

SCHEDULE-VI
Decision on EIA

1. Name, address of proponent:

The Chief Executive Officer, Water and Sanitation Services, Peshawar (WSSP).
Contact No. 091-9217630

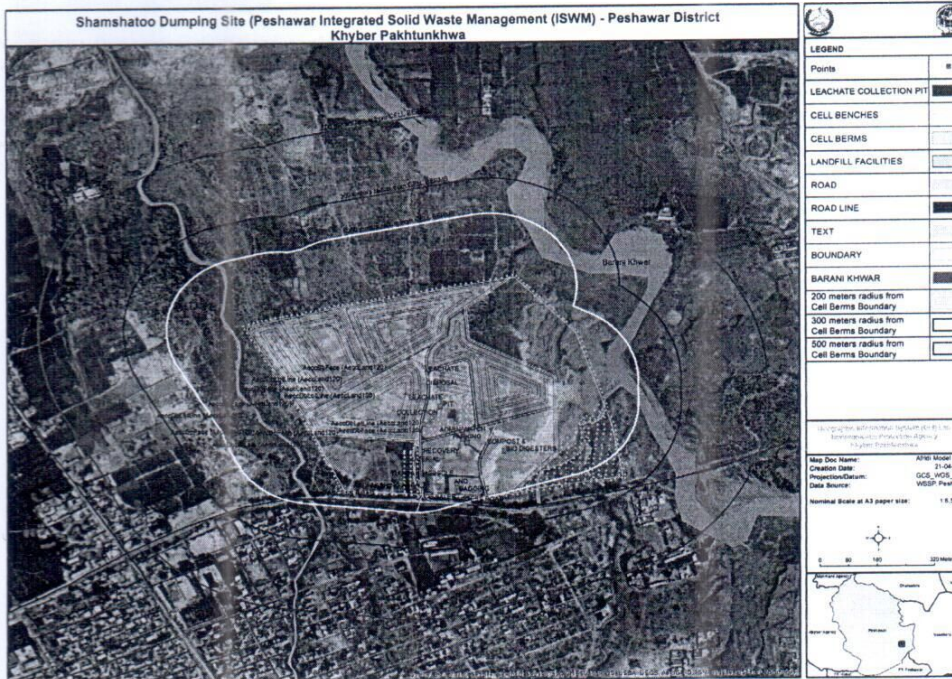
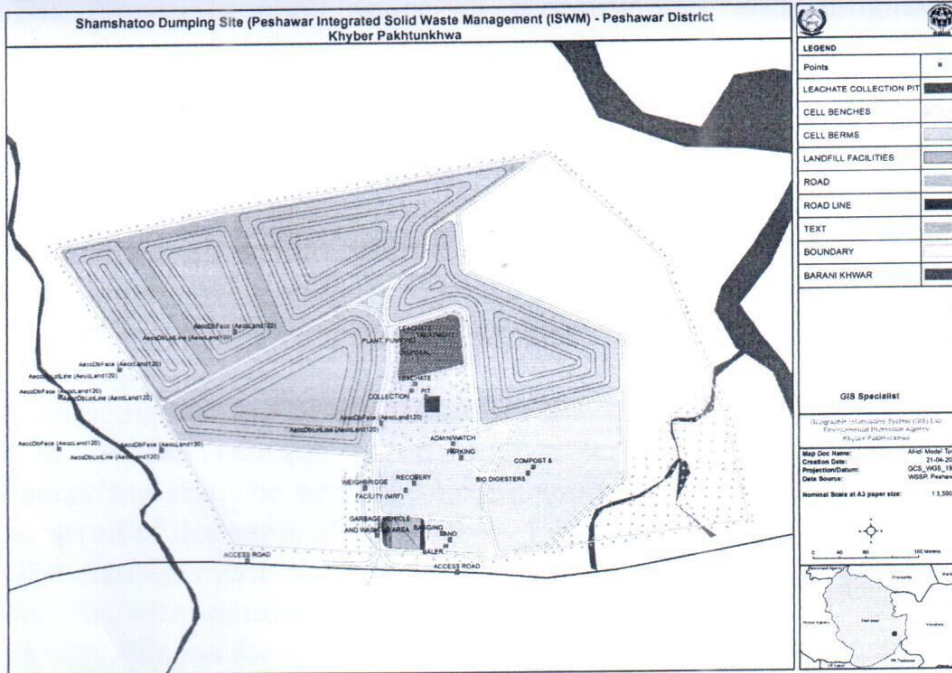
2. Description of project:

The WSSP intends to construct a land fill site for the Solid Waste Management of the Peshawar city. The solid waste collected for landfill site will be segregated at the early stage, 3 R's (Reduce, Reuse, Recycle) rule shall be followed. The landfill facility will consist of Material Recovery Facility (MRF), Composting/biogas Plant, Storage area, Leachate Cell, Leachate collection pit, Leachate Treatment Facility. The organic materials will be used for the process of composting to make it a revenue generating project by converting the composted material in to valuable fertilizers and then sell it to local markets for use. Finally, the useless waste material shall be disposed off in a landfill site which will be very less and also will help the management for increasing the life span of the project. A gas collection system shall also be installed for the collection of Methane Gas which shall also be sell to local market depending on the quantity and will also create revenue to the proposed project. However, the process involved in base lining is Clay Material Layer followed by Geo-Polymer Lining, Lechate Lining, Gravel, final filling and for this purpose various cells of 200x200 meters or 200x300 meters will be constructed. Lechate structure shall be designed and based on gravity flow. Vertical settings shall be made for the collection of Methane Gas.

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(GPS Coordinates in Decimal Degree):

Sno	X	Y	Sno	X	Y
1	71.7182 1	33.8851 5	8	71.7146 1	33.8901 8
2	71.7175 8	33.8851 9	9	71.7190 3	33.8909 2
3	71.7150 8	33.8853 5	10	71.7206 4	33.8894 6
4	71.7145 9	33.8853 8	11	71.7215 6	33.8870 9
5	71.7135 7	33.8872 9	12	71.7218 5	33.8856 9
6	71.7135 6	33.8873 5	13	71.7199 6	33.8854 5
7	71.7120 3	33.8896 5			



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3. **Location of project:** The project is located at Garhi Faizullah, Near Afghan Refugee Camp, Shamshato, District Peshawar.
4. **Date of filing of EIA:** 05/06/2020
Ref. (EPA Diary No. 390)
5. After careful review, the Environmental Protection Agency, Govt. of Khyber Pakhtunkhwa has decided to accord approval of the Environmental Impact Assessment (EIA) Report of **“Land fill site for the Solid Waste Management at Garhi Faizullah, Near Afghan Refugee Camp, Shamshato, District Peshawar”** in line with the Khyber Pakhtunkhwa Environmental Protection Act, 2014 and the IEE/EIA Regulations, 2000, subject to the following terms & conditions:-

- i. The Proponent shall adopt all precautionary and mitigation measures identified in EIA Report, replies submitted to this Agency in response of observations as well as any unanticipated impacts during the construction and operation phase of the project.
- ii. The design of land fill must consider any nuisance that may arise during the construction and operation phase of the landfill including noise, odor, dust, littering, vermin or fire.
- iii. A boundary wall shall be constructed around the project site. Moreover, proper security arrangement shall be made to safeguard the dumping site.
- iv. The acquisition of the houses in the project area shall be completed before commencement of construction work.
- v. The houses located within 500 meter radial distance of the project footprints shall be acquired before commencement of the project activities & detail of the same shall be shared with this Agency.
- vi. The management shall submit a detailed Engineering Design of disposal facility with details of cell structure, leachate lining/leachate treatment facility, biogas formation and fertilizer formation facility before starting the physical activities.
- vii. The management shall submit the detail of budget allocation for maintenance/repair/rehabilitation of the existing link road.
- viii. Temporary storage facility for solid waste shall be established in the landfill site to accommodate the waste in case of non- operation of waste processing and during emergency or natural calamities.
- ix. The landfill cells shall be properly bio-engineered & soil and ground water shall be protected from the solid waste/leachate contamination.
- x. Prior to operation phase of the project, a 50 meter buffer zone with having 20 meter plantation inside the project area along the boundary shall be established. Thick plantation/buffer zone especially towards the human settlement must be maintained. Moreover, the plantation of Chinar, Ghaz, Thooth, Black Bakyan, Dates (Trees of 10-15 feet height) shall be carried out around the boundary wall, inside the project area & if possible outside of the boundary wall.
- xi. The landfill cell shall be constructed to a maximum such depth as to protect & minimize the impacts on the ground water.
- xii. The landfill cell shall have proper liners as identified in the design. The liner system must be provided at the bottom of the waste cell to prevent any percolation of contamination into groundwater strata. The liner system can either be natural or synthetically made to meet the requirement of permeability and thickness.
- xiii. An efficient leachate collection system would be provided within the waste cell, so that the leachate is accumulative at the base and transported to collection pit. After collection, the leachate shall be properly treated in treatment plant before final safe disposal.
- xiv. Landfill gas shall not be allowed to escape directly to the atmosphere. The Landfill Gas needs to be collected through gas pipes & waste cell. The collected gas shall be treated/utilize or disposed of in a safe manner.
- xv. The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the landfill site and leachate from solid waste do not get mixed with the surface runoff water.

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- xvi. The ground water quality within 50 meter of the periphery of landfill site shall be periodically monitored to ensure that the ground water is not contaminated. Moreover, monitoring well of proper number shall be constructed inside the project premises.
- xvii. A Committee shall be notified prior to start of project activities comprising representatives from the locality. The Committee will look after all the issues pertaining to the project activities specifically environment & social related issues.
- xviii. The landfill site shall have waste inspection facility to monitor waste brought in for landfilling; office facility for record keeping and shelter for keeping equipment and machinery includes pollution monitoring equipment.
- xix. The operator of the facility shall maintain record of waste received, processed and disposed.
- xx. Provisions like weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.
- xxi. Storage area of the waste shall be properly confined & covered to avoid seepage.
- xxii. The nearby irrigation channel on the southern side and two natural seasonal Khwarhs towards southern & eastern sides shall be protected from solid waste and all types of pollution.
- xxiii. Proper protection works/boundary wall shall be erected out along the Khwarhs to mitigate floods.
- xxiv. The gaseous emissions from the compost plant & bio-gas plant during the composting process may potentially affect the ambient air quality. The ambient air quality shall periodically be monitored in the vicinity of the plant to ensure that the concentration levels of the gases are within the permissible limits.
- xxv. A proper fumigation system shall be established on project site.
- xxvi. The composting facility shall be properly managed & maintained in order to avoid contamination in the environment (Soil, ground/surface water & ambient air).
- xxvii. Effective aerobic composting conditions shall be maintained. In addition, de-odorizing agents shall be used where needed to suppress the offensive odors. Odor measurements shall be carried out regularly.
- xxviii. The Material Recovery Facility (MRF) shall be properly managed. Record registers shall be maintained for the same.
- xxix. Spraying of appropriate environmental friendly insecticides shall be carried out to kill/repel the insects and reduce their threat as a nuisance to the surrounding communities as well as to their agricultural activities.
- xxx. Most of the non-biodegradable (inert) waste such as metals and glass shall be separated from Municipal Solid Waste (MSW) for recycling; however, a small portion of the inert waste that cannot be recycled shall be disposed off in environment-friendly manner.
- xxxi. The hospital/hazardous waste shall not be disposed off in the landfill site. The biomedical waste/Hospital Hazardous waste shall be disposed off in accordance with the Hospital Waste Management Rules, 2005.
- xxxii. All vehicles, generators and other equipments shall be properly tuned and maintained in good working condition in order to minimize emission of pollutants.

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- xxxiii. The vehicles and construction equipment's shall have appropriate and properly functioning exhaust mufflers (silencers). The noise level shall be monitored during the construction phase.
- xxxiv. To avoid the traffic congestion, a traffic management plan in consultation with the locals, shall be submitted to this Agency.
- xxxv. Unauthorized access to the Landfill site shall not be allowed and the defensive driving practices shall be promoted among the project drivers.
- xxxvi. The MSW trucks/transportation vehicles shall be appropriately covered/sealed and the waste spillage on the roads during the transportation shall be prevented.
- xxxvii. Health certificates of the workers working at the plant shall be submitted to this Agency after every six month. Safety provisions including health inspections of workers at landfill sites shall be carried out.
- xxxviii. Boundary wall of the treatment facility shall be erected high enough in order to avoid odor and noise pollution.
- xxxix. The storage time of the waste collected at the landfill site shall not more than 24 hours.
- xl. Proper record registers shall be maintained for daily collection, disposal, material recovery, composting/biogas production of MSW.
- xli. The project site must be kept clean & tidy and shall be protected from animals & birds
- xl.ii. The management shall be bound to adopt any additional mitigation measures suggested by EPA from time to time during construction & operation of the project activities.
- xl.iii. During land leveling, the muck/debris material shall not be disposed off outside the project site. Cut & fill mechanism shall be adopted during construction/development of the project site.
- xl.iv. The details of CSR activities (if any) shall be shared with this Agency.
- xl.v. All land/building/houses payment/compensation/relocation shall be completed before commencement of the project activities. A certificate in this regard shall be submitted to EPA
- xl.vi. Proper parking area shall be allocated for transportation vehicles.
- xl.vii. Water sprinkling shall be carried out where required to reduce the public nuisance caused by the dust emissions.
- xl.viii. Ambient air quality at the landfill site and at the vicinity shall be regularly monitored.
- xl.ix. Landfill closure plan and the site restoration/reuse plan shall be submitted and duly approved from this Agency.
1. Non-technical jobs shall be provided to the locals and preference shall be given in technical jobs. Moreover, details of the same shall be submitted to EPA.
- li. This approval is issued on the basis of information/documents related to land ownership submitted to EPA. This Agency shall not be responsible for any issue related to land ownership, etc. All such issues to be resolved at proper forum like Revenue Department/Courts, etc.
6. The proponent shall be liable for correctness and validity of the information supplied by the environmental consultant.
7. The proponent shall be liable for compliance of Section-11, 13 & 17 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014 and Regulation 13,

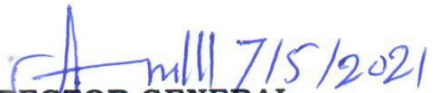
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14, 16, 17 & 18 of the Regulations, 2000, regarding approval, confirmation of compliance, entry, inspections and monitoring.

8. This approval is accorded only for the installation/ construction phase of the project.
9. The proponent will obtain approval for operation of the project in accordance with the Regulation 13 (2) (b) & 18 of the IEE/EIA Regulations, 2000. The proponent must inform EPA, when construction phase is completed.
10. Any change in the approved project shall be communicated to EPA, Khyber Pakhtunkhwa and shall be commenced after obtaining the approval.
11. This approval shall be treated as null and void if all or any of the conditions mentioned above is/are not complied with.
12. This approval does not absolve the proponent of the duty to obtain any other approval or clearance that may be required under any law in force.
13. There shall be no legal case pending in the courts against the project.
14. In exercise of the power under Section 13 of the Khyber Pakhtunkhwa Environmental Protection Act, 2014, the undersigned is pleased to approve the EIA Report for construction phase of aforementioned project;

Dated: Peshawar 07 / 05 /2021.

Tracking/File.No. EPA/EIA/Dumping-site/Pesh/WSSP/21/197-201


DIRECTOR GENERAL,
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