

Guidelines For Labour Camps (Sanitation And Human Health)

INTRODUCTION

The Accommodation Camp Management Plan (ACMP) is the siting, development, management and restoration of accommodation camps to avoid or mitigate impacts on the environment. The area requirement for the accommodation camp shall depend upon the size of work, number of labourers Employed. The plan describes the siting, construction, maintenance, provision of facilities in the accommodation camps and finally their rehabilitation.

The purpose of the plan to develop by contractor is to set out the objectives and measures to maintain and enhance environmental performance of the quarries and borrow areas while avoiding to the extent practical, remedying, and mitigating any potential adverse environmental effects associated with quarrying and borrow area operations.

OBJECTIVE & SCOPE

The ACMP developed for management of Accommodation camp is applicable for effective management of workmen accommodation camp at construction site only.

The purpose of this Standard is to ensure that the workforce across the project is provided with an adequate standard of accommodation which meets specification establishes the construction & welfare requirements for the Workmen Habitat. It covers, area requirements for the various facilities of the habitat, i.e, Contractor shall always undertake best management practices (BMPs) to ensure that the construction and development activities do not cause any adverse impact on the environment and population in nearby area. The objective of the plan is:

To adopt mitigation measures to prevent any adverse impact on Environmental attributes (air, water, soil, noise etc.)

- Ensure that the implementation measures area adopted
- Establish systems and procedures for this purpose
- Monitor the effectiveness of mitigation measures and
- Take any necessary action when unforeseen impact occurs.

LEGISLATIVE AND REGULATORY REQUIRCONTRACTORENT

Contractor shall comply with all applicable regulations required for establishment and compliance of Plans. Contractor shall take all necessary applicable clearances from concerned authorities required under regulatory provisions.

- IS Code IS 10500:2012 – Drinking water specification
- ILO recommendations R 115 Workers Housing recommendation 1961
- Building and Other Construction Work act 1996 and rules 2006
- Indian Electricity rules 1956
- Contractor shall comply with legislative and regulatory requirement as applicable.

SITE SLECTION CRITERIA

Identification of site for construction and labour camps is the first task. Contractor shall identify the site for accommodation camp in within ROW and if outside ROW, consultation with individual owners (in case of private lands) and the concerned department in case of Government lands. The suitable sites shall be selected and finalized in consultation with the Engineer in-charge. Table below gives site selection criteria for setting-up accommodation camps.

Table-1 Selection Criteria for Establishment of accommodation camps

Avoid the Following.....	Prefer the Following.....
<ul style="list-style-type: none"> X Lands within 500 m from nearby inhabitations X Irrigated agricultural land X Land under village forest X Land within 100 m of community water bodies and water resources X Land within 100 m of water courses X Low lying land X Land supporting dense vegetation X Grazing land and land with tenure rights 	<ul style="list-style-type: none"> • Land available within ROW with • minimum distance of 500 m from inhabitation • land with no or less vegetation • land away from water courses and if outside ROW, • minimum distance of 500 m from inhabitation • Waste land belonging to owners willing to give their land • Community land or Govt. land which is not being used for beneficial purposes • Private Land where owner is willing to give their land • Land with no/less vegetation cover and with existing access roads

Contractor shall work out arrangements for setting up construction and labour camps. These shall include and clearly specifying the:

- Photograph of the proposed Camp site in original condition
- Activities to be carried out at site
- Detailed layout plan for development of the labour camp that shall indicate the various structures to be constructed in the camp including temporary, drainage and other facilities.
- Besides this, Contractor shall submit the list of all existing labor camp to the Engineer and list will be updated periodically as per the construction progress and update the list.

FACILITIES TO BE PROVIDED

Contractor shall provide free of cost at the camp site, temporary living accommodation to all the workers Employed during construction work period. The rooms of labour shall be well lighted and ventilated. Following facilities shall be provided at the labour camp:

Drinking Water

Towards the provision and storage of drinking water at the accommodation camp, Contractor shall ensure the following provisions :

- Sufficient supply of potable water in the camps, in overhead tanks or any other suitable containers.

- The drinking water to be supplied shall meet the requirement as per IS 10500. Regular testing of water quality shall be done as per IS 10500:2012.
- Drinking water points/tanks/containers/etc. in the camp are legibly marked "Drinking Water;
- Every water supply or storage shall be at a distance of not less than 15m from any wastewater / sewage drain or other source of pollution.
- Criteria for location of drinking water storage tanks in the camps as well as other provisions to secure them from getting polluted;
- Provision of regular cleaning of water tanks in the camps;
- Provision of arrangement in the labour camp for providing cold drinking water in hot summer
- Water sources within 15m proximity of toilet, drain or any source of pollution will not be used as a source of drinking water in the project.
- All tanks used for the storage of drinking water shall be covered as to prevent water stored therein from becoming polluted or contaminated. Provisions on practices to be observed in the camps on "Water Conservation".

Washing and bathing facilities

At every construction site, Contractor shall provide adequate and suitable facilities for washing clothes and utensils and maintained for use of contract labour Employed therein. Separate and adequate bathing shall be provided for the use of male and female workers. Such facilities shall be conveniently accessible and shall be kept in clean and hygienic conditions.

- Provision on arrangement of drainage for draining away wastewater from key locations such as washing clothes area, hand washbasins, utensils washing in kitchen, bathing area, etc.;
- Provisions of wastewater handling system to be provided on each camp site;
- Provision of storage facility for general water supply in the camp for washing clothes, bathrooms, kitchen, etc.;
- Criteria to be followed on the provision of sufficient bathroom facilities in accordance with the number of workers accommodated in the camp; and
- Provisions on practices to be observed in the camps on "Water Conservation".

Toilet facilities

Contractor shall provide Sanitary arrangements, latrines and urinals at every accommodation camp separately for male and female workers, as required. The arrangements shall include:

- Provision of sufficient toilet and urinal facilities in accordance with the number of workers accommodated in the camp shall be provided.
- Separate latrines for male and female
- Every latrine shall be under cover and so partitioned as to secure privacy, and shall have a proper door and fastenings.
- Where workers of both sexes are Employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men Only" or "For Women Only" as the case may be
- Provision of cleaning and re-equipping of these facilities on daily basis;
- Soak pits of adequate sizes shall be provided in the camp. Regular cleaning shall be done and sewerage disposal shall be done through vendors, if available.

- The latrines and urinals shall be adequately lighted and shall be maintained in a clean sanitary condition at all times and should have a proper drainage system.
- Water shall be provided in or near the latrines and urinals by storage in suitable containers.
- Hand washing facility should be installed outside toilets.

Waste Disposal

Contractor shall be completely responsible for collection of waste generated from labour camps, its temporarily storage and disposal through approved vendors. It shall be ensured that:

- Two different bins shall be provided in kitchen for collection of biodegradable and non-biodegradable waste temporarily and shall be disposed-off through approved vendors or to a municipal waste collection bin, if available nearby
- Necessary awareness on the same shall be provided to inmates of the camp.
- Temporarily Collection of sanitary waste and excreta shall be done in septic tanks of adequate capacity
- Later, they will be disposed-off through govt. approved vendors or in municipal sewers, if found nearby.
- Health & Environment training and awareness programs on waste management in the labour camp shall be conducted.
- Septic tanks shall be located at-least 15m from away from water body.
- The bottom of the pit shall be filled with coarse gravel and the sides shored up with board, etc. to prevent erosion and collapse of the pit.
- The collection tank or septic tank once filled shall be Emptied or if not possible immediately, new collection tank shall be formed.
- Temporarily Collection of sanitary waste and excreta shall be done in septic tanks of adequate capacity
- Later, they will be disposed-off through approved vendors or in municipal sewers, if found nearby
- Soak pits shall be provided for collection of waste water from kitchen.
- The collection bins shall be Emptied on regular basis.
- Plastic waste/Paper waste and other waste shall not be allowed to burn in open.

Cooking Area:

Adequate Cooking area shall be provided at labor camps, depending upon the number of workmen.

- Cooking area shall be kept clean and at regular intervals.
- Hand washing facility and utensil washing facilities shall be provided.
- It shall be ensured that the cooking area has adequate illumination and lighting to make it easier for cooking at nighttime. Waste collection bins shall be provided to collect food waste and other waste, being generated from cooking area.
- Proper ventilation shall be provided at cooking area.
- Regular monitoring shall be done to ensure that cooking area is kept clean and proper hygiene is maintained.
- Wood burning shall be avoided.

Medical and First aid facilities:

Contractor shall provide medical facilities to labors at site:

- Visit of doctor shall be arranged at regular intervals and routine check-ups shall be conducted for labors.
- A separate room for medical checkups and keeping of first aid facilities shall be built.
- A first aid box shall be provided at construction site and under the charge of SHE Engineer who shall always be readily available at site during working hours.
- He shall be adequately trained in administering first aid- treatment.
- Formal arrangement shall be prescribed to carry injured person or person suddenly taken ill to the nearest hospital.
- An ambulance shall always be made available at construction site for the same.
- Emergency Communication & Emergency Response Plan as mentioned in Project SHE Plan shall be followed for labour Camp.
- Awareness, training & information related to HIV/AIDS (through leaflets, booklets, posters, training, etc.) shall be provided to labors / inmates of the camp from time to time.

Fire-fighting arrangements

Contractor shall make all necessary fire-fighting arrangements at labour camps to avoid any major accidents due to fire. Following precaution shall be taken by contractor for ensuring fire safety at labor camp:

- Identification of area susceptible to fires with cautionary signage
- Portable fire extinguishers and/or sand baskets shall be provided at easily accessible locations in the event of fire
- Education and training shall be provided to labors and other workers for using fire- fighting equipment.
- Since labour camp is situated in close proximity to office establishment at different location of the project, Emergency Communication & Emergency Response Plan as mentioned in Project SHE Plan shall be followed for labour Camp.
- One assembly area shall be provided at each construction site.

Safety & Security

Contractor shall ensure the security of all workers staying in labor camps, both during day and night time. A security guard shall be placed at site to ensure proper security at construction site and labor camp. Provision of fencing around campsite shall also be provided to ensure safety and security of workmen.

Insect and rodent control

- All areas should be kept free from insects, pests, and rodents. A pest control should be performed by an approved pest control operator at a regular basis and maintain the records for the same.
- Insect killers and/or suitable means of pest control should be installed
- Effective measures must be taken to prevent infestation by and harbourage of animal or insect vectors or pests.

- The management should have contract with a Pest Control Company to carry out pest control program for the facility.

Illumination

- Lighting must be provided to all internal areas at a Minimum level of 150 Lux.
- All fixed lighting must be ceiling mounted.
- Suspended lighting is prohibited.
- Common outdoor recreational areas at a Minimum level of 50 Lux.
- Lighting of 300 Lux shall be maintained in the first aid centre.

Correct Storage

The correct storage of goods is essential to reduce pest incidence. The following principles must be adhered to by occupiers and users of premises:

- All areas must remain accessible for cleaning and inspection, which should be carried out at frequent and regular intervals.
- Damage to storage containers must be minimized to reduce spillage.
- All goods must be kept clear of the walls, windows, and ventilators.
- All goods must be kept off the floor, taking care enough room is left to clear spillages.
- All areas must be well ventilated and lighted.
- Storage areas must be in good repair and effectively proofed against pest entry
- Storage space should be cleaned and inspected before new stock arrives.

OPERATION & MAINTENANCE

Accommodation camps shall be maintained free from litter and in hygienic condition. It should be kept free from spillage of oil, grease or bitumen. Any spillage shall be cleaned immediately to avoid pollution of soil, water stored or adjacent water bodies. The following precautions shall be taken in accommodation camps:

- Measures to ensure that no leaching of oil and grease into water bodies or underground water takes place.
- Waste water shall not be disposed into water bodies
- Regular collection of solid wastes shall be undertaken and should be disposed-off safely
- All consumables as the first aid equipment, cleaning equipment for maintaining hygiene and sanitation should be recouped immediately
- No water stagnation shall be allowed in the camp such as in ditches or ponds where mosquitoes can breed due to water accumulation;
- No waste shall be allowed to burn on camp sites;
- No general garbage shall be allowed to overflow from the bins and spreading around;
- No workers shall be allowed to cut surrounding vegetation for fuel purpose; and
- SHE Policy shall be displayed in local language in the labour campsite.

GOOD HOUSEKEEPING

Despite all proofing precautions pests will inevitably get into a building at some time. However, there is a large difference between an occasional invader and the establishment of a stable population of certain pests.

- To reduce the risk of an infestation it is important to deny the lone invader the conditions it likes, and all occupiers and users must ensure that.
- Their rooms are clean and tidy to reduce sources of food and harbourage. Attention must be paid to locker rooms, changing, dining, stores, record stores, and waste compounds.
- Cooperation between occupiers, users and cleaners of premises and pest-control contractors is essential, to ensure baits are not moved, re-positioned, or washed away.
- Spillages are cleared away promptly.
- Food is kept in rodent proof containers; lids are always replaced.
- Food waste and other refuse shall be adequately deposited in sealable containers and removed from the kitchen frequently to avoid accumulation.
- Unused equipment, packaging, materials, leaflets, stores, and similar articles must be rotated and checked frequently as rodents prefer living in undisturbed areas.
- Special attention must be paid to waste disposal. Receptacles should be of adequate capacity to avoid overflowing and should be provided with tight fitting lids or covers.
- Waste must be removed promptly and efficiently, and refuse areas kept clean. Receptacles themselves must be cleaned after emptying to prevent deposits providing breeding sites for flies.
- The internal walkways are documented with hard standing material, kept free of any storage material/ obstructions, and maintained in a clean and tidy manner.
- A supervisor shall be appointed to supervise hygiene in the Habitat facilities.

SITE CLOSURE

At the completion of construction, all accommodation camp facilities shall be dismantled and removed from the site. The site shall be restored to a condition in no way inferior to the condition prior to commencement of the works. Contractor shall carry out required activities for site rehabilitation which include:

- Oil and fuel contaminated soil shall be removed and transported to govt. approved vendors and recyclers for final treatment/disposal.
- Soak Pits & Septic tanks shall be covered and effectively sealed off.
- Debris (rejected material) shall be disposed off suitably.
- Ramps created, if any should be levelled.
- Underground water tank in a barren/non-agricultural land can be covered. However, in an agricultural land, the tank shall be removed.
- If the accommodation camp site is on an agricultural land, topsoil can be spread so as to aid faster rejuvenation.
- Proper documentation of rehabilitation site is necessary. This shall include the following:
 - Photograph of rehabilitated site;
 - If camp site is outside ROW, Land owner consent letter for satisfaction in measures taken for rehabilitation of site;
 - Certification from Engineer in-charge.

INSPECTION AND MONIOTRING

Regular inspection of Workers accommodation shall be conducted by Contractor for effective implementation of management plan and mitigation measures to minimize the impact on environmental conditions.

Following practices shall be adopted to monitor the Environmental condition at ACMP:

- Visual Inspection of hygienic and aesthetic of camps
- Impact on air, water, noise, waste etc.
- Waste Management
- Monitoring records of env monitoring
- Monthly inspection by the contractor and submission it to PMC along with site photographs for review and necessary action
- Monitoring the environmental parameters (air, water, soil, noise) and quality as per the Environmental monitoring plan for the project.

PLAN IMPLEMENTATION

Contractor shall implement the ACPM to ensure that no adverse environmental impacts are envisaged. It shall be the responsibility of the SHE team to conduct site inspection as per the checklist developed for each management plan. It will be ensured that:

- All management plans and pollution prevention and control measures are successfully implemented at site
- Waste management of ACPM to be effectively implemented.
- Any observations made at site shall be recorded and reported to Chief SHE Officer
- All necessary actions have been taken at site to minimize any impact
- Any observations made by the engineer shall be reviewed and shall be compiled, if required
- RECORDS KEEPING AND REPORTING
- Contractor shall conduct monthly inspection of all identified accommodation camp in order to:
 - Monitor the implementation of the control measures and to ensure the environmental impacts are being minimized.
 - Ensure the requirements and inspection frequencies are being met.
- Contractor shall monitor the management activity and keep the records of monitoring and routine inspection. It shall be ensured that:
 - A register or similar records/routine checklist documents and records of all types and quantities of material excavated as well as where re-use or recycled material is being used and
 - Inspections records are kept
- Routine monthly inspection shall be done by contractor as per the checklist and any environmental issues associated with it shall be addressed as following:
 - Any issues that are observed during inspection shall be conveyed to Chief SHE Officer and corrective measures shall be taken.
- Contractor at site shall send the monthly report to contractor, who will review the inspection report and forward the same to Chief SHE Officer.
- Contractor shall submit the inspection report as a part of the monthly report to the Engineer.
- Any suggestions, observations made by the engineer shall be addressed, if found necessary and shall submit the updated report.

Contractor shall ensure that following database must be documented for each identified accommodation camp that provides the basis of the redevelopment plan:

- Location of camps
- Distance from nearest habitation
- Map showing location and transportation/access routes
- Present usage of land
- Area (sq.m)
- Approximate quantity of material available
- Number of trees removed or to be removed
- Whether purchased or leased
- Photographs from all 4 sides
- Type and details of access routes
- Slope/drainage characteristics
- Existing land-use
- Any environmental or eco-sensitive issues, if any

TRAINING

Training shall be provided to site Engineers, supervisors and workmen at labor camp at site for effective management of Environment and to prevent/minimize environmental pollution at site. Training module shall be developed by Contractor in coordination from Contractor, Planning engineer and SHE staff. Contractor at site shall deliver the training to the Engineer and workmen at site. The topics to be covered in training shall include:

- Objective of training
- Site selection criteria
- Rules and Regulations/guidelines
- Basic requirement of accommodation camp
- Waste management, Housekeeping
- Preventive and mitigation measures adopted at site
- Do's & Don'ts
- Rehabilitation of camps
- Role & Responsibility of Individual
- Inspection & Monitoring
- Reporting

REVIEW

Contractor shall review the Plan if and when required. All regulatory and applicable guidelines shall be followed and required clearances shall be obtained.

He shall ensure that:

- If any non-compliance to the management plan is observed, Contractor shall review the same and shall take corrective measures to comply the same.
- Any observations made by the engineers shall be reviewed and shall be complied, if required.

GRIEVANCE REDRESSAL MECHANISM

Complaint associated with compulsory acquisition of land and property will be brought to notice to KRAIL and with mutual consultation with all parties involved, the issue will be amicably resolved through KRAIL Grievances/complaints on environmental matters are expected to be relatively few and straight forward so a simplified procedure will be followed. Local concerns which may arise as a result of inappropriate implementation of pollution prevention and control plan, the main aim of which is the reduction of adverse impacts to acceptable levels. These issues will be best addressed through open dialogue and a responsive approach, with acknowledgement of errors wherever appropriate, followed by rapid remedial action.

Any public complain and grievance with respect to generation of pollutants, inappropriate and inadequate pollution control measures, use of public resources such as water resource will be seriously dealt with. Once such notice and verbal/written complain notice, it will be brought to Project EHS committee and based on the severity of the complaint, it will be dealt with appropriate resolution and action plan. All such complains/grievances will be recorded along with the close out reports.

Table-2 Site selection criteria checklist for accommodation camp

- Name of Site with address
- Chainage
- Site In charge/Project Manager
- Community Liaison Officer (CLO)
- Environmental Manager (contractor)
- Date of inspection
- Photographs

S.No	Points	Observation	Remarks
1.	Is the land falls within 500 m of nearby inhabitations? If Yes, than: Give reason for selection The community consultation	Yes/No	
2	Is it nearby water courses, canals etc where there is a probability of these resources getting polluted due to Proposed development? If Yes, then : Give reason for selection	Yes/No	

	Pollution Prevention and Control measures proposed		
3	Is there potable water available? If No, then: Provide details of source of potable water supply proposed for accommodation camps	Yes/No	
4	Are the entry roads / walkways / passages to camp kept clear? If Not, then what provisions are made to address the requirement?	Yes/No	
5	Is it located within ROW or not? If outside ROW: is the land owner consulted and prior consent taken from him/her prior to establishment? Provide documentary proof, if any.	Yes/No	
6	Is the site subject to landslide or heavy erosion? If Yes, then: Reason for selection of site Safety and Mitigation measures proposed?	Yes/No	
7	Is there any critically polluted area or industry which may affect the health? If yes, then Reason for selection of site Safety and Mitigation measures proposed?		
8	Is there any Environmentally Sensitive area nearby Accommodation Camp? If Yes, then: Type of Area (Wildlife/National Park/ any other ecologically sensitive area) Approx. Distance from Site Mitigative and preventive measures proposed Any other information		

9	Decision with observation, if any:
Inspected By	Signature
Site In charge/Project Manager	
Community Liaison Officer (CLO)	
Environmental Manager(contractor)	

Table-3 Checklist for routine weekly inspection of accommodation camp

S. No	Points	Observations	Measures
General			
1.	Are adequate no. of rooms provided?		
2.	Are labor camps located to avoid flooding and water logging?		
3.	Are the camps situated within a reasonable distance from worksite?		
4.	Transport from the living facilities to worksite is safe and free.		
5.	The living facilities are built with adequate materials, kept in good repair and kept clean and free from rubbish and other refuse.		
6.	Proper ventilation Provided?		
7.	Proper illumination provided?		
8.	The living rooms are kept cleaned at regular intervals?		
Water			
9.	Is sufficient quantity of water being supplied for daily needs?		
10.	Is the water supplied for drinking meets the requirements of Drinking water standards.		
11.	All tanks used for storage of water are covered?		

12.	The water tanks are cleaned at regular intervals?		
Washing & bathing facility			
13.	Is bathing & cloth washing facility Provided?		
14.	is there any water logging or stagnation of water near washing and bathing area.		
Toilet Facilities			
15.	Is adequate numbers of toilets provided?		
16.	Is privacy maintained between two latrines?		
17.	Adequate quantity of water being supplied for toilet facilities?		
18.	Hand washing facility available outside toilets?		
19.	The toilets are regularly cleaned and maintained?		
Waste Disposal			
20.	Adequate number of septic tanks provided to collect waste from toilets?		
21.	Soak pits provided at kitchen area?		
22.	Are the septic tanks & soak pits, Emptied on regular intervals?		
23.	are waste collection bins provided at site offices, canteen and labor colonies?		
24.	Are waste collection bins Emptied on regular intervals?		
25.	Are bins kept clean and maintained in good condition?		
Cooking Area			
26.	Is cooking area provided and is separate from living room?		
27.	Is washing facility provided for cleaning of utensils?		
28.	Are cooking area kept clean and good		

	hygiene is maintained?		
29.	Proper ventilation provided at cooking area?		
30.	Food waste and other waste properly collected and disposed off at regular intervals?		
31.	Hand washing facility provided outside cooking area?		
32.	Health, Medical & First Aid Facility		
33.	Is doctor visiting the site at regular intervals?		
34.	First Aid kit provided at site?		
35.	Adequate number of staff trained for first aider?		
36.	Is ambulance available at site?		
37.	Is guidance on alcohol, HIV-AIDS and other health risk related activities provided to workers?		
Safety & Security			
38.	Is firefighting extinguishers provided at labor camp?		
39.	Is Emergency assembling points provided?		
40.	Is security guard provided at site?		
41.	Proper training provided to staff/worker to use fire extinguishers?		
Any other Observation/Issue			

Date of Inspection:

Next Due Date:

Name & Signature: