnel and heavy equipment that operate within the unit and to prevent failure.
- (f) The storage area shall be provided with adequate slope or is otherwise designed and operated to drain and remove any liquid.
- (g) The storage area shall be provided with a means to protect against the formation, accumulation and ignition of vapours in the storage area.

3.2.3 Sanitary Landfill Facility/ Sanitary Landfill Design

The Sanitary landfill design and construction shall be in conformation to the guidelines prescribed in Central Pollution Control Board and in accordance with “Solid Waste Management Rules 2016” and Manual on Municipal Solid Waste Management published by CPHEEO.

A. Liner System

- (1) Liner system shall be designed, constructed and installed to prevent percolation of waste, leachate or gas to adjacent subsurface soil or ground water or surface water. The objective of design must be that site will not cause the concentration of any contaminant to exceed the maximum allowable concentration for the contaminant in the ground water at any point on any property. The maximum allowable concentration could be the background level of that constituent in the ground water or the drinking water standards prescribed by CPCB if the background level of the constituent is below the standard.
- (2) The liner must be constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydro geologic forces, physical contact with the waste or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operations.
- (3) The liner must be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of liner due to settlement, compression or uplift.
- (4) The system shall be designed to minimum specifications listed below:
 - (a) A primary leachate collection layer of thickness 30 cm or more and coefficient of permeability in excess of 10^{-2} cm/sec;
 - (b) A primary composite liner comprising of:

- A HDPE geo-membrane of thickness 1.5 mm or more. The geo-membrane must have (a) Tensile Strength at yield >18 kN/m (b) Tensile Strength at break > 30 kN/m (c) Tear Resistance > 150 N and (d) Puncture Resistance >250N
 - A compacted clay layer of thickness 45 cm or more having coefficient of permeability of 10^{-7} cm/sec or less;
- (c) Secondary leachate collection layer also called leak detection layer of thickness 30 cm or more and coefficient of permeability in excess of 10^{-3} cm/sec;
- (d) Secondary composite liner comprising of:
- A HDPE geo-membrane of thickness 1.5 mm or more. The geo-membrane must have (a) Tensile Strength at yield >18 kN/m (b) Tensile Strength at break > 30 kN/m (c) Tear Resistance > 150 N and (d) Puncture Resistance >250N
 - A compacted clay layer of thickness 45 cm or more having coefficient of permeability of 10^{-7} cm/sec or less
- (5) The design of liner system shall meet the requirement of adequate stability at base and along the sides of the landfill and shall have adequate strength to withstand construction loads and vehicle loads;
- (6) The synthetic liners and covers shall be inspected to ensure have tight seams and joints and the absence of tears, punctures or blisters;
- (7) Soil based and mixed liners and covers shall be free of imperfections including lenses, cracks, channels, root holes or other structural non-uniformities that may cause an increase in the permeability of the liner or cover;

B. Leachate Collection and Removal System

The leachate collection and removal system shall be designed with

- (1) A bottom slope of one percent or more;
- (2) Constructed of granular drainage material with a hydraulic conductivity of 10^{-2} cm/sec or more and thickness of thirty (30) cm or more; or constructed of synthetic or geo-net drainage materials with a transmissivity of 3×10^{-4} m²/sec or more;
- (3) Constructed of materials that are chemically resistant to the waste and the leachate expected to be generated;
- (4) It should be of sufficient strength and thickness to prevent collapse under pressures exerted by the overlying wastes and cover materials or equipment used;
- (5) Designed and operated to minimize clogging during Term and Post Closure Period and provided with appropriate back flushing/backwashing arrangement;
- (6) Provided with sumps and pumps of sufficient size to collect and remove liquids in the sump to minimize the head on the bottom liner and from the sump to prevent liquids from backing up into the drainage layer;

- (7) Each unit shall have its own sump(s). The sump shall be provided with facility for measuring and recording the volume of liquids present in the sump and of liquid removed;
- (8) Leachate holding tank for temporary storage before sending for treatment;
- (9) The leachate management system shall be designed to handle maximum amount of leachate expected to be generated and meet the disposal standards prescribed by CPCB for disposal of treated leachate in the surface water body as provided in as per SWM Rules, 2016

C. Cover System:

- (1) The cover system shall be designed, constructed and installed to satisfy the following:
 - (a) Prevent infiltration of precipitation into the closed landfill
 - (b) Promote drainage of surface water accumulated on the cover
 - (c) Minimize erosion of cover
 - (d) Withstand or accommodate settlement of the cover to maintain its integrity
 - (e) Have a permeability less than or equal to the liner system
 - (f) Function with minimum maintenance for the post closure period of 25 years
- (2) The cover system shall be designed to minimum specifications listed below:
 - (a) A surface soil layer of local top soil which supports self sustaining vegetation and which has a thickness not less than 60 cm
 - (b) A drainage layer of thickness 30 cm or more having a coefficient of permeability in excess of 10^{-2} cm/sec
 - (c) A single composite barrier comprising of:
 - (i) A HDPE geomembrane of thickness 1.5 mm or more.
 - (ii) A compacted clay layer of thickness 60 cm or more having coefficient of permeability of 10^{-7} cm/sec or less.
 - (iii) A regulatory layer of thickness 30 cm having coefficient of permeability greater than 10^{-2} cm/sec with provision of gas collection system.
- (3) The design of cover system shall meet the requirement of stability of top and side slopes, able to sustain vegetative cover and shall have adequate strength to withstand load.

D. Surface Water Control System

- (1) Surface water control system shall be designed to segregate offsite surface water flow from non contaminated onsite runoff originating from non operating areas and potentially contaminated onsite runoff originating from landfill areas, material and waste storage areas and areas designed for collection, storage and treatment of leachate.
- (2) The design should in accordance with the following:
 - (a) The design of external diversion channels, ditches and conveyance structures should be sized to accommodate the peak flow generated from the higher of the 100 year design storm.

- (b) The design of all internal drainage ditches, storm sewers and conveyance structures should be sized to accommodate the peak flow generated from a twenty five (25) year design storm.

E. Monitoring Wells

The design of Monitoring Wells shall be in accordance with

- (1) Minimum five number of wells at appropriate locations in upstream and downstream of ground water flow and depth covering the various aquifers.
- (2) All monitoring wells must be cased in a manner that maintains the integrity of the monitoring well bore hole.
- (3) The casing must be screened or perforated and packed with gravel or sand, where necessary to enable collection of groundwater samples.
- (4) The annular space (i.e. space between the borehole and well casing) above the sampling depth must be sealed to prevent contamination of groundwater.

F. Post Closure Maintenance

- (a) The Concessionaire shall undertake Post Closure Maintenance involving Cover Maintenance, Inspection, Record Keeping, Leachate Management, Environmental Monitoring, Surveillance in line with following specifications
 - (i) The green cover on the top should be always intact devoid any gullies and erosion.
 - (ii) The green cover shall always be trimmed, pruned to maintain healthy growth.
 - (iii) The site shall be provided with twenty four (24) hours surveillance system.

3.3.4 Buffer Area

- (1) A fence which completely surrounds the Processing and Sanitary Landfill shall be minimum 2m height.
- (2) The buffer area is the green belt or zone located on the site between the wastefill area and site boundaries. The buffer area allows for containment attenuation and provides space around the perimeter of the waste area in which various monitoring, maintenance and environmental control activities can take place.
- (3) The Sanitary Landfill should be designed for minimum size of buffer area complying with the regulatory requirement and sufficient to ensure that potential effects of the landfilling operation do not have any unacceptable impact outside the site. The potential effects defined here include surface runoff, litter, vectors, vermins, leachate, subsurface migration of landfill gas and aesthetic effects. The buffer shall be as specified in the conditions stipulated by SPCB/CPCB/MOEF and CPHEEO Guidelines. The native species should be selected as per MoEF/CPCB guidelines.

3.3.5 Analytical Laboratory for Monitoring

The design of analytical laboratory shall be in conformation with Central Pollution Control Board specifications and specifications prescribed by National Accreditation Board for Laboratories (NABL). The Concessionaire shall accredit the laboratory within 1 year of COD-P&D.

3.2.6 Administration Office

The Administration Office shall be provided with following minimum specifications

- (1) Administration Office shall be design with minimum area of 1000 sqm;
- (2) Office shall be provided with reception, visitor's room. board room, conference room, cabins for managerial staff, adequate number of workstations, store room for records etc.

3.2.7 Support Infrastructure

The support infrastructure and ancillary facilities should at minimum meet following specifications:

- (a) The overhead and/or underground water tank with associated pumping system shall be provided to cater to 24 hours water supply requirement.
- (b) Diesel Generator set of suitable capacity conforming to norms prescribed by MoEF shall be provided for standby power supply during power cuts and power breakdowns.
- (c) Adequate lighting including high mast and signages shall be provided at appropriate places.
- (d) Access roads and internal roads shall be designed and constructed to carry truck and heavy earth moving machinery traffic.
- (e) Garage, Vehicle Cleaning Facility, Equipment Shed, and Paved Parking Facility shall be provided of adequate size meeting relevant standards.

3.2.8 Service Level Specifications

- (a) Buildings
 - (i) All elements of external and internal building fabric (including fixtures, fittings, floor, floor coverings), finishes, furniture and equipment or a services system component shall be functional, operational and satisfy the performance requirement.
 - (ii) Building fabric free from damp penetration, debris and moss growth.
 - (iii) Free from structural cracks and/ or deflection.
 - (iv) Function as intended & free from all but minor surface blemishes and wear and tear, corrosion.
 - (v) Floor/ floor covering is free from tears, scoring, cracks or any other damage that is unsightly and/ or could cause a health and safety hazard.
 - (vi) Facade beauty is maintained by timely intervention and regular painting.
- (b) Distribution System : Distribution system (including distribution equipments, protective electrical devices, fuse switches, isolators, distribution boards, cables systems for IT, Lighting, communication, safety, alarm system).

- Ratings clearly marked,
 - Fuse elements and circuit breakers mechanism in working order,
 - Contacts and connections clean and mechanically tight,
 - No overheating during normal operating loads,
 - Cable joint boxes free from compound leaks,
 - Markings and covering notices where necessary,
 - All electrical installations to comply with IS codes,
 - Wiring, fittings, fixtures, controls and safety devices shall be properly housed and fastened securely to their intended point of anchorage and labeled.
- (c) Water Systems: Pipe network and fittings shall be fastened securely to their intended points of anchorage and there shall be no drips and leaks of water from pipe network, taps, valves and/or fittings.
- (d) Public health and drainage system :
- Shall function as intended without due noise and vibration
 - All pipe network and fittings fastened securely
 - There shall be no leaks of waste and/or foul water and /or rainwater
- (e) Fire Fighting Equipment:
- Fire Safety Systems compliant with statutory regulations and service standards at all times
 - Fire extinguisher and firefighting equipment shall be maintained as per IS code
 - Fully operational within manufacturer's recommendations
 - Hydrants, sprinklers and hoses shall be at correct operating pressure and capacity
 - Pipe network free from corrosion, leaks and drips
- (f) Horticulture: Trees, Shrubs Hedges, Grassed areas, Flower Beds trimmed, pruned and /or cut to maintain healthy growth
- (g) Site Circulation Routes including pavings, paths, driveways, roads, parking area, facility entrance:
- Sound safe and even surface with no potholes or sinkings
 - Road markings are clear and complete
- (h) External Sign Posting Secure and Sound
- Be in appropriate locations
 - Highly visible both day and night
 - Offers clear and concise information
- (i) Gutter and Drains: Free from litter, leaves, weeds and extraneous material
- (j) Utilities Maintenance

- (i) Any disruption in power supply shall be rectified in six hours. Standby power supply shall be ready to be operated and should be available 24 hours. Standby power source shall be operational, secure and tested regularly.
 - (ii) Ensure utility infrastructure like water supply, effluent disposal system, communication system is maintained in fully functioning conditions
- (k) Staffing
- (i) There shall be adequate staff to manage the landfill facility
 - (ii) All staff have been vetted and approved for work in areas as appropriate

3.3 Construction Requirements of Project Facilities

- a. All Project Facility shall be constructed, installed and established including the basic and detailed engineering, design, completion, testing and commissioning in accordance with the provisions of this Agreement, including the Technical Specifications, IS Codes, Applicable Laws and Good Industry Practice.
- b. The Construction Works shall commence within the specified Compliance Date. The Concessionaire shall execute them in accordance with the Project Implementation Schedule and achieve Construction Completion by the Scheduled Project Completion Date, unless such time has been extended in accordance with provisions hereof.
- c. To carry out relevant tests for determining that the construction of the Project Facility is being undertaken in accordance with Technical Specifications, Applicable Laws and Good Industry Practice and for quality assurance
- d. All Construction Works shall be carried out with the skill, care and diligence to be expected of appropriately qualified and experienced professional designers, engineers and contractors with experience of similar nature of work
- e. To arrange good quality of materials as specified in IS codes such as bricks, cement, steel, aggregates, soil, bituminous and asphalt materials, chemicals, consumables and any other materials used in undertaking the Construction Works, as well as equipment, machinery, tools and ancillary materials such as shuttering and scaffolding, bearings, joint fillers and similar materials.
- f. To make arrangements for transport, loading and unloading, stacking and proper storage (including making sheds) for all materials and equipment.
- g. To set up fully equipped workshops and laboratory for checking and verifying the Construction Works.
- h. To prepare the Detailed Engineering Design and conduct Tests for civil or other engineering work to ensure the quality & soundness of the work relating to the Project.
- i. Toprepare documents, accounts, papers, data, books and relevant matters relating to Construction Works.

3.4 Operations and Maintenance (O&M) Requirements of Project Facilities

- a. The Concessionaire shall in consultation with the Concessioning Authority evolve not later than 60 (sixty) days before the Construction Completion Date, a manual for the operations and regular and preventive maintenance (the "O&M Manual"), and shall ensure and procure that at all times during the Operations Period, the Project Facilities are operated and maintained in a manner that it complies with the Technical Specifications.

The Concessionaire shall supply, at least one month before the Operations Date, provide 5 (five) copies of the O&M Manual to the Concessioneing Authority.

- b. The Concessionaire shall operate and maintain the Project Facilities at its cost in sound manner and if required, modify, repair or otherwise make improvements to the Project Facilities to comply with Technical Specifications, and other requirements set forth in this Agreement, Applicable Laws, Applicable Permits and Good Industry Practice. More specifically, the Concessionaire shall be responsible for undertaking maintenance works and adhering to the safety standards in accordance with the Technical Specifications.
- c. The Concessionaire shall provide at its cost all equipment, consumables and materials necessary for undertaking the operation and maintenance of the Project Facilities. Maintenance shall include regular, routine, periodic and preventive maintenance and the replacement of equipment/consumables etc. and upkeep of the Project Facilities in good order and working condition.
- d. The Concessionaire shall maintain complete and accurate records of all equipment, materials, consumables and spare parts brought on to the Project Facilities.
- e. The Concessionaire shall ensure that its staff and personnel and its Concessioneing Authority's staff and personnel are fully and comprehensively trained and competent to undertake the works and provide services under this Agreement.
- f. The Concessionaire shall develop and institute within two months of the Construction Completion Date, a quality assurance system and implement the same until the end of the Term. The quality assurance system shall involve maintenance of appropriate records, documents and data, charts, samples etc. regarding the construction and operation of the Project Facility. The Concessioneing Authority shall have the right to inspect, periodically or at random, such records, documents and data etc. and as applicable to make copies thereof, verify the samples or take measurements. The Concessionaire agrees to provide full co-operation to the Concessioneing Authority.
- g. Save and except as otherwise expressly provided in this Agreement, if the Project Facilities or any part thereof shall suffer any loss or damage during the Term, from any cause whatsoever, the Concessionaire shall, at its cost and expense rectify and remedy such loss or damage in a manner so as to make the Project Facilities conform in every respect to the Technical Specifications, quality and performance as prescribed by this Agreement.
- h. The Concessionaire shall at its cost repair, rectify, replace, remove any defects, imperfections, shortcomings or such other faults, normal or fair wear and tear excepted, in the design, detailed engineering or construction and commissioning of the Project Facilities, whether latent or patent.
- i. If the Concessionaire commences any works for rectifying any defects or deficiencies in the Project Facilities, it shall complete such works expeditiously in accordance with Good Industry Practice.
- j. The Concessionaire shall be responsible for ensuring the safety of persons, living creatures, property and the environment in the vicinity or proximity of the Site and take steps to prevent the same being adversely affected by the operations of at the Facilities.
- k. Subject to its rights and obligations herein, the Concessionaire shall, unless directed by any Government Authority to the contrary, provide non discriminatory services in the Cluster.
- l. The Concessionaire shall be responsible for the closure and post closure activities in accordance with the Technical Specifications and the Applicable Law.

3.4.1 O&M Requirements of Processing Facilities

A. General

Concessionaire shall comply with the O&M Requirements set out in this Annexure. In doing so, Concessionaire shall ensure that the MSW Processing Facilities are maintained to the Technical Specifications as set out in the Construction Requirements and also meet the other requirements, if any, set out in the Agreement.

In the design, planning and implementation of all functions associated with the operation and maintenance of the MSW Processing Facilities, Concessionaire shall take all such actions and do all such things (including without limitation, organizing itself, adopting measures and standards, executing procedures including inspection procedures, and engaging contractors, if any, agents and employees) in such manner, as will:

- a. ensure the safety of personnel deployed on and users of the MSW Processing Facilities or part thereof;
- b. ensure that sufficient odour control measures including but not limited to create buffer zone, use of herbal ,microbial culture cleaning of MSW pit atleast once in every 24 hours etc has been taken to remove unpleasant odour as far as practicable.
- c. permit unimpaired performance of statutory duties and functions of any party in relation to the MSW Processing Facilities
- d. ensure that applicable and adequate safety measures are taken;
- e. ensure that adverse effects on the environment and to the owners and occupiers of property and/or land in the vicinity of the MSW Processing Facilities, due to any of its actions, is minimized;
- f. ensure that any situation which has arisen or likely to arise on account of any accident or other Emergency is responded to as quickly as possible and its adverse effects controlled/minimized;
- g. ensure that disturbance or damage or destruction to property of third party by operations of the MSW Processing Facilities shall be minimized;
- h. ensure that data relating to the operation and maintenance of the MSW Processing Facilities shall be collected, recorded and available for inspection by Concessioning Authority.
- i. ensure that all materials used in the maintenance, repair and replacement of any of the MSW Processing Facilities shall meet the Construction Requirements;
- j. ensure that the personnel assigned by Concessionaire have the requisite qualifications and experience and are given the training necessary to enable Concessionaire meet the O&M Requirements of MSW Processing Facilities.

B. Final Products

i. Compost

Concessionaire may adopt any such process and/or methods as it considers necessary for the Processing of organic contents of MSW in order to ensure that the compost produced after such product is certified for its conformity to compost quality specified under Solid Waste Management Rules 2016.and FCO

Concessionaire shall inspect the sieving equipment once every three months and carry out any maintenance necessary to minimize wear and tear.

ii. RDF

Concessionaire may adopt any such process and/or methods as it considers necessary for the conversion of MSW into RDF in order to ensure that the RDF produced after such conversion being fit for use as fuel. Concessionaire shall evolve suitable quality parameters for the product. The RDF so produced shall be sold to the nearby cement industries or any other industries situated in or shall be used as fuel for steam generation along with supporting fuel in compliance with applicable guidelines of MNRE, GoI for generation of renewable energy with/without use of fossil fuel of any kind

iii. Any Other Product

Concessionaire may adopt combination of technologies suitable for waste-to-energy/ power, covering appropriate treatment/processing of bio-degradable and combustible waste, as per the suitable Applicable Laws and applicable guidelines of MNRE, GoI for generation of renewable energy with/without use of fossil fuel of any kind.

3.4.2 Operations and Maintenance Requirements of scientific Disposal Facility – Sanitary Landfill Facility

A. General

Concessionaire shall comply with the O&M Requirements for Sanitary Landfill as set out in this Schedule. In doing so, Concessionaire shall ensure that the Sanitary Landfill is operated and maintained to the applicable regulations, Standards and Specifications and also meet the other requirements, if any, set out in the Agreement.

In the design, planning and implementation of all works and functions associated with the construction, operation and maintenance of the Sanitary Landfill Facility, Concessionaire shall take all such actions and do all such things (including without limitation, organizing itself, adopting measures and standards, executing procedures including inspection procedures, and engaging contractors, if any, agents and employees) in such manner, as will:

- a. ensure the safety of personnel deployed on and users of the Sanitary Landfill Facility or part thereof;
- b. keep the equipment and machinery employed at the Sanitary Landfill Facility from undue deterioration and wear;
- c. permit unimpaired performance of statutory duties and functions of any party in relation to the O&M of Sanitary Landfill Facility
- d. ensure that applicable and adequate safety measures are taken;
- e. ensure that adverse effects on the environment and to the owners and occupiers of property and/or land in the vicinity of the Sanitary Landfill Facility due to any of its actions, is minimised;
- f. ensure that any situation which has arisen or likely to arise on account of any accident or other Emergency is responded to as quickly as possible and its adverse effects controlled/minimised;

- g. ensure that disturbance or damage or destruction to property of third party by operations of the Sanitary Landfill Facility is controlled/minimised;
- h. ensure that data relating to the construction, operation and maintenance of the Sanitary Landfill Facility is collected, recorded and available for inspection by the Project Engineer.
- i. ensure that all materials used in the operation, maintenance of any of the Sanitary Landfill Facility shall meet the Construction Requirements;
- j. ensure that the personnel assigned by Concessionaire have the requisite qualifications and experience and are given the training necessary to enable Concessionaire meet the O&M Requirements for Sanitary Landfill Facility.
- k. Ensure the specifications given in Solid Waste Handling Rules 2016.

B. Operations and Maintenance Manual and O&M Plans

Concessionaire shall finalize the O&M Plan and the O&M Manual for the Sanitary Landfill Facility in consultation with the Project Engineer.

i. Sampling and Testing

Unless modified with mutual consent by the Parties, the Residual Inert Matter shall be sampled and tested in the manner as set out below:

The Residual Inert Matter proposed to be taken to the Sanitary Landfill Facility shall be placed in heaps of almost uniform size of sizeable quantity. The chemist shall take ten random samples from each of these heaps. These random samples shall then be thoroughly mixed and a single random sample taken and tested as per SWM Rules, 2016.

Concessionaire shall be solely responsible for the composition of the material disposed in the Sanitary Landfill Facility.

ii. Weighment

Concessionaire shall provide for a weighbridge for weighing MSW before disposal into Sanitary Landfill Facility

Concessionaire shall not take any Residual Inert Matter into the Sanitary Landfill Facility without having obtained the "Fit for Landfilling" certificate from the Project Engineer. Concessionaire shall plan his operations in a manner such that the landfill waste is taken into the Sanitary Landfill Facility only in the daytime during normal operations or as mutually agreed upon between Nodal Officer and Concessionaire.

Concessionaire shall have to make arrangement for weighing of waste prior to disposal in Sanitary Landfill Facility at his own cost and expense. Such weighment and transport of the Residual Inert Matter shall be done only under the direct supervision of the Nodal Officer or his authorized supervisor

The procedure for weightment of the landfill waste and certification by the Nodal Officer or his authorized representative shall be as set out in the O&M Plan and the O&M Manual.

iii. **Landfill Operation**

• **Monsoon cover liner**

Concessionaire shall provide an intermediate liner or the monsoon cover liner, as per SWM Rules, 2016, to take care of the monsoon season before the onset of monsoon leaving only a temporary shed for operations during non-raining period of the day.

• **Daily Cell Cover**

On each day during the Term, Concessionaire shall compact the landfill waste and cover the same ("Daily Cell Cover") in the manner as specified in SWM Rules, 2016.

• **Landfill Closure and Final Cover**

- Concessionaire shall demonstrate the actual stability by considering the strength parameters of compacted inert material.
- Concessionaire shall inform the Project Engineer at least one year in advance about the exhaustion of landfill, providing the following details:
 - The estimated quantity of Landfill Waste that can be Land filled in future
 - The plan for laying the final cover ("Final Cover") for the Landfill Facility
- Concessionaire shall provide the Final Cover in accordance with SWM Rules, 2016 or amendment thereto.

• **Vegetative cover**

- Concessionaire shall, in accordance with MSW Rules ensure the provision of a vegetative cover after layering of the Final Cover.
- The selection of the varieties of plants /grass to be planted shall be decided in consultation with the Project Engineer and shall form part of the Post Closure Maintenance Plan.

iv. **Leachate Collection and Removal System ("LCRS")**

- Concessionaire shall ensure that there is no run-on/ run-off to and from the facility.
- Concessionaire shall ensure that all leachate drains are free from clogging and allows unobstructed flow of leachate.
- Only treated leachate to be let out from the Site(s), which shall meet the standards prescribed under SWM Rules, 2016.

v. **Leachate Monitoring:**

Concessionaire shall develop and undertake leachate monitoring program that will compliment the ground water and surface water monitoring program. The leachate monitoring shall be undertaken for the parameters at a frequency listed in SWM Rules, 2016

vi. **Provisions for Landfill Gas Recovery / Venting System**

Concessionaire shall examine the requirement of providing Landfill Gas Recovery / Venting System in consultation with the Project Engineer and if found necessary make suitable provisions to avoid any potential hazard to the environment. The SWM Rules, 2016 and other applicable guidelines prevailing guidelines prevent the disposal of bio-degradable waste into landfills.

However, based on the level of segregation achieved and waste characterizes disposed off into landfill, the requirement of gas recovery / venting system may be designed.

Concessionaire may also consider the requirements for getting CDM benefits, while planning for the above.

vii. **Closure and Post-Closure Maintenance Plan**

- The Concessionaire shall close the facility in manner that
 - (i) minimizes the need for further maintenance
 - (ii) controls, minimizes or eliminate, to the extent necessary to protect human health and the environment, post closure escape of pollutants constituents, leachate, contaminated runoff, or MSW decomposition products to the ground or surface waters or to the atmosphere
- The Concessionaire shall develop and prepare closure plan and obtain the necessary approval from regulatory authorities. The closure plan shall be prepared in accordance with the specifications provided in SWM Rules, 2016Complies with closure requirements of regulatory authorities and Technical Specifications.
- Sanitary Landfill Facility shall be maintained in accordance with the Post-Closure Maintenance Plan, during the Post Closure Period, at the cost and expenses of Concessionaire, with funds from Post Closure Maintenance Account.
- Post-closure maintenance shall be in accordance with Applicable Laws and shall involve periodical inspections, of at least once every three months, of the Sanitary Landfill Facility to monitor land surface care, leachate collection, and methane control by way of flaring and to maintain flaring equipment.
- Post-closure maintenance shall also involve investigations for detection of adverse environmental impacts, if any, and implementation of measures for mitigation of the same.
- Post Closure Period of the facility shall begin after completion of closure of the unit and continue for 20 years after that date and must at the minimum involve:
 - (i) Maintenance of the integrity of the liner and cover system
 - (ii) Leachate collection, treatment and disposal
 - (iii) Monitoring of ground water and emissions
 - (iv) Provision of security
 - (v) Inspection and record keeping
 - (vi) Insurance
 - (vii) Remedial system operations (if required)

viii. **Environment Monitoring System**

- The Environmental Monitoring shall be carried out as stipulated in the SWM Rules, 2016, Manual on Municipal Solid Waste Management published by CPHEEO and other application regulations. The monitoring schedule, parameters and locations are to be detailed in the O&M manual to be prepared by the Concessionaire.
- Concessionaire shall provide the instruments/equipment required for carrying out the environmental monitoring tests as per the above requirements.

3.4.3Mandatory Facilities

Concessionaire shall, unless suitably modified in the O&M Plan and/or the O&M Manual, operate and maintain the mandatory facilities in accordance with acceptable standards. The

Manual shall cover the various operational aspects which could be exhaustive but shall include the following:

- Quality Control Laboratory
- Internal Roads
- Lighting and other electrical works
- WeighBridge
- Waste Receipt
- Waste Inspection
- Waste Weighing
- Waste Acceptance
- Waste Unloading
- Vehicle washing system
- Waste Placement and Compaction
- Landfill Machinery and their use, O&M issues etc
- Storm Water Drainage System
- Leachate Collection and Drainage System
- Leachate Treatment Plant
- Water Supply System

3.4.4 Routine Maintenance Standards

In order to ensure smooth and uninterrupted operations, routine maintenance of the Project Facilities shall include but not be limited to the following:

- a) prompt repairs of the weigh-bridge, windrow platforms (in case of Compost plant constructed), leachate collection drainage and treatment system, electrical items, drains, internal roads, sieving machinery, lighting and fencing;
- b) replacement of equipment/consumables, horticultural maintenance and repairs to equipment, structures and other civil works which are part of the Project Facilities;
- c) maintaining the shape, scope, full cross-section of the storm water drainage system and leachate collection and drainage system;
- d) keeping the Project Facilities in a clean, tidy and orderly condition and taking all practical measures to prevent damage to the Project Facilities or any other property on or near the Site (s);
- e) undertaking maintenance works in accordance with the O&M Plan and O&M Manual;
- f) preventing, with the assistance of law enforcement agencies, where necessary, any unauthorized entry to and exit from and any encroachments including any encroachments on the Site (s);
- g) taking all reasonable measures for the safety of all the workmen, material, supplies and equipment brought to the Site (s). Explosives, if any, shall be stored, transported and disposed of by the Concessionaire in accordance with Applicable Permits.

The following standards in order of preference shall be adopted in consultation with the Project Engineer, unless otherwise specified:

- SWM Rules, 2016 Manual on Municipal Solid Waste Management published by CPHEEO
- Any other standards specified by statute and Applicable Laws
- Bureau of Indian Standards (BIS)
- Any other standard acceptable international / national guidelines, procedures etc.

Concessionaire, for the purpose of routine maintenance shall, in consultation with the Project Engineer, set forth such criteria as to conform to good international standards and Good Industry Practice for sound maintenance of the Project Facilities.

Concessionaire shall regularly carry out the necessary preventive maintenance activities for the Project Facilities to ensure adherence to the Construction Requirements/ specifications.

3.4.5 Emergency Maintenance

The Emergency Response Protocol (“ERP”) shall be developed by Concessionaire in line with Factories Act. This shall be a part of the O&M Manual developed by Concessionaire.

The ERP shall set out steps to be taken and measures to be adopted by Concessionaire in responding to dealing with Emergency including those situations related to vehicle accidents involving personal injuries or fatalities, property damage and force majeure as follows:

- (a) In the event of an Emergency, Concessionaire shall immediately carry out an inspection of the area affected by the Emergency. Where Emergency has necessitated closure of the Project Facilities or part thereof, Concessionaire shall promptly carry out any repair works necessary to restore the Project Facilities to safe condition and in any event shall carry out such works before the affected area of the Project Facilities is re-opened to for normal operations.
- (b) Concessionaire shall ensure that sufficient staff, plant, equipment and materials, including without limitation medical assistance are available to respond to Emergency within reasonable period at all times during the Term.

In case of Emergency, Concessionaire shall

- (a) carry out such Emergency maintenance and repairs as may be required to repair the damages and where required under the supervision of the police and other Government Authority in order to ensure that the Project Facilities are returned to normal operating standards as quickly as possible
- (b) take all necessary measures to minimize pollution in accordance with the procedure specified in the O&M Plan/ Environmental Management Plan.
- (c) Submit a report to Project engineer from time to time.

3.4.6 Equipment Maintenance

- (a) Concessionaire shall implement and maintain an auditable asset management system for all equipment devices within the Project Facility. As minimum a system shall record the following information on each device:
 - (i) Name of equipment
 - (ii) Manufacturer and/or Supplier
 - (iii) Serial No and other unique identifier
 - (iv) Warranty and/or guarantee information
 - (v) Acquisition Date
 - (vi) Cost of Equipment
 - (vii) Installation Date
 - (viii) Life of Equipment
 - (ix) Recommended Replacement Date
 - (x) Depreciation per year
 - (xi) Servicing and/or calibration requirements and timetable
 - (xii) Associated hazards and safety bulletins and notices

- (xiii) Current location
 - (xiv) Current condition
 - (xv) Repair and maintenance history
- (b) Concessionaire shall undertake planned and reactive maintenance of equipment to ensure that equipment is safe, accurate and working to optimum performance and to achieve maximum availability and continuity of services by maintaining standards set by equipment manufacturer
 - (c) The maintenance shall include:
 - (i) Planned protective maintenance designed to keep unplanned breakdown and disruptions minimum
 - (ii) Breakdown maintenance providing rectification or arranging similar system to provide continuity of services
 - (iii) Implement and maintain a planned replacement system of time/performance expired asset to maintain quality of performance and service availability
 - (d) Concessionaire shall repair and maintain all equipment in accordance with manufacturer's recommendations. It shall ensure that equipments are calibrated and certified and maintain necessary records of all calibration and test exercises with certificates. It shall provide data on equipment performance etc. on request and at regular interval. Concessionaire shall maintain logbook of planned and reactive maintenance

3.4.7 Staffing and Personnel Training

- (a) Concessionaire shall make provision of adequate staff required for construction, operation, maintenance and management of facility as prescribed in the staffing plan
- (b) Concessionaire shall ensure that all Personnel had received training related to the MSW management. At a minimum, the training should focus on effective response to emergencies. The training program must be completed 2 months from a date worker is newly employed. Training-related documents and records must be kept at the facility. These must include a job title for each person and the name of the employee filling that position, and a written job description

3.4.8 Security

Concessionaire shall make a provision of adequate security to prevent accidental entry and minimize the possibility of unauthorized entry of people or livestock onto the active portion of the facility.

- (a) A 24-hour surveillance system which continuously monitors and controls entry onto the facility (e.g. guards)
- (b) A artificial or natural barrier which completely surrounds the facility (e.g., fence), and a means to control entry to the active portion at all times via gates or entrances
- (c) A sign reading: "Danger — Unauthorized Personnel Keep Out" at each entrance to the facility. The sign must be written in English, Hindi and Punjabi. It must be legible from a distance of 25 feet. Alternate language conveying the same message may be used

3.4.9 Environmental Management Plan

Concessionaire shall develop Environmental Management Plan for mitigating the adverse impacts during construction and operation period and get Environmental Clearance from Ministry of Environment & Forest (MoEF) as per Role & Responsibilities set out in Annexure-7

3.4.10 Emergency Preparedness and Prevention

- (a) The preparedness and prevention standards are intended to minimize and prevent Emergency situations at Project Facilities. Concessionaire shall ensure that facility is operated and maintained in a manner that minimizes the possibility of a fire, explosion, or any unplanned sudden or non sudden release of Pollutants constituents to air, soil, or surface water. Concessionaire shall provide and maintain requisite equipment including fire fighting and adequate water supply, internal communication system and alarms, minimum aisle space, and provisions for contacting local authorities. Local authorities include police, fire department, hospitals, and Emergency response teams. Where more than one local authority is involved, a lead authority must be designated. Where state or local authorities decline to enter into such arrangements, the Concessionaire must document the refusal in the operating record
- (b) Concessionaire shall test and maintain all facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, to assure its proper operation in time of Emergency
- (c) Concessionaire shall prepare and maintain Emergency preparedness plan for facility and train all the personnel working in the facility in order to respond appropriately in such situation and carry out these plans in the event of an actual Emergency.
- (d) The Emergency plan should describes arrangements with local authorities and lists names, addresses, and telephone numbers of all people qualified to act as Emergency coordinators. If more than one Emergency coordinator is listed, a primary contact must be designated. The plan must include a list of all Emergency equipment and evacuation plans, where applicable
- (e) Concessionaire shall review and amend the plan when the applicable regulations are revised, the plan fails in an Emergency, or there are changes to the facility, the list of Emergency coordinators, or the list of Emergency equipment

3.4.11 Recordkeeping and Reporting:

A. Reporting

Concessionaire shall ensure that Concessioneing Authority is provided with adequate information and forewarned of any event or any other matter affecting the Project Facilities to enable them to control/minimize any adverse consequences.

The frequency and formats for the reports with respect to MSW, received MSW processed, rejects generated and disposed off to Sanitary Landfill Facility , , RDF, compost, produced / sold - and any other relevant data like usage of supporting fuels if any, to be submitted and form part of the O&M Plan and O&M Manual.

B. Operating Records

- (a) The operating record also must include

- (i) MSW characterization results
- (ii) Details of emergencies requiring contingency plan implementation
- (iii) Inspection results
- (iv) Monitoring data
- (v) Authorisation Notices

(b) Annual Report

Annual Reports must be filed with the State Pollution Control Board by March 1 of each year, covering the facility's activities for the previous year

(c) Additional Reports

Other reports that must be made to the Concessioneing Authority include, but are not limited to, reports of releases, fires and explosions, groundwater contamination and monitoring data, and facility closure

C. Record Availability

All records and plans must be kept at the facility and furnished upon request, and made available at all reasonable times for inspection by Concessioneing Authority When a facility certifies closure, a copy of records of waste disposal locations and quantities shall be submitted to the Concessioneing Authority and any other competent authority if required

3.4.12 Management Information System

The Concessioneaire shall establish the MSW Management Information System for maintaining records, waste inventory, material inventory, maintenance records, billing and accounting, sampling and analysis records, environmental monitoring. The Concessioneaire shall use the statistical software like SPSS for statistical analysis of environmental monitoring data.

3.4.13 Testing and Inspection

Notwithstanding any provisions of this Agreement and without prejudice to any of the other rights vested under the provisions hereof, the Concessioneing Authority or and any Person authorised by it shall have the right during the Term at all reasonable times and upon reasonable notice to inspect the Project Facility, the documents, accounts, papers, data, books and relevant matters relating to the implementation of the Project to witness and observe the status and functioning of the Facility and to confirm compliance of the Concessioneaire with the provisions of this Agreement. The Concessioneaire shall co-operate in every possible manner with such persons and allow them access to every part of the ProjectFacility and to make copies of the documents and records.

The Concessioneing Authority shall also have the right, without prejudice to the aforesaid, to carry out surprise checks on the records, operations and working of the Concessioneaire, to take or cause samples of MSW etc. to be taken and to conduct or cause technical audits of the Works, including without limitation of the materials and consumables used, the stabilization and other processes carried out or as may otherwise be necessary to confirm and ensure compliance with the provisions of this Agreement, the Applicable Laws, terms of Applicable Permits, guidelines and Good Industry Practice.

Annexure-4

DRAFT WASTE SUPPLY AGREEMENT

A. LAND AND SITE DETAILS

Name of City/Site	Project Facility	Approx. Area (In acres)	Land Provided by (Land ULB)
Village Smagauli * (Near Dear Bassi)	Processing and SLF Facility	50Acres	Mohali Municipal Corporation

DRAFT LAND LEASE AGREEMENT

Project Site Lease Deed/Processing Facilities Site Lease Deed

This **LEASE AGREEMENT** made on the _____ day of _____ in the year Two Thousand and _____

BETWEEN

Municipal Corporation/Council of _____, a statutory body constituted under the Punjab Municipal Act _____, of year _____, and having its office at _____, (hereinafter referred to as "**the Lessor**") which expression shall unless repugnant to the context thereof, include its successors & assigns)

AND

Concessionaire, a company incorporated under the Companies Act, 2013 and having its registered office at _____ (hereinafter referred to as "**Lessee**" which expression shall unless it be repugnant to the subject or context be deemed to include its successors and permitted assigns).

WHEREAS

- A. The Municipal Corporation/Council of _____ is desirous of improving its municipal solid waste (MSW) management and disposal capabilities in order to enable the due discharge of its functions under the Municipal Solid Wastes (Management and Handling) Rules, 2000 framed by the Government of India under the Environment (Protection) Act, 1986 (Act 29 of 1986) and including any statutory amendments / modifications thereto or re-enactments thereof, for the time being in force from time to time] and for that purpose has proposed to develop an MSW Management System or Project for GMADA. To carry out MSW Management activities in GMADA and to develop Processing Facilities as a part of Integrated MSW Management System for GMADA by the Lessee, Municipal Corporation of Mohali (Concessions Authority) has entered into a Concession Agreement dated _____ with M/s _____, ("**Concessionaire**"), under which it has authorized the Concessionaire to implement the Project.
- B. The Municipal Corporation/Council of _____ in order to enable the due implementation of the Project for GMADA and to discharge its obligations under the Concession Agreement signed with Concessions Authority, is hereby providing the Lessee (the Concessionaire under the Concession Agreement), by way of this Lease Agreement ("**this Agreement**"), the Demised Premises (more particularly delineated in Schedule A hereto and shown in the Site map attached thereto) to setup _____ for the purposes of implementing the Project for Mohali and constructing, operating and maintaining the Project Site (s) and Processing Facilities Sites as a part of Project Facilities on the Demised Premises, on the terms and conditions and subject to the covenants and stipulations hereinafter contained.

NOW THIS INDENTURE OF LEASE WITNESSETH AS FOLLOWS:

- 1. The Lessor hereby leases the Demised premises to the Lessee for a period commencing from the date of execution and co-terminus with Concession Period ("**Term**"). This Agreement is to be read, for any interpretation, together with the provisions of the Concession Agreement.

2. The terms that are used but not defined herein shall have the same meaning as given to them in the Concession Agreement.
3. In consideration of the Lessee undertaking to implement the Project in accordance with the provisions of the Concession Agreement and undertaking to pay the lease payment stipulated in Clause 4 below; the Lessor hereby demises to the Lessee, all the land (together with any physical structures existing thereon) which is described, delineated and shown in the **Schedule A** hereto (the "**Demised Premises**"), to hold the said Demised Premises, without interruption or interference together with the full and free right and liberty of way and passage and other rights in relation thereto, for as long as the Concession Agreement does not lapse due to expiry of its term or is not terminated earlier in accordance with the provisions thereof. The term of this Agreement shall be co-terminus with the Concession Agreement. The Lessor hereby agrees and authorizes the construction, operation and maintenance of the Processing Facilities site and other Project Facilities, if any, on the Demised Premises in accordance with the terms of the Concession Agreement.
4. In consideration of the transfer of the Demised Premises under this Agreement, the Lessor shall, effective from the date of handover of the possession of the Demised Premises to the Lessee, receive a rent of Rupee one per square meter per annum payable on or before the 10th day of the first calendar month in each year *provided however*, the lease payment shall be paid in advance for a period of Three (3) years and thereafter in advance for such period(s) of time as the Lessee may deem fit. The Lessor undertakes and assures the Lessee that the lease payment for the Demised Premises shall remain fixed for the entire period that this Agreement remains valid and binding.
5. The Demised Premises are being vested with the Lessee, under this Agreement, free from any Encumbrances (other than the existing physical structures thereon which has been inspected by the Lessee and agreed to be taken over in accordance with the terms of This Agreement and the Concession Agreement), whether legal or physical in nature. At any time during the term of this Agreement if the Lessee discovers any Encumbrances upon or under the Demised Premises which materially adversely affect its rights in relation to the Demised Premises/the Project, it shall notify the Lessor, which shall, within twenty one (21) days from the receipt of the notice, either remove or cause to be removed such encumbrances at its own cost. In the event that the Lessor fails to remove such encumbrances within twenty one (21) days from the notice thereof, the Lessee may remove or cause to be removed such encumbrance and the costs and expenses or consequential liabilities incurred in respect thereof shall be reimbursed to the Lessee by the Lessor.
6. The Demised Premises are being vested with the Lessee, under this Agreement only for the purposes of the Project, including for the purposes of developing, establishing, designing, constructing, operating, and maintaining the Processing Facilities Site, which the Lessor is desirous of being constructed, operated and maintained on the Demised Premises for the purposes of enabling the Project activities in accordance with the Concession Agreement.
7. The Lessor hereby authorizes the Lessee, to construct, erect, own, operate and maintain any superstructure, facility or any movable or immovable structures constituting the Processing Facilities Site on the Demised Premises and for that purpose also remove, renovate, use or demolish any structures that may be existing on the Demised Premises as of the date of this Agreement. The Lessor hereby agrees that the construction, operation and maintenance of the Processing Facilities Site at the Demised Premises and the receipt, storage and

Transport/processing of MSW at the Demised Premises is being undertaken pursuant to the Concession Agreement granted by it and for the purposes of enabling the Lessor to discharge its functions of managing, processing and disposing MSW of the entire Cluster.

8. The Lessee agrees that it is not authorized to create any Encumbrance over the Project Facility constructed on the Demised Premises and the Demised Premises.
9. The Lessor hereby covenants and assures the Lessee that:
 - (a) all the land comprising the Site is permitted and duly authorized and earmarked for purposes of establishment, construction, operation and maintenance of the Project Site (s) and Processing Facilities Site as a part of the Project Facilities;
 - (b) the Site is free from any encroachment or encumbrances whatsoever and is not subject to any acquisition or other legal proceedings by any authority, body or government nor is any claim of any third party subsisting in respect thereof or relating thereto;
 - (c) Lessor is the owner of the lands constituting the Demised Premises and it shall, in that capacity, defend or satisfy all actions or claims against the use of the Demised Premises for the Project;
 - (d) it shall not interfere with or impede in any manner or otherwise limit, restrict or impose any conditions or restrictions on the complete, free and full enjoyment and use of the Demised Premises for the purposes of the Project in accordance with the provisions of the Concession Agreement;
 - (e) it shall not interfere in or impede in any manner or otherwise limit, restrict or impose conditions in relation: (i) to the construction, operation and maintenance of the Processing Facilities Site; (ii) the implementation of the Project by the Lessee and (iii) the possession, control and use, by the Lessee of the Demised Premises and Processing Facilities Site;
 - (f) It shall enter into appropriate further documentation or additional writings as the Lessee or the Lenders may reasonably require to give effect to the provisions of this Agreement and the Financing Agreements;
 - (g) there is no litigation, claim, demand or any proceedings (whether administrative, legal or quasi judicial) pending before any authority in respect of the Demised Premises or its use for the purposes of managing, processing and disposing MSW; and
 - (h) the Lessee shall have complete, lawful and uninterrupted, possession, control and use of the Demised Premises.
10. The Lessee hereby covenants with the Lessor as follows:
 - (a) That it shall implement the Project Facility as a part of Project for GMADA in accordance with the Concession Agreement; and
 - (b) that it shall observe and perform all terms, covenants, conditions and stipulations of this Agreement.
11. Lessor has requisite right and authority to lease the Site to Lessee for the Term of this Agreement for the purposes of the Project on the terms and conditions of this Agreement and further that Lessee shall have full, free and uninterrupted peaceful Vacant Possession, enjoyment/ occupation and use of the Demised Premises throughout the Term, without any obstruction interference or disturbance or claim whatsoever from the Lessor or from any person claiming through under or in trust for Lessor or from any third person whomsoever. Lessor shall keep Lessee fully indemnified and harmless against any claims or demands from any Person claiming right, title or interest to or in the Demised Premises or any part thereof or challenging the validity of the usage of the

Demised Premises for the Project or challenging the validity of this Agreement, as also against any actions, proceedings, damages, losses and expenses caused to Lessee as a result or in consequence of any such claims or demands as aforesaid.

12. Otherwise as expressly provided in this Agreement no assignment of this Agreement or any rights or duties hereunder shall be made in whole or in part by any Party without the written consent of the other Party and in the event of any assignment the assignee shall assume the duties and liabilities of the assignor.
13. Otherwise an expressly provided in this Agreement no mortgage of leasehold interest shall be created of the land/Site(s) under this Agreement in whole or part for obtaining term loan to finance the Project without the written consent of lessor.
14. The Lessor hereby assures and represents to the Lessee that the vesting of the Demised Premises under this Agreement shall be irrevocable for as long as the Concession Agreement remains in force and the Lessor shall not terminate or seek to terminate this Agreement except upon the expiry or early termination of the Concession Agreement. The Parties hereby agree that on the expiry or termination of the Concession Agreement the Concessionaire shall hand back to the Lessor or its nominated agency free of cost, the vacant and peaceful possession of the Demised Premises in accordance with the provisions of the Concession Agreement.
15. Any disputes and/or differences arising between the Parties, in relation to or under this Agreement will be resolved through arbitration in accordance with the relevant provision of the Concession Agreement as per provisions of the Arbitration and Conciliation Act, 1996. The governing law of the arbitration shall be Indian law.

IN WITNESS WHEREOF the Parties have affixed therein and sealed to this Lease Agreement the day and year first hereinabove written:

SIGN SIGNED, SEALED AND DELIVERED IN THE NAME AND ON BEHALF OF THE LESSOR THROUGH:	
SIGNED, SEALED AND DELIVERED BY LESSEE THROUGH ITS AUTHORISED SIGNATORY IN PRESENCE OF:	

**SCHEDULE A
DEMISED PREMISES
(With Site Map)**

These maps will be provided at the time of signing of this Agreement

DEFAULTS DURING OPERATION PERIOD**A. Concessionaire Default During Operations Period****1. Processing of MSW:**

- a) Concessionaire may suspend operational activities of one or more components of Processing Facilities, if required, for undertaking maintenance or repair of any of components of Processing Facilities. However such planned suspension of Processing Facilities along with any unscheduled suspension of part or whole of the Processing facilities shall not exceed (seven) 7 consecutive days and total of (thirty) 30 days in any Financial Year. Penalty shall be applicable for suspension of operations/ processing of waste as defined in Annexure-18 for 8th consecutive day onwards till 14th consecutive day and up to additional (fifteen) 15 days in the Financial year. If consecutive days exceed (fourteen) 14 or total number of such days within any Financial Year exceeds (forty five) 45, it shall result into Concessionaire's Event of Default.
- b) Concessionaire shall however inform Concessioneing Authority or Project Engineer at least one week in advance of any planned repair or maintenance work of any of the processing facilities that may result in the suspension of the operations of the processing plant or a reduction in the capacity of the plant to process the MSW provided however, no such information would be required in the event Emergency or accident or any such unforeseeable event.
- c) Concessionaire shall undertake the operation activities of Processing & Disposal (P&D) of MSW from entire Cluster to meet all the Performance Parameters set out in **Annexure 17**.
- d) During such periods, the Concessioneing Authority shall continue to deliver the MSW at the Receipt point. During this period the Concessionaire shall temporarily stored the MSW at the Site and will be processed later.
- e) Concessionaire shall not dispose off Residual Inert Matter/ processing rejects at the landfill site if such Residual Inert Matter/processing rejects contain more than 10 % of organic contents and shall carry out relevant Tests and Land filling operations in accordance with O&M Requirements and to meet all the Performance Parameter set out in **Annexure 17**.

APPLICABLE APPROVALS & RESPONSIBILITIES
Indicative List of Approvals / Clearances*

S. No	Approval / Clearance	Application to be filed by	Responsibility to obtain clearance
1.	EIA Clearance from SEIAA	Obtained	-
2.	Site Authorization under MSW Rules from Punjab Pollution Control Board. (PPCB)	Obtained	-
3.	Chimney Height Clearance from Airport Authority of India, if required.	obtained	Concessionaire (Concessioneing Authority/DoLG would provide facilitation)
4.	Consent to Establish under Air and Water Act from PCBA	Concessionaire	Concessionaire (Concessioneing Authority/DoLG would provide facilitation)
5.	Clearance from Groundwater Board, if required	Concessionaire	Concessionaire (Concessioneing Authority/DoLG would provide facilitation)
6.	Tie-up for marketing of products produced from the facility, which may be Refuse Derived fuel, compost/manure, etc.	Concessionaire	Concessionaire
7.	Consent to Operate under Air and Water Act from PPCB	Concessionaire	Concessionaire

DATA SHEET
Data Sheet – Other relevant details

Annual Land Lease rental:	Re. 1 per sq.m
Construction period	365 days (max) from COD P&D: For RDF Plant, Compost Plant and Recycling Unit or for any other Processing Facilities except Power. For Power plant : 600 days (max)
Concession Period:	25 years from the Appointed Date, unless earlier terminated in terms of Concession Agreement
Estimated Total Project Cost as per given Detailed Project Report	Rs. 720,808,478 (excluding Power Plant) Rs. 1,237,924,056 (including Power Plant, applicable in case if the bidder proposes power plant/incineration in its Technical Proposal)
Language:	English
Currency:	Indian Rupees (INR)
Bid Security:	Rs. 125 Million
Performance Security:	Rs. 620 Million
Address of Concessioneing Authority:	Municipal Corporation of Mohali_____Punjab Phone No....., Tele Fax: E-mail:
Address of Concessionaire:	M/s _____ Phone No....., Tele Fax: E-mail:
Address of Confirming Party:	Department of Local Government (DLG) _____ Punjab, Phone No....., Tele Fax: E-mail:
Address of Deputy Director of Region (DDR):	_____) Punjab Phone No.....,Tele Fax: E-mail:
Validity of PBG(s) to IIDC Ltd.	1. First PBG of value 10% of Project Development Fees – validity 18 months from Appointed Date. 2. Second PBG of value 10% of Project Development Fees- validity 24months. (to be extended by at least two months at a time if COD- P&D is delayed beyond 24months from Appointed Date)

PERFORMANCE BANK SECURITIES

9A

**FORMAT OF CONSTRUCTION PERFORMANCE SECURITY (UNCONDITIONAL) IN
FAVOUR OF CONCESSIONING AUTHORITY**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. Foreign entities submitting Bids are required to follow the applicable law in their country)

In consideration of the M/s _____ [insert name of Selected bidder] (through M/s _____ "Concessionaire") agreeing to undertake the obligations under the Letter of Intent dated _____ (the "Letter of Intent" or "LOP" issued by Department of Local Government, Government of Punjab (DoLG) and the Concession Agreement to be executed between M/s _____ (insert name of Shareholder of _____), M/s _____ (insert name of Successful Bidder) and M/s _____ "Concessionaire") and other RFP Project Documents, regarding setting up an "Setting up of Municipal Solid Waste Processing Facilities and Scientific Landfill Facility (SLF) " or "Project" for GMADA in Punjab, the _____ [insert name of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to Municipal Corporation of Mohali herein after refer as Concessioning Authority ("MCM") at _____ (insert name of city) forthwith on demand in writing from MCM or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees (Rupees only), on behalf of M/s. _____ [insert name of Successful bidder].

This Security shall be valid and binding on this Bank up to and including _____ and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Security is restricted to Rs. _____ (Rs. _____ only). Our Security shall remain in force until _____. The MCM shall be entitled to invoke this Security till _____ [Insert date which is thirty (30) days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the MCM shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by the MCM, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the MCM.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by M/s _____ [insert name of Successful bidder] and M/s

_____”Concessionaire”) and/or any other person. The Guarantor Bank shall not require the MCM to justify the invocation of this BANK SECURITY, nor shall the Guarantor Bank have any recourse against the MCM in respect of any payment made hereunder

This BANK SECURITY shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK SECURITY has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK SECURITY shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK SECURITY shall be a primary obligation of the Guarantor Bank and accordingly the MC_____ shall not be obliged before enforcing this BANK SECURITY to take any action in any court or arbitral proceedings against the M/s _____”Concessionaire”) or M/s _____ [insert name of Successful bidder], to make any claim against or any demand on M/s _____ Waste Processing Company Private Limited or M/s _____ [insert name of Successful bidder] or to give any notice to M/s _____ _____”Concessionaire”) or M/s _____ [insert name of Selected bidder] or to enforce any security held by the MCM or to exercise, levy or enforce any distress, diligence or other process against M/s _____”Concessionaire”) or M/s _____ [insert name of Selected bidder].

The Guarantor Bank acknowledges that this BANK SECURITY is not personal to the MC_____ and may be assigned, in whole or in part, (whether absolutely or by way of security) by MC_____ to any entity to whom the MCM is entitled to assign its rights and obligations.

Notwithstanding anything contained hereinabove, our liability under this Bank Security is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until _____ [date] with an additional claim period of thirty (30) days thereafter. We are liable to pay the security amount or any part thereof under this Bank Security only if the MC_____ serves upon us a written claim or demand.

Signature _____
Name _____
Power of Attorney No. _____

For
_____ [Insert Name of the Bank]____
Banker's Stamp and Full Address.
Dated this ____ day of ____, 200_

9B

IIDC Limited (IIDC)

Delhi

Bank Guarantee No.

Date of Issue-....-20..

Amount Rs.

Valid up to ...-....-20...

Dear Sir,

In consideration of the M/shaving their Corporate office atand Registered Office at(being the Lead Member of the Consortium comprising of) agreeing to undertake the obligations under the Concession Agreement to be signed between Municipal Corporation of....., M/s, M/sand Department of Local Government, Punjab, and other Project Documents, regarding setting up an “MSW Processing and Scientific Disposal System” or “Project” forCluster in Punjab (Contract).

WE _____ BANK LIMITED

having its Registered office atand branch office at..... (hereinafter referred to as “Bank”) which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns hereby agrees unequivocally, irrevocably and unconditionally agree, confirm and undertake to pay to **IIDC Limited, a Company within the meaning of the Companies Act, 2013 and having its Registered Office at.....** Delhi (hereinafter referred to as IIDC”) towards Project Development Fee forthwith on first demand in writing made by IIDC or from any Officer authorized by IIDC in this behalf, in full, without any deductions, set-off or counterclaim whatsoever immediately on first demand any or, the sum claimed by IIDC which shall not exceed any amount upto and not exceeding Rs./- (Rupeesonly), on behalf of M/s. as aforesaid at any time up towithout any demur, reservation, contest, recourse or protest and / or without any reference to or enquiry from theorAny such demand made by the IIDC on the Bank shall be conclusive and binding notwithstanding any difference between the IIDC,orMunicipal Corporation or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Bank Guarantee herein contained shall be irrevocable and shall continue to be enforceable till IIDC discharges this guarantee.

The Client shall have the fullest liberty without affecting in any way the liability of the Bank under this Guarantee, from time to time to vary or to extend the time for performance of the Contract by

This Security shall be valid and binding on this Bank up to and including _____2016 and shall not be terminable by notice or any change in the constitution of the Bank or the term of Contract or by any other reasons whatsoever and Bank liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations of the terms and conditions of the Contract or any other document made, given, or agreed with or without our knowledge or consent of the Bank, by or between parties to the respective agreement or to postpone from time to time the exercise of any powers vested in IIDC orMunicipal Corporation or of any right which they might have againstand to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract betweenandMunicipal Corporation or any other course or remedy or security available to IIDC /Municipal Corporation. The bank shall not

be relieved of its obligations under these presents by any exercise by IIDC orMunicipal Corporation of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of IIDC orMunicipal Corporation or any other indulgence shown by IIDC orMunicipal Corporation or by any other matter or thing whatsoever which under law would but for this provision have the effect of relieving the Bank.

Bank liability under this Guarantee shall be restricted to Rs.-/ (Rupeesonly), and the Guarantee shall remain in force until The IIDC shall be entitled to invoke this Guarantee till[Insert date which is 30 days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the IIDC shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit and IIDC shall be entitled to make unlimited number of demands under this Bank Guarantee, provided that the aggregate of all sums paid shall not exceed the guaranteed amount.

The Bank Guarantee shall be continuing irrevocable obligation. Any waivers, extensions of time or other forbearance given or variations required under the Contract or any invalidity, unenforceability or illegality of the whole or any part of the Contract or rights, of any party thereto, or amendment or other modification of the Contract, or any other fact, circumstance, provision of statute of law which might, entitle the Bank to be released in whole or in part from its undertaking, shall not in any way release the Bank from its obligations under this bank Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by the IIDC or by any Officer authorized by IIDC in this behalf, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the IIDC.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by M/sand/or any other person. The Guarantor Bank shall not require the IIDC to justify the invocation of this BANK Guarantee, nor shall the Guarantor Bank have any recourse against the IIDC in respect of any payment made hereunder.

This BANK Guarantee shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK Guarantee has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK Guarantee shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK Guarantee shall be a primary obligation of the Guarantor Bank and accordingly the IIDC_ shall not be obliged before enforcing this BANK Guarantee to take any action in any court or arbitral proceedings against the M/sLimited or M/s, to make any claim against or any demand on M/sor M/sor to give any notice toor M/sor to enforce any security held by the IIDC or to exercise, levy or enforce any distress, diligence or other process against M/sor M/s

The Guarantor Bank acknowledges that this BANK Guarantee is not personal to the IIDC and may be assigned, in whole or in part, (whether absolutely or by way of security) by IIDC to any entity to whom the IIDC is entitled to assign its rights and obligations with a prior intimation of such assignment to the Guarantor Bank.

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee is restricted to Rs....., and it shall remain in force untilwith an additional claim period of thirty (30) days thereafter i.e. Bank is liable to pay the security amount or any part thereof under this Bank Security only if the IIDC serves upon the Bank a written claim or demand.

Notwithstanding anything stated above,

1. Bank's liability under this guarantee is restricted to _____, and this guarantee shall remain valid up to and including-....-.

2. Unless a written demand or claim under this guarantee is filed against us on or before-....- all the rights of the IIDC under this guarantee shall forfeited and we shall be relieved and discharged from all the liabilities hereunder.

IN WITNESS WHEREOF THE BANK HAS SET ITS HANDS HERETO ON THE DAY, of, 2017MENTIONED HEREUNDER.

ForBank Limited

Auth signatory Auth. Signatory

Name: Name:

Designation: Designation

9C

FORMAT OF GRANT SECURITY (UNCONDITIONAL) IN FAVOUR OF CONCESSIONING AUTHORITY

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. Foreign entities submitting Bids are required to follow the applicable law in their country)

In consideration of the M/s _____ [insert name of Selected bidder] (through M/s _____ Waste Management Company Private Limited) agreeing to undertake the obligations under the Letter of Intent dated _____ (the “Letter of Intent” or “LOI” issued by Municipal Corporation Mohali (MCM)/Department of Local Government, Government of Punjab (DoLG) and the Concession Agreement to be executed between Municipal Corporation of Mohali.....M/s _____ (name of SPC) _____ M/s _____ (name of selected bidder)..... and Department of Local Government Punjab, and other Project Documents, regarding setting up an “Integrated MSW Management System” or “Project” for GMADA Cluster in Punjab, the _____ [insert name of bank] hereby agrees unequivocally, irrevocably and unconditionally to pay to Municipal Corporation Mohali herein after refer as Concessioning Authority (“MCM”) at _____(insert name of city) forthwith on demand in writing from MCM or any Officer authorized by it in this behalf, any amount upto and not exceeding **Rupees -----Rupees _____**only), on behalf of M/s. _____ [insert name of selected bidder].

This Security shall be valid and binding on this Bank up to and including _____ and shall not be terminable by notice or any change in the constitution of the Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Security is restricted to Rs. _____ (Rs. _____ only). Our Security shall remain in force until _____. The MCM shall be entitled to invoke this Security till _____ [Insert date which is thirty (30) days after the date in the preceding sentence].

The Guarantor Bank hereby agrees and acknowledges that the MCM shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by the MCM, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the MCM.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by M/s _____ [insert name of Selected Bidder] and M/s _____ insert name of SPC and/or any other person. The Guarantor Bank shall not require the MCM to justify the invocation of this BANK SECURITY, nor shall the Guarantor Bank have any recourse against the MCM in respect of any payment made hereunder

This BANK SECURITY shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK SECURITY has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK SECURITY shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK SECURITY shall be a primary obligation of the Guarantor Bank and accordingly the MC_____ shall not be obliged before enforcing this BANK SECURITY to take any action in any court or arbitral proceedings against the M/s _____ (SPC) or M/s _____ [insert name of Selected Bidder], to make any claim against or any demand on M/s _____ (insert name of SPC) or M/s _____ [insert name of Selected bidder] or to give any notice to M/s _____ (insert the name of SPC) or M/s _____ [insert name of Selected bidder] or to enforce any security held by the MCM or to exercise, levy or enforce any distress, diligence or other process against M/s _____(insert name of the SPC) or M/s _____ [insert name of Selected bidder].

The Guarantor Bank acknowledges that this BANK SECURITY is not personal to the MCM_____ and may be assigned, in whole or in part, (whether absolutely or by way of security) by MCM_____ to any entity to whom the MCM is entitled to assign its rights and obligations.

Notwithstanding anything contained hereinabove, our liability under this Bank Security is restricted to Rs. _____ (Rs. _____ only) and it shall remain in force until _____ [date] with an additional claim period of thirty (30) days thereafter. We are liable to pay the security amount or any part thereof under this Bank Security only if the MCM_____ serves upon us a written claim or demand.

Signature _____
Name _____
Power of Attorney No. _____

For
_____ [Insert Name of the Bank]____
Banker's Stamp and Full Address.
Dated this _____ day of _____, 2017

APPOINTMENT & SCOPE OF PROJECT ENGINEER

10.1 Procedure for Appointment of Project Engineer

1. Project Engineer shall be any Engineer of the level of Executive Engineer or above nominated by Concessing Authority who shall be the nodal person for supervision and monitoring of compliance by the Concessionaire with respect to the Construction Requirements and O&M Requirements, more particularly to undertake, perform, carry out the duties, responsibilities, services and activities set forth in the bid documents consisting of this Agreement, RFP and DPR prepared for the Project.
2. Project Engineer shall have a team of Sanitary Inspectors and other supervisory supporting persons (as decided by Commissioner of the Concessing Authority) working in various zones in MSW/Solid Waste management.
3. Project Engineer shall have a team of Engineers and other supervisory supporting persons (as decided by Commissioner of the Concessing Authority) for P&D monitoring and operations.
4. Project Engineer shall have the right to appoint/replace any person from its team with the consent of Commissioner, Municipal Corporation. As per the requirement of the field staff for monitoring P&D operations, Project Engineer may request to Commissioner for appointment of contractual staff. Concessing Authority shall have the right to appoint / replace the Project Engineer, depending upon the requirement. If the Project Engineer is not meeting his performance obligations, Concessionaire has the right to request the Concessing Authority in writing with details/reasons for his replacement. The Commissioner / Regional Deputy Director of Concessing Authority shall decide the need for replacement and if required may appoint/nominate any other suitable Person as Project Engineer

10.2 Scope of the Project Engineer

The Project Engineer ("PE") is expected to play a positive, proactive & unbiased role in discharging its functions, thereby facilitating the smooth implementation and operation of the Project Facilities. Broadly, the role of the Project Engineer or his authorized representative is to:

- (a) review, monitor and where required by the Agreement, to supervise & approve activities associated with the Design, Construction, Operation and Maintenance of the Project Facilities to ensure compliance by Concessionaire with the Construction Requirements and O&M Requirements;
- (b) report to Concessing Authority on the various physical, technical and financial aspects of the Project based on inspections, Site visits and Tests;
- (c) assist in arriving at an amicable settlement of disputes, should the need arise at primary level without recourse to the intervention of C.E.O of Concessionaire and Commissioner of the Concessing Authority or DoLG
- (d) review matters related to safety and environment management measures adopted by Concessionaire for the Project.

- (e) The Project Engineer may take the services of a thirdparty engineer/firm for providing the services as envisaged hereunder and the mechanism therefore, may be mutually agreed upon by Parties.

10.2.1 Scope of Services

The services to be provided by the Project Engineer are listed below. In addition, the scope of services would also include such other functions as are required to be undertaken pursuant to specific provisions of the Agreement.

10.2.2 Implementation Period

- a) Ensure that all implementation work fully complies with all Applicable Laws and, in particular, Solid Waste Management Rules 2016governing the requirements of MSW management and disposal
- b) Review all the drawings submitted by Concessionaireand ensure conformity of the same with the Construction Requirements.
- c) Review of the following submitted by Concessionaire:
 - Quality Assurance Plan;
 - Implementation Plan;
 - O&M Plan – Implementation Period.

10.2.3 Implementation Period - Construction Inspection and General Services

The Project Engineer would monitor, in accordance with Good Industry Practice, the progress in implementation of, Waste Processing Facilities and the Sanitary Landfill Unit and ensure compliance with the Construction Requirements. For this purpose the Project Engineer shall undertake, interalia, the following activities and where appropriate make suitable suggestions:

1. Project Engineer will approve the Detailed project report in consultation with the Commissioner, Concessioning Authority
2. Act on the Concessioning Authority's behalf as the Concessioning Authority's representative regarding all contact with Concessionaireunless expressly indicated otherwise;
3. Review and approve test results and materials and/or equipment used in the Construction Works;
4. Interpret the requirements of the contract and make decisions regarding performance of Concessionaire. The PE shall inform and advise the Concessioning Authority, in a timely manner all matters relating to the execution, progress, and completeness of the Construction Works;
5. Reject work, which fails to comply with the specifications and requirements of the Agreement. Whenever considered necessary or advisable to ensure correction of defective work, the PE may require inspection or testing of such work, whether or not such work be then fabricated, installed, or completed;
6. Review drawings, samples, and other submissions of Concessionaireto determine compliance and conformance with the requirements of the Agreement;
7. Provide the services of Engineers to check the quality of materials and the workmanship during the installation/construction of the MSW Processing Facilities, including the following:
 - Weigh bridge at the Project Facility entry gate;as described in Scope of Work of the Concessionaire;

- Waste reception facility
 - windrow platforms/RDF facility/WTE facility as applicable
 - storm water drainage system;
 - leachate collection and treatment system;
 - water supply system;
 - sieving mechanism for the residual inert matter; for landfill
 - quality control laboratory and associated equipments;
 - electrical systems including street lighting
 - fire detection, prevention and fighting system
 - Internal roads, workshop, parking, etc.,
 - Buildings and plant control rooms
 - Green belt
8. Provide the services of Engineers to check the quality of materials and the workmanship during the installation/construction of the Sanitary Landfill Facility including the following:
- weigh bridge at the Sanitary Landfill Unit/Facility drainage system;
 - leachate collection system;
 - leachate treatment plant
 - composite liner system of the Sanitary Landfill Facility
 - Stability of the Sanitary Landfill Facility upto Final Cover
 - testing laboratory and associated equipments

Address issues relating to specific Site conditions, modifications/amendments, or Concessionaire disputes.

9. The PE or his authorized representative shall attend regular meetings with the Concessions Authority to be held at least once fortnightly during the Implementation Period to report on progress and quality of work performed by Concessionaire and to discuss problems or other pertinent matters relating to the work. The PE shall take notes at the meetings and provide a copy of the minutes to each person who attended the meeting.
10. The PE or his authorized representative shall prepare and submit to Concessions Authority, Fortnightly Progress Reports including the following:
- Progress of works;
 - Slippages, if any, in the construction vis-à-vis planned construction schedule and the reasons thereof;
 - Construction schedule for the succeeding week;
 - Report on field and laboratory Tests
 - Report on notices issued
 - Issues, if any, with regard to the works along with the details of the action taken for the resolution of the same;
 - Photographic record of progress of works over the previous week or at suitable interval, if desired

The PE shall provide all other services as normally provided by a Project Coordinator on behalf of Concessions Authority.

10.2.4 Active Operations Period

During this period the Project Engineer would monitor, in accordance with Good Industry Practice, the operations and maintenance activities undertaken by Concessionaires so as to ensure compliance with the O&M Requirements. The specific activities to be undertaken would include the following:

- The Project Engineer on the behalf of the Concessioneing Authority shall be responsible to monitor the operations of the Weighbridges. The Weighbridges shall be monitored and inspected regularly (mutually agreed frequency between Concessionaire and PE) to ensure its due calibration and accuracy and any error shall be rectified within 24 hours.
- Provide administration of the contract in full and in complete accordance with applicable laws;
- Act on the Concessioneing Authority's behalf as the Concessioneing Authority's representative regarding all contact with the Concessionaire unless expressly indicated otherwise;
- Interpret the requirements of the contract and make decisions regarding performance of Concessionaire. The PE shall inform and advise the Concessioneing Authority, in a timely manner all matters relating to the execution, progress and completeness of works;
- Reject work, which fails to comply with the specifications and requirements of the Agreement. Whenever considered necessary or advisable to ensure correction of defective work, the PE may require inspection or testing of such work, whether or not such work is then fabricated, installed, or completed;
- Review submissions of Concessionaire to determine compliance and conformance with the requirements of the Agreement;
- Provide the services representative during the period commencing from 7 seven days from the date of nomination of the PE until the expiry of the PE's nomination.
- In addition to conduct a general inspection of the Project Facilities at least once a month and as and when exigencies require to ascertain conformity with Construction Requirements and O&M Requirements;
- Provide the services of Engineers to check the quality of materials and the workmanship during the construction of the Landfill, including but not limited to the following:
 - leachate collection system;
 - intermediate liner system of the Engineered Sanitary Landfill;
 - daily cell cover;
 - gas venting and flaring system;
 - slope stability of the Engineered Sanitary Landfill;
 - final cover system.
- Inspect and certify the quality of MSW/ Solid Waste collected by Concessionaire, if required.
- Inspect and certify composition of the Residual Inert Matter
- Address issues relating to specific Site conditions, design modifications, or Concessionaire disputes.
- Review the O&M Plans submitted by Concessionaire from time to time and assist Concessionaire in finalising the same.
- Periodically review the O&M Manual for adequacy;
- Monitor Operation and Maintenance activities (including maintenance of Project Facilities and equipment, standards of service, safety and environmental issues) and the overall quality of O&M activities so as to ensure compliance by Concessionaire with the O&M Requirements as specified in Annexure-3
- Review and ascertain the cost variation arising as a result of Change in Law and determine the Additional Cost;

- Undertake a quarterly review of the various records and registers to be maintained by Concessionaire and suggest suitable remedial measures/ procedures, where necessary.
- The PE shall attend regular meetings (“Project Review Meetings” or “PRMs”) with Concessionaire, to be held at least once in every month during the Active Operations Period to report on progress and quality of work performed by Concessionaire and to discuss problems or other pertinent matters relating to the work. The PE shall take notes at the meetings and provide a copy of the PRM minutes to each person who attended the meeting.
- The PE shall prepare and submit to Concessions Authority, Monthly Project Reports including the following:
 - Report on field and laboratory Tests
 - Report on notices issued
 - Issues, if any, with regard to the works along with the details of the action taken for the resolution of the same;
 - Photographic record of progress of works over the previous week or at suitable interval as agreed between PE and Concessions Authority.

10.2.5 Handover of Project Facilities to Concessions Authority

At the time of handing back the all Project Facilities to Concessions Authority at the end of Active Operations Period, the PE shall:

- monitor and certify compliance with the Handback Requirements,
- issue a Certificate of Compliance with Requirements to Concessionaire,
- assist in preparation of the Post Closure Maintenance Plan

10.2.6 Post Closure Period

- During the Post Closure Period, the PE shall monitor and certify compliance with the Post Closure Maintenance Plan.
- Arrange meetings between Concessions Authority and Concessionaire to be held at intervals as mutually decided upon by the Parties, to discuss problems or other pertinent matters relating to the Project. The PE shall take notes at the meetings and provide a copy of the minutes of such meetings to each person who attended the meeting. PE shall also check and report the action taken/compliance/non-compliance based on the minutes of the last meeting.

10.2.7 Meetings, Records and Reporting

The Project Engineer shall, in the ordinary course, maintain record of the activities undertaken by it in discharge of its functions and responsibilities. This would include records in respect of the following:

- (a) Manpower deployed and other organizational arrangements of the Project Engineer;
- (b) Reviews of documents submitted to it by Concessionaire to meet Construction Requirements and O&M Requirements, such as manuals, schedules, plans and reports;
- (c) Inspections undertaken and notices/ instructions issued to Concessionaire;
- (d) Review of compliance with Construction Requirements and O&M Requirements;
- (e) Field and laboratory Tests;
- (f) Concession Payments / Tipping Fees certified;
- (g) Reverse Mass Balance Calculation for the Project shall be compared with the Total Weight received at the Processing Facilities Site by Concessions Authority for Processing of MSW (RDF + Compost+ Inert / ash / pre-processing and processing rejects+ Processing& Moisture

Loss) and Disposal of MSW for the Whole Cluster. Reconciliation of reverse mass balance calculation vis-a-vis the total weight will be carried out every quarter. Based on the mass-balance quarterly adjustment in payable tipping fee (if any deviation is found) will be carried out.

- (g) Change in Law;
- (h) Force Majeure Events;
- (i) Breaches and defaults by the Parties; and
- (j) Handback Requirements

The Project Engineer would be required to submit the following reports to Concessioneing Authority during the Term:

- Implementation Period
- Fortnightly Progress Report
- Readiness Certificate (including Provisional Readiness Certificate)
- Any supplemental or special report that may be considered necessary by the Project Engineer (including Force Majeure, and breach of obligations).
- Active Operations Period
- Monthly Project Report
- Any supplemental or special report that may be considered necessary by the Project Engineer (including Force Majeure, and breach of obligations)
- Annual Review of O&M Manual
- Report on Handover Requirements.
- Any other report as may be reasonably required by Concessioneing Authority or as may be necessary to give effect to the provisions of the Agreement.

INDEPENDENT EXPERT

1. Appointment Procedure:

- 1.1 Independent Expert shall be appointed by the Concessions Authority on or before the Compliance Date- P&D for a period upto the date which shall be 3 month from Appointed Date and as and when required by the Concessions Authority at its own cost. On expiry or termination of the aforesaid period, the Concessions Authority may in its discretion renew the appointment, or appoint another firm from a fresh panel constituted by it to be the Independent Expert for a term of 3 (three) years, and such procedure shall be repeated after expiry of each appointment.
- 1.2 The Concessions Authority/ Department of Local Govt., Punjab, shall invite expressions of interest from consulting engineering firms or bodies corporate of Independent Expert and thereupon shortlist up-to 6 (Six) qualified firms, in accordance with pre-determined criteria. The Concessions Authority shall convey the aforesaid list of firms to the Concessionaire for scrutiny and comments, if any. The Concessionaire shall be entitled to scrutinize the relevant records of the Concessions Authority to ascertain whether the selection of firms has been undertaken in accordance with the prescribed procedure and it shall send its comments, if any, to the Concessions Authority within 15 (fifteen) days of receiving the aforesaid list of firms. Upon receipt of such comments, if any, the Concessions Authority shall, after considering all relevant factors, finalise and constitute a panel of up-to 6 (Six) firms (the "Panel of Firms") and convey its decision to the Concessionaire. The Concessions Authority shall invite the aforesaid firms in the Panel of Firms to submit their respective technical and financial offers, each in a separate sealed cover. All the technical bids so received shall be opened and pursuant to the evaluation thereof, the Concessions Authority shall shortlist up-to 3 (three) eligible firms on the basis of their technical scores. The financial bids in respect of such short-listed firms shall be opened and the order of priority as among these firms shall be determined on the basis of a weighted evaluation where technical and financial scores shall be assigned respective weights of 80:20.
- 1.2 If the Concessionaire has reason to believe that the Independent Expert is not discharging its duties and functions in a fair, efficient and diligent manner, it may make a written representation to the Concessions Authority and seek termination of the appointment of the Independent Expert. Upon receipt of such representation, the Concessions Authority shall hold a tripartite meeting with the Concessionaire and Independent Expert for an amicable resolution of the Dispute, and if any difference or disagreement between the Concessions Authority and the Concessionaire remains unresolved, the Dispute shall be settled in accordance with the Dispute Resolution Procedure. In the event that the appointment of the Independent Expert is terminated hereunder, the Concessions Authority shall appoint forthwith another Independent Expert in accordance with the provision of Concession Agreement.
- 1.3 In case of non- appointment of Independent Expert due to any reasons, whatsoever may be; all roles, responsibilities, functions and powers defined below shall be undertaken by the Project Engineer except Termination and Determination of Cost and Time (7 & 8 define below). For the avoidance of doubt, it is clarified that the functions defined in Annexure 17 and Annexure 18 shall also be performed by Project Engineer.

2. Role and Functions of the Independent Expert

The role and functions of the Independent Expert shall include, inter alia, the following:

3. Development Period

- 3.1.1 During the Development Period, the Independent Expert shall undertake a detailed review of the Drawings to be furnished by the Concessionaire along with supporting data, including the geotechnical and hydrological investigations, characteristics of materials from various sites, topographical surveys and other surveys etc. The Independent Expert shall complete such review and send its comments/observations to the MCM and the Concessionaire within 12 (twelve) days of receipt of such Drawings. In particular, such comments shall specify the conformity or otherwise of such Drawings with the Scope of the Project and Specifications and Standards.
- 3.1.2 The Independent Expert shall review any modified Drawings or supporting Documents sent to it by the Concessionaire and furnish its comments within 7 (seven) days of receiving such Drawings or Documents.
- 3.1.3 The Independent Expert /Project Engineer shall review the detailed design, construction methodology, quality assurance procedures and the procurement, engineering and construction time schedule sent to it by the Concessionaire and furnish its comments within 15 (fifteen) days of receipt thereof.
- 3.1.4 The Independent Expert shall review and approve the Detailed Project Report and any other drawing submitted within this period
- 3.1.5 Upon reference by the MCM, the Independent Expert shall review and comment on the Engineering Procurement & Construction (EPC) Contract or any other contract for construction, operation and maintenance of the project, and furnish its comments within 7 (seven) days from receipt of such reference from the MCM.

4. Construction Period

- 4.1.1 In respect of the Drawings and Documents received by the Independent Expert for its review and comments during the Construction Period, the provisions of Paragraph 4 shall apply, mutatis mutandis.
- 4.1.2 The Independent Expert shall review the monthly progress report furnished by the Concessionaire and send its comments thereon to the Concessions Authority and the Concessionaire within 7 (seven) days of receipt of such report.
- 4.1.3 Independent Expert in consultation/with information to Project Engineer shall inspect, test, verify, report, confirm and certify the Project works being undertaken by the Concessionaire to meet the compliance, Specifications and Standards as per provision under the executed Concession Agreement.
- 4.1.4 Independent Expert in consultation/with information to Project Engineer shall finalize the Scheduled Construction Completion Dates with the Concessionaire.
- 4.1.5 Independent Expert in consultation/with information to Project Engineer shall monitor the commencement of P&D operations with effect from Compliance Date-P&D; and shall certify the percentage of Waste Generators covered by the Concessionaire in MSW Supply Area for the purposes of the target schedule provided under Annexure 17 of executed Concession Agreement.

Based on such certification by Independent Expert the levy of the penalties shall be decided in accordance with Annexure 18 of executed Concession Agreement.

- 4.1.6 Independent Expert in consultation/with information to Project Engineer shall ensure timely completion of Construction Work of the Project Facilities in all respects and in accordance with the provisions of the executed Concession Agreement.
- 4.1.7 Independent Expert in consultation/with information to Project Engineer shall review the Detailed Engineering Design and conduct Tests for civil or other engineering work to check the quality & soundness of the work carried out by the Concessionaire relating to the Project.
- 4.1.8 Independent Expert in consultation/with information to Project Engineer shall have the right to inspect the Site, Works, services, goods, materials, books and documents etc. of the Concessionaire, take samples, conduct or cause performance of tests and meet the Concessionaire's personnel and advisors in relation to the Project.
- 4.1.9 Independent Expert in consultation/with information to Project Engineer shall inspect the Project Facility, the documents, accounts, papers, data, books and relevant matters relating to the implementation of the Project to witness and observe the status and functioning of the Facility and to confirm compliance of the Concessionaire with the provisions of this Agreement
- 4.1.10 Independent Expert in consultation/with information to Project Engineer shall inform the Concessionaire about any defects, discrepancies which needs to be rectified and about delay in Scheduled Construction Completion dates, if any. In case Concessionaire fails to rectify or correct any of the defects, discrepancies notified by Independent Expert and fails to achieve Scheduled Construction Completion dates and COD of Project Facility, Independent Expert in consultation/with information to Project Engineer shall inform, serve notice and penalize for Liquidity Damages if any to the Concessionaire.
- 4.1.11 Upon issuance of Construction Completion notice by Concessionaire in respect of the Processing Facilities, Independent Expert in consultation/ with information to Project Engineer shall give Project Facilities Completion Certificate that all Project Facilities have been constructed in accordance with the Standards & Specification and per provisions of the executed Concession Agreement.
- 4.1.12 At least 30 (thirty) days before the likely completion of the construction of Processing Facilities and Sanitary Landfill Unit or the Project Facilities, as the case may be, the Independent Expert shall conduct the Tests for completion of the Construction Works. Such notice will set out the place, date and time when such Tests will be performed (which shall not be on a date which is earlier than 10 (ten) days following the date of such notice and at least 7 (seven) days in case of any subsequent Tests or retests). The Concessioning Authority shall have the right to attend such Tests. The Independent Expert shall attend such Tests with a view to determining whether completion of construction has occurred.
- 4.1.13 Within 1 (one) month from the date of inspection in accordance with sub-clause (a) above, the Independent Expert shall issue a Provisional Certificates, upon successful completion of the Tests of the Processing Facilities and/or Project Facilities and Sanitary Landfill Unit, as the case may be ("Processing & Disposal Facilities Completion Certificate" and "Project Facilities Completion Certificate" respectively). Provided, that Project Facilities Completion Certificate shall be issued no

later than 15 days from the date of issuance of the Processing & Disposal Facilities Completion Certificate. The aforesaid Provisional Certificates shall certify that the Processing Facilities/Project facilities can legally, safely and reliably be applied for commercial operations. The incompleteness of any particular work or things forming part of the Commercial Facilities (being within the Scope of Works) but which do not, in any manner whatsoever, affect the safety or commercial operations of the Project in any material respect (the "Punch List Items") may be temporarily disregarded by the Independent Expert at its for the limited purpose of issuance of the said Provisional Certificate. The Punch List Items shall be appended to the Provisional Certificate signed jointly by the Independent Expert/Consultant as the case may be, and the Concessionaire. All Punch List Items shall be completed by the Concessionaire within 90 (ninety) days of the date of issue of the Provisional Certificate. The Concessionaire may commence Commercial Operations of the Processing Facilities and Sanitary Landfill Unit and Project Facilities on the date of issuance of Processing & Disposal Facilities Completion Certificate and Project facilities Completion Certificate respectively (such date are referred as "COD-P&D").

- 4.1.14 The Concessionaire shall complete or cause to be completed the Punch List Items appended to the Provisional Certificates within a period of 90 (ninety) days from the date of issue of the Provisional Certificates and, upon completion thereof, the Concessionaire shall notify the Independent Expert. The Independent Expert shall, within 7 (seven) days of receipt of such notice, inspect the Processing & Disposal Facilities/Project Facilities and issue the Completion Certificate, with a copy marked to the Concessioneing Authority, to confirm completion of such Punch List Items. The Completion Certificate shall specify the date on which, in the Independent Expert/ Consultant, reasoned opinion, all parts of the Construction Works of Processing Facilities/Project Facilities reached completion.
- 4.1.15 Upon reference from MCM, the Independent Expert shall make a fair and reasonable assessment of the costs of completing the Punch List items and certify the reasonableness of such costs for payment by the Concessionaire to MCM
- 4.1.16 In the event of the Concessionaire's failure to complete the Punch List items within the said stipulated period of 90 (ninety) days from the date of issue of the Provisional Certificates, the Concessioneing Authority may, without prejudice to any other rights or remedy available to it under this Agreement or at law, have such items completed at the risk and costs of the Concessionaire. The Concessionaire shall reimburse to Concessioneing Authority on demand the entire costs incurred by the Concessioneing Authority in completing the Punch List Items.
- 4.1.17 If the Independent Expert certifies to the Parties that it is unable to issue the Completion Certificate or Provisional Certificates because of events or circumstances which excuse the performance of the Concessionaire's obligations in accordance with the executed Concession Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall re-schedule the Tests and hold the same as soon as reasonably practicable.
- 4.1.18 The Concessionaire shall bear all the expenses relating to Tests under this Agreement. Provided, however, if the Concessioneing Authority requires the Concessionaire to conduct any Test that is not specified in this Agreement, the Concessioneing Authority shall forthwith reimburse to the Concessionaire the expenses incurred by the Concessionaire thereon.
- 4.1.19 The Independent Expert shall inspect the Construction Works once every month, or as when required or directed by MCM, if there is any special requirement), preferably after receipt of the

monthly progress report from the Concessionaire, but before the 20th (twentieth) day of each month in any case, and make out a report of such inspection (the “Inspection Report”) setting forth an overview of the status, progress, quality and safety of construction, including the work methodology adopted, the materials used and their sources, and conformity of Construction Works with the Scope of the Project and the Specifications and Standards. In a separate section of the Inspection Report, the Independent Expert shall describe in reasonable detail the lapses, defects or deficiencies observed by it in the construction of the Project.

- 4.1.20 For determining that the Construction Works conform to Specifications and Standards, the Independent Expert shall require the Concessionaire to carry out, or cause to be carried out, tests on a sample basis, to be specified by the Independent Expert in accordance with Good Industry Practice for quality assurance.
- 4.1.21 The sample size of the tests, to be specified by the Independent Expert under Paragraph 5.20, shall be finalized as per the Best Industry Practices and in consultation with MCM
- 4.1.22 The timing of tests referred to in Paragraph 5.20, and the criteria for acceptance/ rejection of their results shall be determined by the Independent Expert in accordance with the relevant Quality Control Manuals/ industry guidelines. The tests shall be undertaken on a random sample basis and shall be in addition to, and independent of, the tests that may be carried out by the Concessionaire for its own quality assurance in accordance with Good Industry Practice.
- 4.1.23 In the event that the Concessionaire fails to achieve any of the Project Milestones, the Independent Expert shall undertake a review of the progress of construction and identify potential delays, if any. If the Independent Expert shall determine that completion of the Project is not feasible within the time specified in the Agreement, it shall require the Concessionaire to indicate within 15 (fifteen) days the steps proposed to be taken to expedite progress, and the period within which the Project Completion Date shall be achieved. Upon receipt of a report from the Concessionaire, the Independent Expert shall review the same and send its comments to the MCM and the Concessionaire forthwith.
- 4.1.24 If at any time during the Construction Period, the Independent Expert determines that the Concessionaire has not made adequate arrangements for the safety of workers and Users in the zone of construction or that any work is being carried out in a manner that threatens the safety of the workers and the Users, it shall make a recommendation to the Authority forthwith, identifying the whole or part of the Construction Works that should be suspended for ensuring safety in respect thereof.
- 4.1.25 In the event that the Concessionaire carries out any remedial measures to secure the safety of suspended works and Users, it may, by notice in writing, require the Independent Expert to inspect such works, and within 3 (three) days of receiving such notice, the Independent Expert shall inspect the suspended works and make a report to the MCM forthwith, recommending whether or not such suspension may be revoked by the MCM.
- 4.1.26 If suspension of Construction Works is for reasons not attributable to the Concessionaire, the Independent Expert shall determine the extension of dates set forth in the Project Completion Schedule, to which the Concessionaire is reasonably entitled, and shall notify the MCM and the Concessionaire of the same.

4.1.27 The Independent Expert shall aid and advise the Concessionaire in preparing the Maintenance Manual.

6. Operation Period

- 6.1. In respect of the Drawings, Documents and Safety Report received by the Independent Expert for its review and comments during the Operation Period, the provisions of Paragraph 4 shall apply, mutatis mutandis.
- 6.2. The Independent Expert shall review the annual Maintenance Programme furnished by the Concessionaire and send its comments thereon to the MCM and the Concessionaire within 15 (fifteen) days of receipt of the Maintenance Programme.
- 6.3. The Independent Expert shall review the monthly status report furnished by the Concessionaire and send its comments thereon to MCM and the Concessionaire within 7 (seven) days of receipt of such report.
- 6.4. The Independent Expert shall inspect the Project at-least once every month, or preferably after receipt of the status report from the Concessionaire, but before the 20th (twentieth) day of each month in any case, and make out an O&M Inspection Report setting forth an overview of the status, quality and safety of O&M including its conformity with the Maintenance Requirements and Safety Requirements.
- 6.5. The Independent Expert shall in its O&M Inspection Report specify the tests, if any, that the Concessionaire shall carry out, or cause to be carried out, for the purpose of determining that the Project is in conformity with the Maintenance Requirements. It shall monitor and review the results of such tests and the remedial measures, if any, taken by the Concessionaire in this behalf.
- 6.6. The Independent Expert shall determine if any delay has occurred in completion of repair or remedial works in accordance with the Agreement, and shall also determine the Damages, if any, payable by the Concessionaire to MCM for such delay.
- 6.7. In the event that the Concessionaire notifies the Independent Expert of any modifications that it proposes to make to the Project, the Independent Expert shall review the same and send its comments to MCM and the Concessionaire within 15 (fifteen) days of receiving the proposal.

7. Termination

The Independent Expert will certify the Development Costs, in the event the Conditions Precedent for Concessioning Authority have not been satisfied within the stipulated time, then the Concessionaire shall have the option of either: (i) mutually extend the time period for satisfaction of the Conditions Precedent for Concessioning Authority or (ii) terminate this Agreement, in which event, the Concessioning Authority shall pay to the Concessionaire, In case of extension of CP-P&D for Concessioning Authority beyond a period of 120 (One Hundred and Twenty) days from Appointed Date, the Concession Period shall be extended with an equivalent period with the recommendation of Independent Expert and Project Engineer.

8. Determination of Costs and Time

8.1 The Independent Expert shall determine the costs, and/or their reasonableness, that are required to be determined by it under the Agreement.

8.2 The Independent Expert shall determine the period, or any extension thereof, that is required to be determined by it under the Agreement.

9. Assistance in Dispute resolution

9.1 When called upon by either Party in the event of any Dispute, the Independent Expert shall mediate and assist the Parties in arriving at an amicable settlement.

9.2 In the event of any disagreement between the Parties regarding the meaning, scope and nature of Good Industry Practice, as set forth in any provision of the Agreement, the Independent Expert shall specify such meaning, scope and nature by issuing a reasoned written statement relying on good industry practice and authentic literature.

10. Other Duties and Functions

The Independent Expert shall perform all other duties and functions specified in the Agreement.

11. Miscellaneous

11.1 The Independent Expert shall notify its programme of inspection to the Concessioning Authority and to the Concessionaire, who may, in their discretion, depute their respective representatives to be present during the inspection.

11.2 A copy of all communications, comments, instructions, Drawings or Documents sent by the Independent Expert to the Concessionaire pursuant to this TOR, and a copy of all the test results with comments of the Independent Expert thereon shall be furnished by the Independent Expert to the Authority forthwith.

11.3 The Independent Expert shall obtain, and the Concessionaire shall furnish in two copies thereof, all communications and reports required to be submitted, under this Agreement, by the Concessionaire to the Independent Expert, whereupon the Independent Expert shall send one of the copies to the Authority along with its comments thereon.

11.4 The Independent Expert shall retain at least one copy each of all Drawings and Documents received by it, including 'as-built' Drawings, and keep them in its safe custody.

11.5 Upon completion of its assignment hereunder, the Independent Expert shall duly classify and list all Drawings, Documents, results of tests and other relevant records, and hand them over to the Authority or such other person as the MCM may specify, and obtain written receipt thereof. Two copies of the said document shall also be furnished in micro film form or in such other medium as may be acceptable to the MCM.

11.6 Wherever no period has been specified for delivery of services by the Independent Expert, the Independent Expert shall act with the efficiency and urgency necessary for discharging its functions in accordance with Good Industry Practice.

- 11.7 The Independent Expert and Project Engineer shall at the request of the Concessionaire decide if the shifting of utilities is required or not.
- i. Independent Expert in consultation/with information to Project Engineer shall inspect, test, verify, report, confirm and certify the Project works being undertaken by the Concessionaire to meet the compliance, Specifications and Standards as per provision under this Agreement.
 - ii. Independent Expert in consultation/with information to Project Engineer shall finalize the Scheduled Construction Completion Dates with the Concessionaire
 - iii. Independent Expert in consultation/with information to Project Engineer shall ensure timely completion of Construction Work of the Project Facilities in all respects and in accordance with the provisions of this Agreement.
 - iv. Independent Expert in consultation/with information to Project Engineer shall review the Detailed Engineering Design and conduct Tests for civil or other engineering work to check the quality & soundness of the work carried out by the Concessionaire relating to the Project.
 - v. Independent Expert in consultation/with information to Project Engineer shall have the right to inspect the Site, Works, services, goods, materials, books and documents etc. of the Concessionaire, take samples, conduct or cause performance of tests and meet the Concessionaire's personnel and advisors in relation to the Project.
 - vi. Independent Expert in consultation/with information to Project Engineer shall have the right to inspect the Project Facility, the documents, accounts, papers, data, books and relevant matters relating to the implementation of the Project to witness and observe the status and functioning of the Facility and to confirm compliance of the Concessionaire with the provisions of this Agreement
 - vii. Independent Expert in consultation/with information to Project Engineer shall inform the Concessionaire about any defects, discrepancies which needs to be rectified and about delay in Scheduled Construction Completion dates, if any. In case Concessionaire fails to rectify or correct any of the defects, discrepancies notified by Independent Expert and fails to achieve Scheduled Construction Completion dates and COD of Project Facility, Independent Expert in consultation/with information to Project Engineer shall inform, serve notice and penalize for Liquidity Damages if any to the Concessionaire.
 - viii. Upon issuance of Construction Completion notice by Concessionaire in respect of the Processing Facilities, Independent Expert in consultation/ with information to Project Engineer shall give Project Facilities Completion Certificate that all Project Facilities have been constructed in accordance with the Standards & Specification and per provisions of this Agreement
 - ix. At least 30 (thirty) days before the likely completion of the construction of Processing Facilities and Sanitary Landfill Facility or the Project Facilities, as the case may be, the Concessionaire shall notify the same in writing to the Independent Expert, and the Concessioning Authority of its intention to conduct the Tests for completion of the Construction Works. Such notice will set out the place, date and time when such Tests will be performed (which shall not be on a date which is earlier than 10 (ten) days following the date of such notice and at least 7 (seven) days in case of any subsequent Tests or retests). The Concessioning Authority shall have the right to attend such

Tests. The Independent Expert shall attend such Tests with a view to determining whether completion of construction has occurred.

- x. Within 1 (one) month from the date of inspection in accordance with sub-clause (a) above, the Independent Expert shall issue a Provisional Certificates, upon successful completion of the Tests of the Processing Facilities and Sanitary Landfill Facility, as the case may be (“**Processing & Disposal Facilities Completion Certificate**” and “**Project Facilities Completion Certificate**” respectively). Provided, that Project Facilities Completion Certificate shall be issued no later than 15 days from the date of issuance of the Processing & Disposal Facilities Completion Certificate. The aforesaid Provisional Certificates shall certify that the Processing Facilities/Project facilities can legally, safely and reliably be applied for commercial operations. The incompleteness of any particular work or things forming part of the Commercial Facilities (being within the Scope of Works) but which do not, in any manner whatsoever, affect the safety or commercial operations of the Project in any material respect (the “Punch List Items”) may be temporarily disregarded by the Independent Expert at its for the limited purpose of issuance of the said Provisional Certificate. The Punch List Items shall be appended to the Provisional Certificate signed jointly by the Independent Engineer/Consultant as the case may be, and the Concessionaire. All Punch List Items shall be completed by the Concessionaire within 90 (ninety) days of the date of issue of the Provisional Certificate. The Concessionaire may commence Commercial Operations of the Processing Facilities and Sanitary Landfill Facility Unit and Project Facilities on the date of issuance of Processing & Disposal Facilities Completion Certificate and Project facilities Completion Certificate respectively (such date is referred as “**COD-P&D**”)
- xi. The Concessionaire shall complete or cause to be completed the Punch List Items appended to the Provisional Certificates within a period of 90 (ninety) days from the date of issue of the Provisional Certificates and, upon completion thereof, the Concessionaire shall notify the Independent Expert. The Independent Expert shall, within 7 (seven) days of receipt of such notice, inspect the Processing & Disposal Facilities/Project Facilities and issue the Completion Certificate, with a copy marked to the Concessioneing Authority, to confirm completion of such Punch List Items. The Completion Certificate shall specify the date on which, in the Independent Engineer/ Consultant, reasoned opinion, all parts of the Construction Works of Processing Facilities/Project Facilities reached completion.
- xii. In the event of the Concessionaire’s failure to complete the Punch List items within the said stipulated period of 90 (ninety) days from the date of issue of the Provisional Certificates, the Concessioneing Authority may, without prejudice to any other rights or remedy available to it under this Agreement or at law, have such items completed at the risk and costs of the Concessionaire. The Concessionaire shall reimburse to Concessioneing Authority on demand the entire costs incurred by the Concessioneing Authority in completing the Punch List Items.
- xiii. If the Independent Expert certifies to the Parties that it is unable to issue the Completion Certificate or Provisional Certificates because of events or circumstances which excuse the performance of the Concessionaire’s obligations in accordance with this Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall re-schedule the Tests and hold the same as soon as reasonably practicable.
- xiv. The Concessionaire shall bear all the expenses relating to Tests under this Agreement. Provided, however, if the Concessioneing Authority requires the Concessionaire to conduct any Test that is not specified in this Agreement, the Concessioneing Authority shall forthwith reimburse to the Concessionaire the expenses incurred by the Concessionaire thereon.

TIPPING FEE/FINANCIAL PROPOSAL

12A. In case of Positive Tipping Fee, the Concessioning Authority shall pay to the Concessionaire the amount equivalent to $X1 \times Q1$

	Process	Base Tipping Fee (Rs/Tonne)	Quantity
	Processing and Disposal of MSW from Mohali	X1 Tipping Fees	Q 1

OR

12.B In case of Negative Tipping Fee, the Concessionaire shall pay to the Concessioning Authority as mentioned in above table in 12 A

Tipping Fee (s) in a given year will be calculated by escalating the Base Tipping Fee(s) quoted by the Selected Bidder in its Financial Proposal, as mentioned above, by applying the index of escalation (Tipping Fee Index) in accordance with Annexure 22.

CALCULATION & MONTHLY FEE STATEMENT

For measurement of MSW, the weighbridge constructed at Processing Site by the Concessionaire with duly calibrated weighbridge having the maximum possible accuracy, shall carry out the following operations:

- (i) weigh the trucks to determine the weight of the consignment,
- (ii) generate and maintain an electronic data base for each delivery and provide a print out of the specifications and details for each consignment during the day, as stated in sub-clause (i) above (such print out is referred to as “Daily Weight Sheet”).

The Project Engineer on behalf of Concessioneing Authority shall be a responsible person to monitor the operations of the Weighbridges. The Weighbridges shall be monitored and inspected regularly to ensure its due calibration and accuracy and any errors shall be rectified within 24 hours The Daily Weight Sheet shall be final and binding on the Parties.

A. Calculation procedure for Tipping Fee for Concessioneing Authority:

1. Tipping Fee for Processing & Disposal (P&D)of MSW (w.e.f. COD-P&D):

Total Quantity of MSW Receivedfor Processing& Disposal = Q_1 Tons

Per Ton Tipping Fee of Processing & Disposal (P&D)of MSW = X_1

T_1 =Total Tipping Fee (P&D) = Q_1 (MSW) X X_1 (P&D)

* Tshall be applicable for the Financial Year in which COD is achieved. For subsequent Financial Years, X shall be revised with respect to a Tipping Fee Index calculated as per Annexure 22. Such revision shall be made for every Financial Year.

Also refer Monthly Fee Statement at the end of Annexure

B. Approval of Monthly Fee Statement:

The Concessionaire shall submit to the Project Engineer, Monthly Fee Statement for every month by 7th day of the next month in the format provided at the end of this annexure, clearly stating the information provided and supporting thereto.

The Project Engineer shall within seven (7) days of receiving the Monthly Fee Statement, provide its approval/comments on the Monthly Fee Statement. If no observations are made by the Project Engineer / Concessioneing Authority, within ten (10) days of receipt of Monthly Fee Statement, the same shall be deemed to be approved by the Concessioneing Authority. If the Project Engineer is not satisfied with the Monthly Fee Statement or supporting provided thereto, Project Engineer shall have the right to ask for more information from the Concessionaire as may be reasonably required.

Under any circumstances, the Monthly Fee Statement shall be approved (with or without modifications) within fifteen (15) days of receiving the same. Disputes, if any, on the approved

amount shall be taken up separately for mutual resolution. Dispute on any such amounts shall not result in non-payment of any already approved and/or partly approved amounts due to the Parties.

After complete/part approval of Monthly Fee Statement, due and approved payment shall be made to the Concessionaire (in case of Positive Tipping Fee) or to the Concessing Authority (in case of Negative Tipping Fee) within ten (10) days of such approval and in any case within thirty (30) days of receipt of Monthly Fee Statement, whichever is earlier.

C. Payment as per Monthly Fee Statement:

Payment to the Parties shall be made in line with Articles 7.4, 7.5 and 7.6 of the Agreement

D. Tipping Fee Fund

The Concessing Authority shall at least 30 (thirty) days prior to Compliance Date-P&D create a fund account under the name Tipping Fee Fund with a scheduled or nationalized bank at Mohali. The Tipping Fee Fund shall remain active during the entire Term of the Agreement.

The Concessing Authority shall deposit and maintain in the Tipping Fee Fund, an amount equivalent to the amount payable to the Concessionaire for three (3) months for the P&D services provided by the Concessionaire. The amount that shall be deposited and/or maintained in the Tipping Fee Fund shall be calculated as below.

Tipping Fee Fund = $Q1 * X_1 \times 30 \text{ (days)} \times 3 \text{ (months)}$

* Q (MSW) shall be determined as below:

- i. For the initial six (6) months from Compliance Date - = Estimated MSW Quantity per day as per PR
- ii. From seventh month onwards = Average daily MSW for last six (6) months

E. Post Closure Performance Account

The Concessing Authority and the Concessionaire shall at least 30 (thirty) days prior to COD (P&D) shall jointly create a fund account under the name "Post Closure Performance Account". The fund is created to serve as a guarantee for performance obligations of the Concessionaire during the post closure period and also serve fund requirements for post closure maintenance and contingencies in case the Concessionaire fails to do so. The Post Closure Performance Account shall serve as protective measure to ensure that the Concessionaire binds by all its obligations during Post Closure Period.

The Concessing Authority (in case of Positive Tipping Fee) or the Concessionaire (in case of Negative Tipping Fee) shall credit the balance amounts, which are equal to 1.5 % of the Monthly Payment – P&D, in the "**Post Closure Performance Account**" maintained by the Concessing Authority for meeting the expenses related to Post Closure Activities. The proof of deposit of such amounts shall be provided to the other party on monthly basis by the party depositing the amount.

The utilization and disbursement of monies deposited in Post Closure Performance Account shall be in line with Article 7.6 of the Agreement.

F. Appellate Authority

First Appellate Authority shall be Director, Department of Local Government, GoP

- Second Appellate Authority shall be the Principal Secretary, GoP.
- **Format of Monthly Fee Statement**

Project Name:				
Monthly Fee Statement For the Month of _____ 20xx				
Municipal Commissioner		Invoice No.		
		Date		
Address :		W.O./ Reference/		
		Category of Service		
		Service Tax Registration No.:		
		PAN Number:		
S.N.	Particulars	Quantity (In Tonnes) A	Fees Per Tonne (In Rs) B	Total Fees (In Rs.) A X B
1	In case of Positive Tipping Fee: Tipping Fees for Processing and Disposal payable by Concessioning Authority OR In case of Negative Tipping Fee: Tipping Fees for Processing and Disposal payable by Concessionaire	Q1	X1	T1
			Sub Total	T1
2	Deduction for Post Closure Performance Account = 0.015 * T1			D
3	Penalty (if any)			P

5	Basic Amount Payable			T1 – D – P (for Positive Tipping Fee, T) –T1 – D – P (for Negative Tipping Fee, T)
		Add	Service Tax	
			Professional Tax	
			Education Cess	
			Total Amount	
			Total Amount Payable	
<p>(Rupees _____ only)</p> <p>Payment should be made by cheque in favour of _____</p> <p style="text-align: right;">(Director/ Authorized Signatory)</p>				

PROJECT IMPLEMENTATION SCHEDULE

Dates	Scheduled Time (in Days)
Appointed Date	T0
Compliance Date – P&D (CD-P&D)	T0 + 120
Latest Construction Start Date – P&D	TO + 180
Scheduled Construction Completion Date – P&D	CD-P&D + 240 (except Power Plant) CD-P&D+600 (Power Plant)
Date of Commissioning – P&D	CD-P&D + 30
Term	Appointed Date + 25 years

LIQUIDATED DAMAGES AND DEFAULTS

If the Concessionaire is not able to meet the scheduled timelines in achieving COD of the Project Facilities, the Concessionaire shall be liable to pay liquidated damages as detailed below:

Processing and Disposal (P&D) of MSW:

In the event of Concessionaire failing to achieve COD for Processing & Disposal (COD-P&D) within (Three Hundred and Sixty days) 360 days from the Compliance Date (CD)-P&D, and such event has not occurred on account of Force Majeure or Default of the Concessioning Authority, Concessionaire shall be liable to pay as Liquidated Damages, an amount equivalent to (two point five percent) 2.5% (Two decimal Five) of the amount of Performance Security per week of delay or part thereof, to the Concessioning Authority. Liquidated Damages on this account shall be limited to (thirty percent) 30% of the Performance Security i.e. up to twelve (12) weeks only, after which, the Concessioning Authority shall have the right to Terminate the Agreement.

In the event of Project Facilities comprising a Power Plant as well and the Concessionaire failing to achieve COD for Power Plant (if Applicable) within (Six Hundred Days) 600 days from CD-P&D, and such event has not occurred on account of Force Majeure or Default of the Concessioning Authority, Concessionaire shall be liable to pay as Liquidated Damages, an amount equivalent to one percent (1.0%) of the amount of Performance Security per week of delay or part thereof, to the Concessioning Authority. Liquidated Damages on this account shall be limited to twenty five percent (25%) of the Performance Security

NOTE: It may be noted that the amount of Liquidated Damages has to be deposited by the Concessionaire within fifteen (15) days of first written demand by the Concessioning Authority, failing which the Concessioning Authority shall have the right to encash the Performance Security and after deducting its present Liquidated Damages amount, keep the balance amount in a separate bank account as Performance Security for remaining time. However, under any circumstances, the shortfall in Performance Security, if any at the time of COD has to be first fulfilled by the Concessionaire to be eligible to receive any payments from the Concessioning Authority.

REPORTING REQUIREMENT

(A) Construction Reporting

Monthly progress reports shall be prepared by the Concessionaire and submitted to the Concessioneing Authority. Each report shall include:

- (a) an executive summary ;
- (b) charts showing the status of Construction Documents;
- (c) status of quality assurance documents, test results and certificates;
- (d) comparisons of actual and planned progress, with details of any aspects which may affect the completion in accordance with the LoI, and the measures being (or to be) adopted to overcome such aspects;
- (e) summons of any unresolved disputes and claims between the Parties;
- (f) such other reports as may be reasonably requested by the Concessioneing Authority

(B) Construction Documents

The Concessionaire shall submit Construction documents to the Concessioneing Authority which include but not limited to following

1. Construction program of the Concessionaire
2. As built drawings for all Project Facilities
3. As fit drawings for all equipment
4. Rated capacity test reports for all equipment, pipelines etc. (test certificates)
5. Original equipment manufacturers reports
6. Design basis of all Project Facilities
7. Installation manuals
8. Operation and Maintenance Manuals
9. Quality Assurance Reports for all Project Facilities and systems
10. Third party inspection reports
11. Equipment Warranty certificates
12. List of manufacturers recommended spares and confirmation of purchase
13. List of vendors for purchase of spares and consumables
14. Original copies of all consents obtained by Concessionaires
15. List of Contractor's staff and duties assigned to each
16. Commissioning Records
17. Statement certifying compliance with Environment Management Plan

(C) Operation Documents

The Concessionaire shall submit documents required by the Concessioneing Authority, which include but not limited to following:

1. To submit the monthly Log sheet as per Appendix 3.4 covering quantity of MSW, processed and Residual Inert Matter / rejects disposed off at Sanitary Landfill Facility .
2. Operation and Maintenance Manual
3. Quality Assurance plans for various Project Facilities

4. Insurance policies
5. Details of end products, byproducts.
6. List of Concessionaire's staff and duties assigned to each

(D) Operation and Maintenance Manual

The Concessionaire shall finalise the contents of the Operation Manual in consultation with the Concessioning Authority. An indicative content of the Operation & Maintenance Manual is provided below:

1. Description of the entire P&D facility
2. Description of all systems installed, including mechanical, electrical, instrumentation, control systems with relevant design and operating parameters
3. Description of all equipment supplied including manufacturer's leaflets, which shall be arranged and compiled for easy reference
4. Schedules and manufacturer's catalogues for all equipment supplied, giving duties, electrical load, etc
5. Schedules of all equipment suppliers (and their local agents) including names, addresses, telephone, fax and e-mail numbers
6. Start-up, operation and shut down instructions for all sections / equipment of the facility. These shall include step by step directions on setting the facility to work listing all adjustments and settings necessary for the current functioning of the Facility.
7. Instructions on monitoring of Project Facility's performance and sample log sheets for each plant item, to be filled and maintained by Concessionaires on a routine basis.
8. "Do's" and "Don'ts" in Project Facility operation. Concessionaire's attention shall be drawn to all operations considered to be dangerous to Concessionaires or likely to cause damage to the Project Facility or Employees or Environment.
9. Procedures to deal with breakdown and emergencies
10. Fault locations and remedy charts to facilitate tracing the cause of malfunctions or breakdown and correcting faults
11. Complete list of recommended materials
12. A 'spares schedule' which shall consist of a complete list of time wise spares for all Project Facility items with ordering references and part numbers
13. A complete list of manufacturer's instructions for operation and maintenance of all bought out equipment. The list shall be tabulated in alphabetical order giving the name of supplier / manufacture, identification of the Project Facility item giving the model number and the literature provided including instruction leaflets and drawing numbers.
14. Step by step procedure for the dismantling, repair and re-assembly of all items of equipment
15. Part-list and drawings or exploded diagrams for each item of Project Facility with construction particulars, materials of construction, matching components, clearances and tolerances, maximum wear permitted before replacements are to be done, etc.
16. Record drawings of all systems installed, including general arrangements, conduit and writing trunking systems, wiring diagrams, control schematics and valve charts, etc. to a reduced scale.

(E) Form of Annual Report

An Annual report will be produced which will summarise the previous year's activities and relate these to the Annual Operating Plan for the same period, thus highlighting any anomalies as well as successes. Any anomalies will be redressed by the inclusion of remedial measures in the next years operating plan. The Annual report will include all contents relevant to annual report (FORM-III)for P&D facilities as prescribed in SWM Rules, 2016 and inclusive of but not limited to, the following items;

1. An executive summary containing the main achievements of the previous year, with special mention of Performance Indicators and Levels of Service
2. A report on quantitative data relating to MSW processed and waste disposed off at Sanitary Landfill Unit.
3. A report on volumes of leachate collected and treated
4. A report on quantitative data relating to end products ,bye products
5. A report on ground water quality data and other environmental monitoring
6. A report on compliance to authorization and other regulatory norms
7. Details of maintenance activities carried out in the previous year including the number of non scheduled activities (breakdowns), any major problems encountered and how they were solved and a report summarizing the major refurbishment and replacement activities.
8. A report on billing activities
9. A report on Personnel issues including no's of personnel by department, leavers and joiners, training undertaken across the operations function, accident statistics and absenteeism levels due to sickness.

PERFORMANCE PARAMETERS

During the operations of the Project Facilities and the entire Term of the Agreement, the Concessionaire shall ensure the compliance of following parameters, failing which may result in Event of Default of the Concessionaire under the Agreement:

i. Weighbridge Functioning and Calibration:

Functioning of Weighbridge shall be monitored by the Project Engineer / Independent Engineer so that same is working properly and is Calibrated “The Weight and Measure Act” / Legal Metrology Act/ Applicable Laws. The Concessionaire is responsible for the requisite calibration and working conditions

ii. Processing of MSW at Site:

From COD – P&D onwards, the Concessionaire shall:

- ensure processing of MSW in compliance with Technical Specifications, guidelines mentioned in this Agreement,
- ensure that the storage of MSW at Processing Facilities shall not exceed 3(three) days,
- ensure that total quantity of rejects shall not be more than twenty percent (20%) of total MSW processed,
- ensure that the processing rejects shall not contain more than ten percent (10%) organic content,
- ensure that the quality of compost (as applicable) shall conform to compost quality standards specified under SWM Rules, 2016 and fertilizer control order,
- ensure that adequate pollution control measures are installed and operated,
- The concessionaire shall carry out the detailed Material Balance study of the Processing & Disposal Facility and submit a report to the Concessioneing Authority once in a quarter.

iii. Disposal of MSW

From COD – P&D onwards, the Concessionaire shall:

- ensure that rejects shall not contain 10% of organic matter of total MSW processed. Rejects that have to be disposed off in next time can be sampled by coning and quartering method to get a composite sample. This sample can be analyzed in the lab in the P&D Facility for organic content and on compliance of the limit, it can be permitted by Project Engineer’s/ Authorized Official for disposal in SLF.
- ensure that total quantity of rejects to be land filled shall not be more than twenty percent (20%) of total MSW processed
- verification for compliance to maximum limits of 20% prescribed for rejects shall be checked on a quarterly basis as follows:
 - Quantity of MSW processed in the last quarter in tonnes (A)
 - Quantity of rejects disposed off in SLF in the last quarter in tonnes (B)
 - Percentage = $B/A * 100$

Methodology to calculate Quantity of waste processed and disposed off in SLF :

- a. Concessionaire shall maintain a Plant log book wherein hours of operation of each section of the plant along with operating capacity shall be recorded and maintained daily. From this quantity of waste processed should be calculated.
- b. Concessionaire shall maintain a plant log book wherein quantity of rejects disposed off in SLF is maintained on a daily basis.
- c. Concessionaire shall install a section wise electricity sub meters in the Processing & Disposal facility and based on the section wise electricity consumption and quantity of waste processed the concessionaire has to work out and provide a specific electricity consumption pattern for each section i.e., (kWh or units of electricity consumed per ton of waste processed).
- d. Concessionaire shall install CCTVs in every section in the Processing & Disposal Facility and provide a website based link to the Concessions Authority so that the Concessions Authority can monitor the operational activities from its office / Municipal Corporation office and also through the mobile phone of the authorized municipal corporation officer/ Project Engineer.
- e. Project Engineer/Independent Engineer or any official authorized person may visit the plant at least twice a week, check and verify all operations of the plant including quantity received, processed and disposed off in SLF.

PENALTIES

In case Concessionaire fails to meet the performance parameters mentioned in Annexure 17, Concessioneing Authority shall levy the penalties as per following

i. Weighbridge Functioning and Calibration:

It shall be the responsibility of the Concessionaire to calibrate the weighbridges as per “The Weight & Measure Act” / Legal Metrology Act. The weighbridges will be approved by the Concessioneing Authority and the weigh slips will be accepted for payments.

In the event the Weighbridge is non operational due to some breakdown or any other reason, Concessioneing Authority shall provide a list of three weighbridges, located near the Processing Facility Site, from where the Concessionaire shall weigh the MSW at its own cost.

If the breakdown happens more than 4 consecutive working days, the Concessionaire will be penalized for 2% of the average monthly tipping fee payment made to concessionaire in case of Positive Tipping Fee on a particular month of breakdown. In case of Negative Tipping Fee or Zero Tipping Fee, a lump sum Penalty of Rs. 1,00,000/- (one lacs) shall be applicable for that particular month.

ii. Processing of MSW at Site

From COD of plant, till three months from COD of plant, the Concessionaire shall be given a period for stabilization of plant’s operation. No penalty shall be applicable during this period of stabilization. Penalty shall be applicable only after Stabilization Period.

Description of the deficiency of operation	Penalty in case of Positive Tipping Fee	Penalty in case of Negative Tipping Fee	Penalty in case of zero Tipping Fee
1. Processing of MSW below 90% of supplied waste quantity up-to the Obligated Quantity of MSW except under Force Majeure	Concessionaire shall be penalized 1.25 times the Tipping Fee for shortfall in processing of the supplied waste quantity per day up-to the Obligated Quantity of MSW.	Concessionaire shall be penalized 1.25 times the tipping for shortfall in processing of the supplied waste quantity up-to the Obligated Quantity of MSW.	Concessionaire shall be penalized at the rate of Rs. 300/- per ton of shortfall in processing of the supplied waste quantity up-to the Obligated Quantity of MSW.
2.Failure to process entire quantity of MSW for 8 th consecutive day and onwards till 14 th consecutive day, or for a total period of thirty (30) days except under Force Majeure in any Accounting Year	Concessionaire shall be penalized 1.5 times the Tipping Fee for the waste supplied, up-to the Obligated Quantity of MSW.	Concessionaire shall be penalized 1.5 times the Tipping Fee for the waste supplied, up-to the Obligated Quantity of MSW.	Concessionaire shall be penalized at the rate of Rs.500/- per ton for the waste supplied, up-to the Obligated Quantity of MSW.
<i>Note : Penalty shall be levied in the first fortnight of every month for the preceding month.</i>			

iii. Disposal of MSW

In case the quantity of rejects, over a month exceed 20% of total MSW processed in the month, the Concessionaire shall be penalized as follows:

- a. In case of Positive Tipping Fee, for every percentage increase in rejects, an amount equivalent to 0.5% of average monthly payment made to the Concessionaire on Processing & Disposal over immediately preceding three months.
- b. In case of negative Tipping Fee, for every percentage increase in rejects, an amount equivalent to 0.5% of average monthly payment received from the concessionaire on P&D over immediately preceding three months.
- c. In case of zero Tipping Fee, an amount at the rate of Rs.100 / Ton of excess rejects over the prescribed limit of 20%.

DESIGN & DETAILED ENGINEERING

19.1. Preparation of Designs and Drawings

- (i) The Concessionaire shall, at its cost, charges and expenses, prepare or cause preparation of the designs and detailed Engineering for the Project in accordance with the Specifications and Standards, the Applicable Laws and guidelines issued from time to time by the PPCB, the CPCB and the concerned Government Authorities.
- (ii) The Concessionaire seeks approval of designs and detailed Engineering by the Concessions Authority, acting through the Independent Expert.

19.2 Review and Approval of the Designs and Drawings

- (a) The Concessionaire shall within 30 (thirty) days Compliance Date- P&D submit the designs and detailed Engineering with specifications and calculations for the approval of the Concessions Authority.
- (b) By forwarding the designs and detailed Engineering pursuant to sub-section (a) above, the Concessionaire represents that it has determined and verified that the design and Engineering, including field construction criteria related thereto, are in conformity with the Technical Specifications, the Applicable Laws and the guidelines issued by the CPCB or the PPCB.
- (c) The Concessionaire shall be responsible for delays in Construction Completion and consequences thereof caused by reason of the designs and detailed Engineering or part thereof not being in conformity with the Technical Specifications, the Applicable Laws and the guidelines issued by the CPCB or the PPCB and shall not be entitled to seek any relief in this regard from the Concessions Authority.
- (d) The Concessions Authority or the Independent Expert appointed by it shall review the designs and detailed Engineering and specifications and calculations submitted by the Concessionaire and subject to the provisions of sub-section (e) herein below, communicate its approval within 14 (fourteen) days from the date of the receipt thereof. The Concessions Authority may in consultation with the Concessionaire prescribe a schedule for submission, clarifications and approval of designs and detailed Engineering for specific components of the Project.
- (e) In the event that the Concessions Authority or the Independent Expert has any objection to the designs and detailed Engineering and specifications and calculations or any part thereof, it/he shall promptly within the said 14 (fourteen) days notify the Concessionaire of its/his objections, seek clarifications or suggest changes or modifications or corrections thereto. Thereupon, the Concessionaire shall within 14 (fourteen) days of such notification provide the necessary

clarification to the and/ or re-submit the designs and detailed Engineering and/or specifications and calculations or part thereof, as the case may be, after incorporating the changes, modifications or corrections suggested by the Independent Expert.

- (f) If the Concessioneing Authority or the Independent Expert does not object to the designs and detailed Engineering and specifications and calculations submitted to it by the Concessionaire within 30 (thirty) days of submission, the Concessioneing Authority or the Independent Expert shall be deemed to have approved such designs and detailed Engineering and the Concessionaire shall be entitled to proceed with the Project accordingly.
- (g) The Concessionaire shall not be entitled to any extension of time for completing construction or any other relief on account of delay caused due to providing any clarification or in resubmitting the designs and detailed Engineering
- (h) The Concessionaire shall not change any designs and detailed Engineering, specifications and calculations approved or deemed to be approved by the Concessioneing Authority or Independent Expert under this Agreement, without the prior written consent of the Concessioneing Authority. Provided that the Concessionaire may, for more efficient functioning of the Project propose to and seek the consent of the Concessioneing Authority for changes to the approved designs and detailed Engineering and specifications of any equipment consistent with all design standards applicable to the Project and the Applicable Laws, which consent shall not be unreasonably denied or delayed by the Concessioneing Authority; provided that the Concessionaire shall bear the costs of such change.
- (i) Notwithstanding the express or deemed approval by the Concessioneing Authority or Independent Expert, the Concessionaire shall be solely responsible for any defect and/or deficiency in the designs and detailed Engineering relating to the Project or any part thereof and accordingly the Concessionaire shall at all times remain responsible for its obligations under this Agreement.
- (j) Any design, drawing or specification provided by the Concessioneing Authority to the Concessionaire shall only be indicative and the Concessionaire shall accept the same at its sole risk, cost and consequence.
- (k) Any civil or other Engineering review conducted by the Concessioneing Authority or the Independent Expert is solely for the Concessioneing Authority's own information and that by conducting such review, the Concessioneing Authority does not accept any responsibility for the quality or workmanship of any civil or other Engineering or soundness of the work relating to the Project done by the Concessionaire or any part thereof. The Concessioneing Authority shall not be responsible or liable in any manner for the accuracy, completeness or otherwise of the designs and detailed Engineering or the construction and implementation of the Works by the Concessionaire on the basis thereof, irrespective of any perusal or review thereof or comment thereon by the Concessioneing Authority, any Government Authority or the Independent Expert.

- (l) The Concessionaire shall in no way represent to any Person that, as a result of any review by the Concessioneing Authority or the Independent Expert, the Concessioneing Authority has accepted responsibility for the Engineering or soundness of any work relating to the Project or part thereof carried out by the Concessionaire and the Concessionaire shall, subject to the provisions of this Agreement, be solely responsible for the technical feasibility, operational capability and reliability of the Project or any part thereof.

- (m) Within 45 (forty five) days of Construction Completion Date the Concessionaire shall furnish to the Concessioneing Authority three copies of "as built" drawings reflecting the Project as actually designed, Engineered and constructed, including without limitation an "as built" survey illustrating the layout of the Project and setback lines, if any, of the buildings and structures forming part of the Facility.

DELETED

DELETED

Annexure-21

TIPPING FEES INDEX

Tipping Fee (s) quoted by the Selected Bidder shall be applicable for the Financial Year in which COD-P&D is achieved. This Tipping Fee shall be increased every two years starting from the Financial Year of COD-P&D

For any given Financial Year (t) during the Term, the Tipping Fees X shall be revised as follows:

$$X_{(t)} = X_{(t-2)} * [50\% * \text{Inflation CPI-IW}_{(t)} + 50\% * \text{Inflation-WPI All commodities}_{(t)}]$$

Where:

‘X’ means the Tipping Fee(s)

‘t’ would represent the years i+2z, with ‘i’ representing the Financial Year of COD-P&D and ‘z’ is a whole number;

‘X(t)’ means the Tipping Fee(s) in the year t

Inflation CPI-IW_(t) = Percent increase in All India Consumer Price Index for Industrial Workers between December (t-1) and December (t-3).

WPI-All Commodities_(t) = Percent increase in Wholesale Price Index for All commodities(monthly average) between December (t-1) and December (t-3).

SUBSTITUTION AGREEMENT

(Indicative Draft)

THIS SUBSTITUTION AGREEMENT is entered into on this the ***day of ***20**.

AMONGST

1. The Municipal Commissioner, Municipal Corporation of Mohali (hereinafter referred to as the **“Concessioneing Authority”** which expression shall unless repugnant to the context or meaning thereof include its administrators, successors and assigns) of the First Part;
2. [*****Limited], a company incorporated under the provisions of the Companies Act, 1956 and having its registered office at *****, (hereinafter referred to as the **“Concessionaire”** which expression shall unless repugnant to the context or meaning thereof include its successors and permitted assigns and substitutes) of the Second Part; and
3. *****[NAME AND PARTICULARS OF Lenders’ Representative] and having its registered office at *****, acting for and on behalf of the Senior Lenders as their duly authorized agent with regard to matters arising out of or relation to this Agreement (hereinafter referred to as the **“Lenders’ Representative”**, which expression shall unless repugnant to the context or meaning thereof include its successors and substitutes) of the Final Part.

WHEREAS:

- (A) The Concessioneing Authority has entered into a Concession Agreement dated ***with the Concessionaire (the **“Concession Agreement”**) for project to design, finance, build, operate and maintain the Project Facilities (as defined under the Concession Agreement) on BOOT Basis (the **“Project”**), and a copy of which is annexed hereto and marked as Annex-A to form part of this Agreement.
- (B) Senior Lenders have agreed to finance the Project in accordance with the terms and conditions set forth in the Financing Agreements.
- (C) Senior Lenders have requested the Concessioneing Authority to enter into this Substitution Agreement for securing their interests through assignment, transfer and substitution of the Concession to a Nominated Company in accordance with the provisions of this Agreement and the Concession Agreement.
- (D) In order to enable implementation of the Project including its planning, designing, engineering financing, construction, operation and maintenance, the Concessioneing Authority has agreed and undertaken to transfer and assign the Concession to a Nominated Company in accordance with the terms and conditions set forth in this Agreement and the Concession Agreement.

NOW IT IS HEREBY AGREED as follows:

1 DEFINITIONS AND INTERPRETATION

Definitions

In this Substitution Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

“Agreement” means this Substitution agreement and any amendment thereto made in accordance with the provisions contained in this Agreement;

“FinancialDefault” means occurrence of a material breach of the terms and conditions of the Financing Agreements or a continuous default in Debt Service by the Concessionaire for a minimum period of 3 (three) months;

“Lenders’ Representative” means the person referred to as the Lenders’ Representative in the foregoing Recitals;

“NominatedCompany” means a company, incorporated under the provisions of the Companies Act, 1956, selected by the Lenders’ Representative, on behalf of Senior Lenders, and proposed to the Concessions Authority for assignment/transfer of the Concession as provided in this Agreement;

“Notice of Financial Default” shall have the meaning ascribed thereto in Clause 3.2.1; and

“Parties” Means the parties to this agreement collectively and **“Party”** shall mean any of the Parties to this Agreement individually.

1.2 Interpretation

1.2.1 References to Lenders' Representative shall, unless repugnant to the context or meaning thereof, mean references to the Lenders' Representative, acting for and on behalf of Senior Lenders.

1.2.2 References to Clauses are, unless stated otherwise, references to Clauses of this Agreement.

1.2.3 The words and expressions beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein, and the words and expressions used in this Agreement and not defined herein but defined in the Concession Agreement shall, unless repugnant to the context, have the meaning ascribed thereto in the Concession Agreement.

1.2.4 The rules of interpretation stated in Clauses 1.2, 1.3 and 1.4 of the Concession Agreement shall apply, *mutatis mutandis*, to this Agreement.

2 ASSIGNMENT

2.1 Assignment of rights and title

The Concessionaire hereby assigns the rights, title and interest in the Concession to, and in favour of, the Lenders' Representative pursuant to and in accordance with the provisions of this Agreement and the Concession Agreement by way of security in respect of financing by the Senior Lenders under the Financing Agreements.

3 SUBSTITUTION OF THE CONCESSIONAIRE

3.1 Rights of substitution

- 3.1.1 Pursuant to the rights, title and interest assigned under Clause 2.1, the Lenders' Representative shall be entitled to substitute the Concessionaire by a Nominated Company under and in accordance with the provisions of this Agreement and the Concession Agreement.
- 3.1.2 The Concessions Authority hereby agrees to substitute the Concessionaire by endorsement on the Concession Agreement in favour of the Nominated Company selected by the Lenders' Representative in accordance with this Agreement. (For the avoidance of doubt, the Senior Lenders or the Lenders' Representative shall not be entitled to operate and maintain the Project as Concessionaire either individually or collectively).

3.2 Substitution upon occurrence of Financial Default

- 3.2.1 Upon occurrence of a Financial Default, the Lenders' Representative may issue a notice to the Concessionaire (the "**Notice of Financial Default**") along with particulars thereof, and send a copy to the Concessions Authority for its information and record. A Notice of Financial Default under this Clause 3 shall be conclusive evidence of such Financial Default and it shall be final and binding upon the Concessionaire for the purposes of this Agreement.
- 3.2.2 Upon issue of a Notice of Financial Default hereunder, the Lenders' Representative may, without prejudice to any of its rights or remedies under this Agreement or the Financing Agreements, substitute the Concessionaire by a Nominated Company in accordance with the provisions of this Agreement.
- 3.2.3 At any time after the Lenders' Representative has issued a Notice of Financial Default, it may by notice require the Concessions Authority to suspend all the rights of the Concessionaire and undertake the operation and maintenance of the Project in accordance with the provisions of the Concession Agreement, and upon receipt of such notice, the Concessions Authority shall undertake suspension under and in accordance with the provisions of the Concession Agreement. The aforesaid suspension shall be revoked upon substitution of the Concessionaire by a Nominated Company, and in the event such substitution is not completed within 180 (one hundred and eighty) days from the date of such suspension, the Concessions Authority may terminate the Concession Agreement forthwith by issuing a Termination Notice in accordance with the provisions of the Concession Agreement; provided that upon written request from the Lenders' Representative and the Concessionaire, the Concessions Authority may extend the aforesaid period of 180 (one hundred and eighty) days by a period not exceeding 90 (ninety) days.

3.3 Substitution upon occurrence of Concessionaire Default

- 3.3.1 Upon occurrence of a Concessionaire Default, the Concessioneing Authority shall by a notice inform the Lenders' Representative of its intention to issue a Termination Notice and grant 15 (fifteen) days time to the Lenders' Representative to make a representation, stating the intention to substitute the Concessionaire by a Nominated Company.
- 3.3.2 In the event that the Lenders' Representative makes a representation to the Concessioneing Authority within the period of 15 (fifteen) days specified in Clause 3.3.1, stating that it intends to substitute the Concessionaire by a Nominated Company, the Lenders' Representative shall be entitled to undertake and complete the substitution of the Concessionaire by a Nominated Company in accordance with the provisions of this Agreement within a period of 180 (one hundred and eighty) days from the date of such representation, and the Concessioneing Authority shall either withhold Termination or undertake suspension for the aforesaid period of 180 (one hundred and eighty) days; provided that upon written request from the Lenders' Representative and the Concessionaire, the Concessioneing Authority shall extend the aforesaid period of 180 (one hundred and eighty) days by a period not exceeding 90 (ninety) days.

3.4 Procedure for substitution

- 3.4.1 The Concessioneing Authority and the Concessionaire hereby agree that on or after the date of Notice of Financial Default or the date of representation to the Concessioneing Authority under Clause 3.3.2, as the case may be, the Lenders' Representative may, without prejudice to any of the other rights or remedies of the Senior Lenders, invite, negotiate and procure offers, either by private negotiations or public auction or tenders for the take over and transfer of the Project including the Concession to the Nominated Company upon such Nominated Company's assumption of the liabilities and obligations of the Concessionaire towards the Concessioneing Authority under the Concession Agreement and towards the Senior Lenders under the Financing Agreements.
- 3.4.2 To be eligible for substitution in place of the Concessionaire, the Nominated Company shall be required to fulfill the eligibility criteria that were laid down by the Concessioneing Authority for short listing the bidders for award of the Concession; provided that the Lenders' Representative may represent to the Concessioneing Authority that all or any of such criteria may be waived in the interest of the Project, and if the Concessioneing Authority determines that such waiver shall not have any material adverse effect on the Project, it may waive all or any of such eligibility criteria.
- 3.4.3 Upon selection of a Nominated Company, the Lenders' Representative shall request the Concessioneing Authority to:
- (a) accede to transfer to the Nominated Company the right to construct, operate and maintain the Project in accordance with the provisions of the Concession Agreement;
 - (b) endorse and transfer the Concession to the Nominated Company, on the same terms and conditions, for the residual Concession Period; and
 - (c) enter into a Substitution Agreement with the Lenders' Representative and the Nominated Company on the same terms as are contained in this Agreement.
- 3.4.4 If the Concessioneing Authority has any objection to the transfer of Concession in favour of the Nominated Company in accordance with this Agreement, it shall within 15 (fifteen) days from the date of proposal made by the Lenders' Representative, give a reasoned order after hearing the

Lenders' Representative. If no such objection is raised by the Concessioneing Authority, the Nominated Company shall be deemed to have been accepted. The Concessioneing Authority thereupon shall transfer and endorse the Concession within 7 (seven) days of its acceptance/deemed acceptance of the Nominated Company; provided that in the event of such objection by the Concessioneing Authority, the Lenders' Representative may propose another Nominated Company whereupon the procedure set forth in this Clause 3.4 shall be followed for substitution of such Nominated Company in place of the Concessionaire.

3.5 Selection to be binding

The decision of the Lenders' Representative and the Concessioneing Authority in selection of the Nominated Company shall be final and binding on the Concessionaire. The Concessionaire irrevocably agrees and waives any right to challenge the actions of the Lenders' Representative or the Senior Lenders or the Concessioneing Authority taken pursuant to this Agreement including the transfer/assignment of the Concession in favour of the Nominated Company. The Concessionaire agrees and confirms that it shall not have any right to seek revaluation of assets of the Project or the Concessionaire's shares. It is hereby acknowledged by the Parties that the rights of the Lenders' Representative are irrevocable and shall not be contested in any proceedings before any court or Concessioneing Authority and the Concessionaire shall have no right or remedy to prevent, obstruct or restrain the Concessioneing Authority or the Lenders' Representative from effecting or causing the transfer by substitution and endorsement of the Concession as requested by the Lenders' Representative.

4 PROJECT AGREEMENTS

4.1 Substitution of Nominated Company in Project Agreements

The Concessionaire shall ensure and procure that each Project Agreement contains provisions that entitle the Nominated Company to step into such Project Agreement, in its discretion, in place and substitution of the Concessionaire in the event of such Nominated Company's assumption of the liabilities and obligations of the Concessionaire under the Concession Agreement.

5 TERMINATION OF CONCESSION AGREEMENT

5.1 Termination upon occurrence of Financial Default

At any time after issue of a Notice of Financial Default, the Lenders' Representative may by a notice in writing require the Concessioneing Authority to terminate the Concession Agreement forthwith, and upon receipt of such notice, the Concessioneing Authority shall - undertake Termination under and in accordance with the provisions of Article 22 and 23 of the Concession Agreement.

5.2 Termination when no Nominated Company is selected

In the event that no Nominated Company acceptable to the Concessioneing Authority is selected and recommended by the Lenders' Representative within the period of 180 (one hundred and eighty) days or any extension thereof as set forth in Clause 3.3.2, the Concessioneing Authority may terminate the Concession Agreement forthwith in accordance with the provisions thereof.

5.3 Realisation of Debt Due

The Concessioneing Authority and the Concessionaire hereby acknowledge and agree that, without prejudice to their any other right or remedy, the Lenders' Representative is entitled to receive from the Concessionaire, without any further reference to or consent of the Concessionaire, the Debt Due upon Termination of the Concession Agreement.

6 DURATION OF THE AGREEMENT

6.1 Duration of the Agreement

This Agreement shall come into force from the date hereof and shall expire at the earliest to occur of the following events:

- (a) Termination of the Concession Agreement; or
- (b) no sum remains to be advanced, or is outstanding to the Senior Lenders, under the Financing Agreements.

7 INDEMNITY

7.1 General indemnity

7.1.1 The Concessionaire will indemnify, defend and hold the Concessioneing Authority and the Lenders' Representative harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense of whatever kind and nature arising out of any breach by the Concessionaire of any of its obligations under this Agreement or on account of failure of the Concessionaire to comply with Applicable Laws and Applicable Permits.

7.1.2 The Concessioneing Authority will indemnify, defend and hold the Concessionaire harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Concessioneing Authority to fulfill any of its obligations under this Agreement, materially and adversely affecting the performance of the Concessionaire's obligations under the Concession Agreement or this Agreement, other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by the Concessioneing Authority, its officers, servants and agents.

7.1.3 The Lenders' Representative will indemnify, defend and hold the Concessionaire harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Lenders' Representative to fulfill its obligations under this Agreement, materially and adversely affecting the performance of the Concessionaire's obligations under the Concession Agreement, other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by the Lenders' Representative, its officers, servants and agents.

7.2 Notice and contest of claims

In the event that any Party hereto receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under Clause 7.1 or in respect of which it is entitled to reimbursement (the "**Indemnified Party**"), it shall notify the other Party responsible for indemnifying such claim hereunder (the "**Indemnifying Party**") within 15 (fifteen) days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, such approval not to be unreasonably withheld or delayed. In the event that

the Indemnifying Party wishes to contest or dispute the claim, it may conduct the proceedings in the name of the Indemnified Party and shall bear all costs involved in contesting the same. The Indemnified Party shall provide all cooperation and assistance in contesting any claim and shall sign all such writings and documents as the Indemnifying Party may reasonably require.

8 DISPUTE RESOLUTION

8.1 Dispute resolution

8.1.1 Any dispute, difference or claim arising out of or in connection with this Agreement which is not resolved amicably shall be decided by reference to arbitration to a Board of Arbitrators comprising one nominee each of the Concessing Authority, Concessionaire and the Lenders' Representative. Such arbitration shall be held in accordance with the Rules of Arbitration of the International Centre for Alternate Dispute Resolution, New Delhi (the "Rules") or such other rules as may be mutually agreed by the Parties, and shall be subject to provisions of the Arbitration and Conciliation Act, 1996.

8.1.2 The Arbitrators shall issue a reasoned award and such award shall be final and binding on the Parties. The venue of arbitration shall be [Chandigarh] and the language of arbitration shall be English.

9 MISCELLANEOUS PROVISIONS

9.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the Courts at [Chandigarh] shall have jurisdiction over all matters arising out of or relating to this Agreement.

9.2 Waiver of sovereign immunity

The Concessing Authority unconditionally and irrevocably:

- (a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;
- (b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Concessing Authority with respect to its assets;
- (c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and
- (d) consents generally in respect of the enforcement of any judgement or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgement that may be made or given in connection therewith).

9.3 Priority of agreements

In the event of any conflict between the Concession Agreement and this Agreement, the provisions contained in the Concession Agreement shall prevail over this Agreement.

9.4 Alteration of terms

All additions, amendments, modifications and variations to this Agreement shall be effectual and binding only if in writing and signed by the duly authorised representatives of the Parties.

9.5 Waiver

Waiver by any Party of a default by another Party in the observance and performance of any provision of or obligations under this Agreement:

- (a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
- (b) shall not be effective unless it is in writing and executed by a duly authorised representative of the Party; and
- (c) shall not affect the validity or enforceability of this Agreement in any manner.

9.5.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to another Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

9.6 No third party beneficiaries

This Agreement is solely for the benefit of the Parties and no other person or entity shall have any rights hereunder.

9.7 Survival

9.7.1 Termination of this Agreement:

- (a) shall not relieve the Parties of any obligations hereunder which expressly or by implication survive termination hereof; and
- (b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such termination or arising out of such termination.

9.7.2 All obligations surviving the cancellation, expiration or termination of this Agreement shall only survive for a period of 3 (three) years following the date of such termination or expiry of this Agreement.

9.8 Severability

If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to dispute resolution under Clause 8 of this Agreement or otherwise.

9.9 Successors and assigns

This Agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

9.10 Notices

All notices or other communications to be given or made under this Agreement shall be in writing, shall either be delivered personally or sent by courier or registered post with an additional copy to be sent by facsimile. The address for service of each Party and its facsimile number are set out under its name on the signing pages hereto. A notice shall be effective upon actual receipt thereof, save that where it is received after 5.30 (five thirty) p.m. on any day, or on a day that is a public holiday, the notice shall be deemed to be received on the first working day following the date of actual receipt. It is hereby agreed and acknowledged that any Party may by notice change the address to which such notices and communications to it are to be delivered or mailed. Such change shall be effective when all the Parties have notice of it.

9.11 Language

All notices, certificates, correspondence and proceedings under or in connection with this Agreement shall be in English.

9.12 Authorized representatives

Each of the Parties shall by notice in writing designate their respective authorized representatives through whom only all communications shall be made. A Party hereto shall be entitled to remove and/or substitute or make fresh appointment of such authorized representative by similar notice.

9.13 Original Document

This Agreement may be executed in three counterparts, each of which whereexecuted and delivered shall constitute an original of this Agreement.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED AND
DELIVERED

SIGNED, SEALED AND
DELIVERED

For and on behalf of
CONCESSIONAIRE by:

For and on behalf of
CONCESSIONING AUTHORITY OF [***] by:

(Signature)
(Name)
(Designation)
(Address)
(Fax No.)

(Signature)
(Name)
(Designation)
(Address)
(Fax No.)

SIGNED, SEALED AND DELIVERED

For and on behalf of
SENIOR LENDERS by the Lenders' Representative:

(Signature)
(Name)
(Designation)
(Address)
(Fax)

In the presence of:

- 1
- 2.

Annexure-24 B

[Note LL: A Copy of D.O. No. Z -14013/3/2009-PHE II dated March 22, 2010 issued by Ministry of Urban Development, Government of India, should be attached in this Annexure]