

Initial Environmental Examination

Document Stage: Updated
Project Number: 42267-031
September 2021

India: Rajasthan Secondary Towns Development
Sector Project – Sewerage Subproject in Pratapgarh
Town, Pratapgarh District, Rajasthan

Part 2 of 2 (pages 248-324)

Prepared by Project Management Unit, Rajasthan Urban Drinking Water Sewerage and Infrastructure Corporation Limited, Government of Rajasthan for the Asian Development Bank. This is an updated version of the draft originally posted in May 2020 available on <https://www.adb.org/projects/documents/ind-42267-031-iee-7>.

This updated initial environmental examination report is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section on ADB's website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

F. Standards for nutrition and food safety

When cooking for a number of workers, hygiene and food safety are absolutely critical. In addition to providing safe food, providing nutritious food is important as it has a very direct impact on workers' productivity and well-being. An ILO study demonstrates that good nutrition at work leads to gains in productivity and worker morale, prevention of accidents and premature deaths and reductions in health care costs.¹⁰

Benchmarks

1. The WHO 5 keys to safer food or an equivalent process is implemented (see Box 6 below).
2. Food provided to workers contains an appropriate level of nutritional value and takes into account religious/cultural backgrounds; different choices of food are served if workers have different cultural/religious backgrounds.
3. Food is prepared by cooks. It is also best practice that meals are planned by a trained nutritionist.

Box 6 - Five keys to safer food

Keep clean

Wash your hands before handling food and often during food preparation.
Wash your hands after going to the toilet.
Wash and sanitise all surfaces and equipment used for food preparation.
Protect kitchen areas and food from insects, pests and other animals.

While most micro organisms do not cause disease, dangerous micro organisms are widely found in soil, water, animals and people. These micro organisms are carried on hands, wiping cloths and utensils, especially cutting boards and the slightest contact can transfer them to food and cause food borne diseases.

Separate raw and cooked

Separate raw meat, poultry and seafood from other foods.
Use separate equipment and utensils such as knives and cutting boards for handling raw foods.
Store food in containers to avoid contact between raw and prepared foods.

Raw food, especially meat, poultry and seafood, and their juices, can contain dangerous micro organisms which may be transferred onto other foods during food preparation and storage.

Cook thoroughly

Cook food thoroughly, especially meat, poultry, eggs and seafood.
Bring foods like soups and stews to boiling to make sure that they have reached 70°C. For meat and poultry, make sure that juices are clear, not pink. Ideally, use a thermometer.
Reheat cooked food thoroughly.

Proper cooking kills almost all dangerous micro organisms. Studies have shown that cooking food to a temperature of 70°C can help ensure it is safe for consumption. Foods that require special attention include minced meats, rolled roasts, large joints of meat and whole poultry.

Keep food at safe temperatures

Do not leave cooked food at room temperature for more than 2 hours.
Refrigerate promptly all cooked and perishable food (preferably below 5°C).
Keep cooked food piping hot (more than 60°C) prior to serving.
Do not store food too long even in the refrigerator.
Do not thaw frozen food at room temperature.

Micro organisms can multiply very quickly if food is stored at room temperature. By holding at temperatures below 5°C or above 60°C, the growth of micro organisms is slowed down or stopped. Some dangerous micro organisms still grow below 5°C.

Use safe water and raw materials

Use safe water or treat it to make it safe.
Select fresh and wholesome foods.
Choose foods processed for safety, such as pasteurised milk.
Wash fruits and vegetables, especially if eaten raw.
Do not use food beyond its expiry date.

Raw materials, including water and ice, may be contaminated with dangerous micro organisms and chemicals. Toxic chemicals may be formed in damaged and mouldy foods. Take care in selection of raw materials and implement simple measures such as washing.

Source: World Health Organization, Food Safety

www.who.int/foodsafety/publications/consumer/en/5keys_en.pdf

10. C. Wanjek (2005), "Food at Work – Workplace solutions for malnutrition, obesity and chronic disease", International Labour Organization, Geneva.

G. Medical facilities

Access to adequate medical facilities is important to maintain workers' health and to provide adequate responses in case of health emergency situations. The availability or level of medical facilities provided in workers' accommodation is likely to depend on the number of workers living on site, the medical facilities already existing in the neighbouring communities and the availability of transport. However, first aid must always be available on site.

First aid facilities

Providing adequate first aid training and facilities can save lives and prevent minor injuries becoming major ones.

Other medical facilities

Depending on the number of workers living on site and the medical services offered in the surrounding communities, it is important to provide workers with additional medical facilities. Special facilities for sick workers and medical services such as dental care, surgery, a dedicated emergency room can, for instance, be provided.

Benchmarks

1. A number of first aid kits adequate to the number of residents are available.
2. First aid kits are adequately stocked. Where possible a 24/7 first aid service/facility is available.
3. An adequate number of staff/workers is trained to provide first aid.
4. Where possible and depending on the medical infrastructures existing in the community, other medical facilities are provided (nurse rooms, dental care, minor surgery).

Box 7 - UK/HSE First Aid facilities

What should be in a first aid kit?

There is no standard list and it very much depends on the assessment of the needs in a particular workplace:

- a leaflet giving general guidance on first aid, for example HSE leaflet *Basic advice on first aid at work*
- individually wrapped sterile adhesive dressings (assorted sizes)
- two sterile eye pads
- four individually wrapped triangular bandages (preferably sterile)
- six safety pins
- six medium-sized (approximately 12 cm x 12 cm) individually wrapped sterile unmedicated wound dressings
- two large (approximately 18 cm x 18 cm) sterile individually wrapped unmedicated wound dressings
- one pair of disposable gloves.

What should be kept in the first aid room?

The room should contain essential first aid facilities and equipment. Typical examples of these are:

- a sink with hot and cold running water
- drinking water and disposable cups
- soap and paper towels
- a store for first aid materials
- foot-operated refuse containers, lined with disposable yellow clinical waste bags or a container for the safe disposal of clinical waste
- a couch with waterproof protection, clean pillows and blankets
- a chair
- a telephone or other communication equipment
- a record book for recording incidents where first aid has been given.

Source: UK Health and Safety Executive

H. Leisure, social and telecommunication facilities

Basic leisure and social facilities are important for workers to rest and also to socialise during their free time. This is particularly true where workers' accommodation is located in remote areas far from any communities. Where workers' accommodation is located in the vicinity of a village or a town, existing leisure or social facilities can be used so long as this does not cause disruption to the access and enjoyment of local community members. But in any case, social spaces should also be provided on site. Exercise and recreational facilities will increase workers' welfare and reduce the impact of the presence of workers in the surrounding communities. In addition it is also important to provide workers with adequate means to communicate with the outside world, especially when workers' accommodation is located in a remote location or where workers live on site without their family or are migrants. Consideration of cultural attitudes is important. Provision of space for religious observance needs to be considered, taking account of the local context and potential conflicts in certain situations.

Benchmarks

1. Basic collective social/rest spaces are provided to workers. Standards range from providing workers multi-purpose halls to providing designated areas for radio, TV, cinema.
2. Recreational facilities are provided. Standards range from providing exercise equipment to providing a library, swimming pool, tennis courts, table tennis, educational facilities.
3. Workers are provided with dedicated places for religious observance if the context warrants.
4. Workers have access to public phones at affordable/public prices (that is, not inflated).
5. Internet facilities can also be provided, particularly where large numbers of expatriates/Third Country Nationals (TCNs) are accommodated.

Box 8 - Examples of social/leisure facilities

In Qatar there is a newly built 170-hectare complex which accommodates contractors and more than 35,000 workers for a project run by a major oil company. At the heart of this complex, the recreation area includes extensive sport facilities, a safety-training centre, an outdoor cinema and a park. The purpose of those facilities goes beyond providing adequate accommodation to the large numbers of contractors and workers on this project but is designed to provide the same level of services as a small town. The accommodation complex has a mayor, as well as a dedicated welfare team which is responsible for the workers' welfare, cultural festivals and also acts as the community's advocates.

II. Managing workers' accommodation

Once the living facilities have been constructed and are operational, effective ongoing management of living facilities is essential. This encompasses issues such as the physical maintenance of buildings, security and consultation with residents and neighbouring communities in order to ensure the implementation of the housing standards in the long term.

A. Management and staff

Worker camps and housing facilities should have a written management plan, including management policies or plans on health and safety, security, living conditions, workers' rights and representation, relationships with the communities and grievance processes. Part of those policies and plans can take the form of codes of conduct. The quality of the staff managing and maintaining the accommodation facilities will have a decisive impact on the level of standards which are implemented and the well-being of workers (for instance on the food safety or overall hygiene standards). It is therefore important to ensure that managers are competent and other workers are adequately skilled. The manager will be responsible for overseeing staff, for ensuring the implementation of the accommodation standards and for the implementation of the management plans. It is important the accommodation manager has the corresponding authority to do so.

If the facility is being managed by a contractor, as is often the case, the expected housing and management standards should be specified in the relevant contract, and mechanisms to ensure that those standards are implemented should be set up. As part of this process, the accommodation manager (or contractor) should have a duty to monitor the application of the accommodation standards and to report frequently on their implementation to the client.

Benchmarks

1. There are management plans and policies especially in the field of health and safety (with emergency responses), security, workers' rights, relationships with the communities.
2. An appointed person with the adequate background and experience is in charge of managing the workers' accommodation.
3. If contractors are being used, there are clear contractual management responsibilities and monitoring and reporting requirements.
4. Depending on the size of the accommodation, there is a sufficient number of staff in charge of cleaning, cooking and of general maintenance.
5. Such staff are recruited from the local communities.
6. Staff have received basic health and safety training.
7. Persons in charge of the kitchen are trained in nutrition and food-handling and adequately supervised.

B. Charging fees for accommodation and services

Charging fees for the accommodation or the services provided to workers such as food or transport should be avoided where workers do not have the choice to live or eat anywhere else, or if deemed unavoidable, should take into account the specific nature of workers' accommodation. Any charges should be transparent, discussed during recruitment and specified in workers' contracts. Any such charges should still leave workers with sufficient income and should never lead to a worker becoming indebted to an employer.

Benchmarks

1. When fees are charged, workers are provided with clear information and a detailed description of all payments made such as rent, deposit and other fees.
2. When company housing is considered to be part of workers' wages, it is best practice that workers are provided with an employment contract clearly specifying housing arrangements and regulations, in particular rules concerning payments and fees, facilities and services offered and rules of notice.
3. When fees are charged, the renting arrangements are fair and do not cost the worker more than a small proportion of income and never include a speculative profit.
4. Food and other services are free or are reasonably priced, never above the local market price.
5. The provision of accommodation or other services by employers as a payment for work is prohibited.

Additional issue

To avoid that fair renting arrangements turn into unfair ones, any deposit of advance should be set at a reasonable level and it is best practice that renting prices include a fixed fee covering the water needed and the use of the energy required to the functioning of the heating/cooling/ventilation/cooking systems. However, in such cases it might be necessary to raise workers' awareness to ensure that workers will use the facilities responsibly, particularly in areas where water is scarce.

C. Health and safety on site

The company or body in charge of managing the workers' accommodation should have the prime responsibility for ensuring workers' physical well-being and integrity. This involves making sure that the facilities are kept in good condition (ensuring that sanitary standards or fire regulations are respected for instance) and that adequate health and safety plans and standards are designed and implemented.

Benchmarks

1. Health and safety management plans including electrical, mechanical, structural and food safety have been carefully designed and are implemented.
2. The person in charge of managing the accommodation has a specific duty to report to the health authorities the outbreak of any contagious diseases, food poisoning and other important casualties.
3. An adequate number of staff/workers is trained to provide first aid.
4. A specific fire safety plan is prepared, including training of fire wardens, periodic testing and monitoring of fire safety equipment and periodic drills.
5. Guidance on the detrimental effects of the abuse of alcohol and drugs and other potentially harmful substances and the risk and concerns relating to HIV/AIDS and of other health risk-related activities is provided to workers. It is best practice to develop a clear policy on this issue.
6. Workers have access to adequate preventive measures such as contraception (condoms in particular) and mosquito nets.
7. Workers have easy access to medical facilities and medical staff. Where possible, female doctors/nurses should be available for female workers.
8. Emergency plans on health and fire safety are prepared. Depending on the local context, additional emergency plans are prepared as needed to handle specific occurrences (earthquakes, floods, tornadoes).

D. Security of workers' accommodation

Ensuring the security of workers and their property on the accommodation site is of key importance. To this end, a security plan must be carefully designed including appropriate measures to protect workers against theft and attacks. Policies regarding the use of force (force can only be used for preventive and defensive purposes in proportion to the nature and the extent of the threat) should also be

carefully designed. To implement those plans, it may be necessary to contract security services or to recruit one or several staff whose main responsibility is to provide security to safeguard workers and property. Before making any security arrangements, it is necessary to assess the risks of such arrangements to those within and outside the workers' accommodation and to respect best international practices, including IFC PS4 and EBRD PR4 and applicable law.¹¹ Particular attention should be paid to the safety and security of women workers.

Benchmarks

1. A security plan including clear measures to protect workers against theft and attack is implemented.
2. A security plan including clear policies on the use of force has been carefully designed and is implemented.
3. Security staff have been checked to ensure that they have not been implicated in any previous crimes or abuses. Where appropriate, security staff from both genders are recruited.
4. Security staff have a clear mandate and have received clear instruction about their duties and responsibilities, in particular their duties not to harass, intimidate, discipline or discriminate against workers.
5. Security staff have received adequate training in dealing with domestic violence and the use of force.
6. Security staff have a good understanding about the importance of respecting workers' rights and the rights of the communities.
7. Body searches are only allowed in specific circumstances and are performed by specially trained security staff using the least-intrusive means possible. Pat down searches on female workers can only be performed by female security staff.
8. Security staff adopt an appropriate conduct towards workers and communities.
9. Workers and members of the surrounding communities have specific means to raise concerns about security arrangement and staff.

11. See for instance the Voluntary Principles on Security and Human Rights. www.voluntaryprinciples.org/principles

E. Workers' rights, rules and regulations on workers' accommodation

Freedoms and human rights of workers should be recognised and respected within their living quarters just as within the working environment. House rules and regulations should be reasonable and non discriminatory. It is best practice that workers' representatives are consulted about those rules. House rules and regulations should not prevent workers from exercising their basic rights. In particular, workers' freedom of movement needs to be preserved if they are not to become effectively "trapped". To this end it is good practice to provide workers with 24/7 access to the accommodation and free transport services to and from the surrounding communities. Any restriction to this freedom of movement should be limited and duly justified. Penalties for breaking the rules should be proportional and implemented through a proper procedure allowing workers to defend themselves and to challenge the decision taken. The relationship between continuing employment and compliance with the rules of the workers' accommodation should be clear and particular attention should be paid to ensure that housing rules do not create indirect limitation of the right to freedom of association. Best practice might include a code of conduct relating to the accommodation to be signed together with the contract of employment.

Box 9 - Dole housing plantation regulation in Costa Rica

In every plantation there is an internal accommodation regulation that every worker is required to sign together with his/her employment contract. That document describes the behaviour which is expected from workers at all times and basic rules such as the prohibition of alcohol and the interdiction to make noise after a certain time at night. In case there is any problem concerning the application of those internal rules, a set of disciplinary procedures which have been designed with the workers' representatives can be enforced. Workers are absolutely free to enter or leave the site and do not have any restrictions in relation to accessing their living quarters. Families are not allowed in the living quarters unless they have been registered for a visit.

Benchmarks

1. Restriction of workers' freedom of movement to and from the site is limited and duly justified. It is good practice to provide workers 24/7 access to the accommodation site. Any restrictions based on security reasons should be balanced by the necessity to respect workers' freedom of movement.
2. Where possible, an adequate transport system to surrounding communities is provided. It is good practice to provide workers with free transportation to and from local communities.
3. Withholding workers' ID papers is prohibited.
4. Freedom of association is expressly respected. Provisions restricting workers' rights on site should take into account the direct and indirect effect on workers' freedom of association. It is best practice to provide trade union representatives access to workers in the accommodation site.
5. Workers' gender and religious, cultural and social backgrounds are respected. In particular, workers should be provided with the possibility of celebrating religious holidays and observances.
6. Workers are made aware of their rights and obligations and are provided with a copy of the internal workers' accommodation rules, procedures and sanction mechanisms in a language or through a media which they understand.
7. Housing regulations, including those relating to allocation of housing, should be non-discriminatory. Any justifiable discriminatory rules – for example all-male dormitories – should be strictly limited to the rules which are necessary to ensure the smooth running of the worker camp and to maintain a good relationship with the surrounding communities.
8. Where possible, visitor access should be allowed.
9. Decisions should be made on whether to prohibit alcohol, tobacco and third party access or not from the camp and the relevant rules should be clearly communicated to all residents and workers.
10. A fair and non-discriminatory procedure exists to implement disciplinary procedures including the right of workers to defend themselves (see also next section).

F. Consultation and grievance mechanisms

All residents should be made aware of any rules governing the accommodation and the consequences of breaking such rules. Processes that allow for consultation between site management and the resident workers will assist in the smooth running of an accommodation site. These may include a dormitory or camp committee as well as formal processes that allow workers to lodge any grievances about their accommodation.

Benchmarks

1. Mechanisms for workers' consultation have been designed and implemented. It is best practice to set up a review committee which includes representatives elected by workers.
2. Processes and mechanisms for workers to articulate their grievances are provided to workers. Such mechanisms are in accordance with PS2/PR2.
3. Workers subjected to disciplinary proceedings arising from behaviour in the accommodation should have access to a fair and transparent hearing with the possibility to contest decisions and refer the dispute to independent arbitration or relevant public authorities.
4. In case conflicts between workers themselves or between workers and staff break out, workers have the possibility of easily accessing a fair conflict resolution mechanism.
5. In cases where more serious offences occur, including serious physical or mental abuse, there are mechanisms to ensure full cooperation with the police authority (where adequate).

Additional issue

Alcohol is a complex issue and requires a very clear policy from the workers' accommodation management. If a non-alcohol policy is taken, special attention should be paid to clearly communicate the interdiction, how it applies and the consequences for breaching this rule. Special attention should also be paid to enforce it adequately.

G. Management of community relations

Workers' living facilities have various ongoing impacts on adjacent communities. In order to manage these, it is good practice to design a thorough community relations management plan. This plan will contain the processes to implement the findings of the preliminary community impact assessment and to identify, manage, mitigate or enhance ongoing impacts of the workers' accommodation on the surrounding communities.

Issues to be taken into consideration include:

- community development – impact of workers' camp on local employment, possibility of enhancing local employment and income generation through local sourcing of goods and services
- community needs – ways to identify and address community needs related to the arrival of specific infrastructures such as telecommunications, water sanitation, roads, health care, education, housing
- community health and safety – addressing and reducing the risk in the increase in communicable diseases, corruption, trade in illegal substances such as drugs, alcohol (in the Muslim context), petty crimes and other sorts of violence, road accidents
- community social and cultural cohesion – ways to mitigate the impact of the presence of large numbers of foreign workers, often males, with different cultural and religious background, ways to mitigate the possible shift in social, economic and political structures due to changes in access to income generation opportunities.

Benchmarks

1. Community relations plans addressing issues around community development, community needs, community health and safety and community social and cultural cohesion have been designed and implemented.
2. Community relations plans include the setting up of a liaison mechanism allowing a constant exchange of information and consultation with the local communities in order to identify and respond quickly to any problems and maintain good working relationships.
3. A senior manager is in charge of implementing the community relations management plan and liaising with the community.

-
4. The impacts of workers' accommodation on local communities are periodically reviewed, mitigated or enhanced.
 5. Community representatives are provided with an easy means to voice their opinions and to lodge complaints.
 6. There is a transparent and efficient process for dealing with community grievances, in accordance with PS1/PR10.

Box 10 - Examples of community relations management

Community consultation in the Baku-Tbilisi-Ceyhan (BTC) pipeline

The BTC pipeline's Environment and Social Management Plans incorporated a Worker Camp Management Plan to be implemented by the construction contractor. As part of ongoing community liaison over the project as a whole, community liaison officers were appointed for worker camps who were responsible for meeting regularly with communities, identifying issues and addressing community concerns. A particular responsibility was to review HR records and disciplinary logs at worker camps to assess that rules were being implemented effectively and that any community liaison after any incidents was effective.

Appendix 17: Guidelines and Emergency plan for handling and storing chlorine

Instructions for Storage and Handling of Chlorine Cylinders (Based on the 'Manual on Operation and Maintenance of Water Supply Systems' published by the Central Public Health and Environmental Engineering Organization (CPHEEO) in 2005)

1.1 Storage Area

- a. Obtain storage license from controller of explosives under Gas Cylinder Rules 2004 if the quantity of Cl₂ containers to be stored is more than 5 Nos.
- b. Storage area should be cool, dry, well ventilated, and clean of trash and protected from external heat sources. Please refer to Manual on "Water Supply and Treatment", (1999 Edition), for further details.
- c. Ventilation must be sufficient to prevent accumulation of vapour pockets. The exhaust should be located either near the floor or duct be provided extending to the floor. All fan switches should be outside the storage area.
- d. Do not store container directly under the sun.
- e. Weather cock should be installed near the storage to determine wind direction.
- f. The storage building should be of non-combustible construction with at least two exits opening outside.
- g. Neutralization system should be provided.
- h. Continuous monitoring of chlorine leak detection equipment with alarm should be installed in the storage area.
- i. The area should be free and remote from elevators, gangways or ventilating system to avoid dangerous concentration of Chlorine during leak.
- j. Two portable foam type fire extinguishers should be provided in the premises.
- k. Corrosive substances shall not be stored nearby which react violently with each other.
- l. Unauthorized person should not be allowed to enter into the storage area.
- m. The floor level of storage shed should be preferably 30 cms (at least one foot) higher from the ground level to avoid water logging.
- n. Ensure that all containers are properly fitted with safety caps or hooks.

1.2. Cylinder & Drum Containers

- a. Store chlorine cylinders upright and secure them so that they do not fall.
- b. Drum containers should be stored on their sides on rails, a few inches above the floor. They should not be stacked one upon the other. They should be stored such that the valves are in vertical plane.
- c. Keep enough space between containers so as to have accessibility in case of emergency.
- d. Store the containers in a covered shed only. Keep them away from any source of heat as excessive heat may increase the pressure in container which will result into burst.
- e. Do not store explosives, acids, turpentine, ether, anhydrous ammonia, finely divided metals or other flammable material in the vicinity of Chlorine.
- f. Do not store containers in wet and muddy areas.
- g. Store filled and empty containers separately.
- h. Protective covers for valves are secured even when the containers are empty, except during use in the system.
- i. Never use containers as a roller to move other equipment.

- j. Never tamper with fusible plugs of tonners.
- k. Check leakages every day by means of ammonia torch. However, it should not be touched to brass components like valves of container for safety.
- l. Never carry out any welding work on the chlorine system as combustion of steel takes place at 2510C in presence of chlorine.
- m. The boxes containing emergency kit, safety applications and self contained breathing apparatus should be kept in working order in an easily approachable area.

1.3. Use of Cylinders & Drum Containers in Process System

- a. Use containers in the order of their receipt, as valve packing can get hardened during prolonged storage and cause gas leaks.
- b. Do not use oil or lubricant on any valve of the containers.
- c. Badly fitting connections should not be forced and correct tool should always be used for opening and closing valves. They should never be hammered.
- d. The area should be well ventilated with frequent air changes.
- e. Transport the cylinders to the process area by using crane, hoist or railings etc.
- f. The drum containers should be kept in a horizontal position in such a way that the valves are in a vertical plane. The upper valve gives out gas and the lower one gives out liquid chlorine.
- g. The cylinder should be kept in upright position in order to release gas from the valve. For liquid chlorine withdrawal, it should be inverted with the help of an inverted rack.
- h. Connect the containers to the system by using approved accessories.
- i. Use copper flexible tube, with lead washer containing 2 to 4% antimony or bonded asbestos or teflon washer. Use yoke clamp for connecting chlorine container.
- j. Never use rubber tubes, PVC tubes etc. for making connections.
- k. Use the right spanner for operating the valve. Always keep the spanner on the valve spindle. Never use ill fitting spanner.
- l. After making the flexible connection, check for the leakage by means of ammonia torch but it should not come in contact with a valve.
- m. Keep minimum distance between the container valve and header valve so that during change-over of the container, minimum amount of gas leaks.
- n. The material of construction of the adopter should be same as that of valve outlet threads. o. The valve should not be used as a regulator for controlling the chlorine. During regulation due to high velocity of Chlorine, the valve gets damaged which in turn can cause difficulty in closing.
- o. The tools and other equipment used for operating the container should be clean and free of grease, dust or grit.
- p. Wear breathing apparatus while making the change-over of the container from the process header.
- q. Do not heat the container to withdraw more gas at faster rate.
- r. Use pressure gauge and flow measuring device to control the flow and to know the quantity of gas left in the container.
- s. Use an inverted U type barometric leg or vacuum breaking arrangement for connecting the container to the process piping.
- t. Withdrawal of the gas should be stopped when the gas pressure inside the container is between 0.1 to 0.5 kg/cm² approximately.

- u. If withdrawal of the gas from the container connected to the process system has to be suspended for long intervals, it should be disconnected from the system, and the valve cap and hood replaced.
- v. Gas containers should be handled by trained persons only.

1.4. Disconnecting Containers from Process System

- a. Use breathing apparatus before disconnecting the container.
- b. First close the container valve fully. After removal of chlorine the process valve should be closed.
- c. Remove the flexible connection, plug the flexible connection in order to avoid entry of humid air. Replace the valve cap or hood on the container.
- d. Put the tag on the empty container & bring it to storage area marked for empties.
- e. Check for the leakage.

1.5. Loading and Unloading of Containers

- a. The handling of containers should be done under the supervision of trained and competent person.
- b. It should be done carefully with a crane, hoist or slanted ramp. Do not use magnet or sharp object for lifting the containers.
- c. Small cylinders should not be lifted by means of valve caps as these are not designed to carry the weight.
- d. The containers should not be allowed to strike against each other or against any hard object.
- e. Vehicles should be braked and isolated against any movement.
- f. After loading, the containers should be secured properly with the help of wooden wedges, rope or sling wire so that they do not roll away.
- g. The containers should never be dropped directly to the ground or on the tyre from the vehicle.
- h. There should be no sharp projection in the vehicle.
- i. Containers must have valve caps and plugs fitted properly.
- j. Check containers for leakage before loading/unloading.

1.6. Transportation of Container

- a. The name of the chemical along with diamond pictorial sign denoting the dangerous goods should be marked on the vehicle.
- b. The name of the transporter, his address and telephone number should be clearly written on the vehicle.
- c. The vehicle should not be used to transport any material other than what is written on it. d. Only trained drivers and cleaners should transport hazardous chemical
- d. The driver should not transport any leaking cylinder.
- e. The cylinder should not project outside the vehicle.
- f. The transporter must ensure that every vehicle driver must carry "Trem Card" (Transport Emergency Card) and 'Instructions in writing booklet' and follow them.
- g. Every driver must carry safety appliances with him, viz; Emergency kit, breathing apparatus etc.
- h. The vehicles must be driven carefully, specially in crowded localities and on bumpy roads. Do not apply sudden brakes.

- i. Check for the leakage from time to time.
- j. In the case of uncontrollable leakage the vehicle should be taken to an open area where there is less population.

1.7. Emergency Kit. It consists of various tools and appliances like gaskets, yokes, studs, tie rods hoods, clamps, spanners, mild steel channels, screws, pins, wooden pegs etc. of standard sizes. Separate kits are used for cylinders and tonners. All the gadgets are designed for using in controlling or stopping the leakages from valves, fusible plug and side walls of cylinders and containers used for handling chlorine.

- a. Leakage may occur through the valve. There are basically four types of valve leaks.
 - Valve packing
 - Valve seat
 - Defective inlet thread
 - Broken valve thread
- b. Leakage may occur through container wall. For controlling such leakages, clamps are used for cylinders and chain and yoke arrangement is used for tonner. Sometimes wooden peg is used by driving into the leaking hole as a temporary arrangement.
- c. Leakage may occur through fusible plug.
 - If the leakage is through the threads of fusible plug, yoke, hood and cap nut arrangement is used to control the leak.
 - ii. If fusible metal itself in the plug is leaking, yoke and stud arrangement is used to control the leak.

1. First Aid to be Provided for a Person Affected by Chlorine

a. General. Remove the affected person immediately to an uncontaminated area. Remove contaminated clothing and wash contaminated parts of the body with soap and plenty of water. Lay down the affected person in cardiac position and keep him warm. Call a physician for medical assistance at the earliest. Caution: Never attempt to neutralize chlorine with other chemicals.

b. Skin Contact. Remove the contaminated clothes, wash the affected skin with large quantity of water. Caution: No ointment should be applied unless prescribed by the physician.

c. Eye Contact. If eyes get affected with liquid chlorine or high concentration of chlorine gas, they must be flushed immediately with running water for atleast 15 minutes keeping the eyelids open by hand. Caution: No ointment should be used unless prescribed by an eye specialist.

d. Inhalation. If the victim is conscious, take him to a quiet place and lay him down on his back, with head and back elevated (cardiac position). Loosen his clothes and keep him warm using blankets. Give him tea, coffee, milk, peppermint etc. for making good effect on breathing system. If the victim is unconscious, but breathing, lay him down in the position mentioned above and give oxygen at low pressure until the arrival of doctor. If breathing has stopped, quickly stretch him out on the ground or a blanket if available, loosen his collar and belt and start artificial respiration without delay. Neilson arm lift back pressure method is useful. Automatic artificial respiration is preferable if available. Continue the respiration until the arrival of the doctor. Amboo bag can also be used for this purpose.

3. On-Site Emergency Plan to Cover the Leakage of Chlorine

3.1. Introduction As chlorine is a hazardous chemical, handling and storage of it demand adequate precautions to avoid possible hazards. Leakage of chlorine may develop into a major emergency. Therefore, the emergency procedure to cover this eventuality is essential. It is drawn in the form of on-site emergency plan. The elements of onsite emergency plan are as follows:

3.2. Identification of Hazard Chart

In this case the site risk is evaluated by the expert and the extent of the probable damage is calculated on the basis of stored chlorine quantity, nearby population, wind direction, type of equipment failure etc. For this purpose hazard analysis is conducted in which case all the hazardous properties of chlorine are considered. If evacuation is required, the range of it is calculated.

3.3. Appointing Key Persons In order to control the incident like chlorine leakage, it is essential to appoint various persons with their well-defined responsibilities. Taking into account the various activities likely to be involved, the following key persons are appointed (i) Site Controller, (ii) Incident controller, (iii) Shift Executive In charge, (iv) Communication Officer, (v) Safety Officer, (vi) Fire and Security Officer, (vii) Utilities and Services In charge, (viii) Traffic Controller, (ix) First Aider

3.4. Assembly Points These points are set up where persons from the plant would assemble in case of chlorine leakage. At these points the in-charge for counting the heads will be available.

3.5. Emergency Control Center

The control centre is the focal point in case of an emergency from where the operations to handle the emergency from are directed and coordinated. It contains site plan, telephone lines, public address system, safety equipment, first aid boxes, loud speaker, torches, list of essential telephone numbers, viz. fire brigade, police, hospital, civil defence, collector, factory inspector, organizational authorities, chlorine suppliers, mutual aid group, social workers, list of key persons and their addresses, copy of chemical fact sheet, location plan of fire hydrant, details of dispersion model of chlorine gas, population distribution pattern, location of alarm system.

3.6. Procedure to Meet Emergency

The actions to be taken by the staff and authority are given below; Emergency Alarm: An audible emergency alarm system is installed throughout the plant. On hearing the alarm the incident controller will activate the public address system to communicate with the staff about the emergency and give specific instructions for evacuations etc. anyone can report the occurrence of chlorine leakage to section in-charge or incident controller through telephone or intercom or in person.

3.7. Communication

Communication officer shall establish the communication suitable to that incident.

3.8. Services

For quickness and efficient operation of emergency plan the plant is divided into convenient number of zones and clearly marked on the plan. These are emergency services viz. fire fighting, first aid, rescue, alternative source of power supply, communication with local bodies etc. The incident controller will hand over the charge to the site controller of all these coordinating activities, when the site controller appears on the site. The site controller will coordinate all the activities of the key persons. On hearing the emergency alarm system all the key persons will take their charge. Incase of their absence other alternatives are nominated.

The person nominated for personnel and administration purposes will be responsible for informing all statutory authorities, keeping account of all persons in the plant including contract labour, casual workers and visitors. He will be responsible for giving information to press or any outside agencies. He is also responsible for organizing canteen facilities and keeping informed the families of affected persons. The person nominated as security officer should guide police, fire fighting and control the vehicle entries. The site controller or any other nominated person will announce resumption of normalcy after everything is brought under control. The onsite emergency plan needs to be evaluated by mock drill. Any weaknesses noticed during such drills should be noted and the plan is modified to eliminate the weaknesses.

3.9. Emergency

Measures In case of leakage or spillage of Chlorine, the following emergency measures should be taken:

- a. Take a shallow breath and keep eyes opened to a minimum.
- b. Evacuate the area.
- c. Investigate the leak with proper gas mask and other appropriate Personal protection.
- d. The investigator must be watched by a rescuer to rescue him in emergency.
- e. If liquid leak occurs, turn the containers so as to leak only gas.
- f. In case of major leakage, all persons including neighbours should be warned.
- g. As the escaping gas is carried in the direction of the wind all persons should be moved in a direction opposite to that of the wind. Nose should be covered with wet handkerchief.
- h. Under no circumstances should water or other liquid be directed towards leaking containers, because water makes the leak worse due to corrosive effect.
- i. The spillage should be controlled for evaporation by spraying chilled water having temperature below 9.4°C. With this water crystalline hydrates are formed which will temporarily avoid evaporation. Then try to neutralize the spillage by caustic soda or soda ash or hydrated lime solution carefully. If fluoroprotein foam is available, use for preventing the evaporation of liquid chlorine.
- j. Use emergency kit for controlling the leak.
- k. On controlling the leakage, use the container in the system or neutralize the contents in alkali solution such as caustic soda, soda ash or hydrated lime. Caution: Keep the supply of caustic soda or soda ash or hydrated lime available. Do not push the leaking container in the alkali tank. Connect the container to the tank by barometric leg.
- l. If container commences leak during transport, it should be carried on to its destination or manufacturer or to remote place where it will be less harmful. Keeping the vehicle moving will prevent accumulation of high concentrations.
- m. Only specially trained and equipped workers should deal with emergency arising due to major leakage.
- n. If major leak takes place, alert the public nearby by sounding the siren.
- o. Any minor leakage must be attended immediately or it will become worse.
- p. If the leakage is in the process system, stop the valve on the container at once.

3.10. Safety Systems Required at Chlorination Plant

The following safety systems should be kept ready at the chlorination plant:

- a. Breathing apparatus.
- b. Emergency kit.
- c. Leak detectors.
- d. Neutralisation tank.

- e. Siren system.
- f. Display of boards in local language for public cautioning, first aid and list of different authorities with phone numbers.
- g. Communication system.
- h. Tagging system for equipments.
- i. First aid including tablets and cough mixtures.
- j. Exhaust fans.
- k. Testing of pressure vessels, chlorine lines etc. every year as per factory act.
- l. Training & mock drill.
- m. Safety showers.
- n. Eye fountain.
- o. Personal protective equipment.
- p. Protecting hoods for ton-containers.
- q. Fire extinguishers.
- r. Wind cock.

Appendix 18: Details of Public Consultations

During detailed design, site visit was conducted in April 2018 to assess potential social and environmental impacts of proposed components. Discussions with public including vendors, shopkeepers and hawkers were held to understand their perception about the proposed works and their co-operation during implementation of project. During consultations it was found that most of the public is aware about the proposed works and shown their interest to co-operate during construction works. Details of public consultations are given below-

S.No	Name of Persons	Location	Topic Discussed	Peoples Perceptions/ Outcome
1	Jagdish Mali, Ramesh Mali, Manoj Sahu	Gandhi Circle	<p>Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP), Willingness to pay for improved services</p> <p>Environmental, Health & Sanitation in the town.</p> <p>Environment, Health & Safety</p> <p>Safety of residents during construction phase and applying of vehicle for construction activities</p> <p>Presence of any forest, wild life or any sensitive/ unique environmental components nearby the project</p>	<p>People are aware supportive of the project. People are willing to pay for improved services.</p> <p>By the proposed sewerage project all the measures of environment will definitely improved and quality of life, health and sanitation will also improved.</p> <p>Environment, Health & Safety should be a priority in proposed subproject. All the measures of environment should be strictly followed and complied as per Rules and Regulation of Competent Authority.</p> <p>People are concerned about the existing sewer problems in the town which is flows in open drains.</p> <p>By the proposed sewerage project, foul smell and vector borne diseases will be removed and mitigated</p> <p>Adequate safety measures to be adopted during construction time in view point of environment, health and safety. Health and safety of workers and nearby residents .</p> <p>Proper care and all necessary arrangement to be ensured at the site regarding environmental, health and safety.</p> <p>There is no such environmental sensitive components in the vicinity of project area.</p>
2	Prakash Chandra Jatia, Mummna Khan, Raju Kushwaha,	Bus stand	<p>Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP), Willingness to pay for improved services</p>	<p>People are supportive of the project. People are willing to pay for improved services.</p> <p>All the measures should be taken care while selecting the disposal location of STP.</p>

S.No	Name of Persons	Location	Topic Discussed	Peoples Perceptions/ Outcome
			TP Disposal point, SPS etc.	<p>Treated effluent water may be used in Agricultural activities or discharge and discharge in nearby natural nallahs/waterbody after meeting prescribed standard of STP.</p> <p>By the proposed project of sewerage in the town, aesthetic quality of town will be improved.</p> <p>Health and hygiene condition will improve</p>
3	Kalulal, Aayodhaya Bai, BrajmohanPaliwal, Deepak	Near Govt Hospital	<p>resent Status of Sewerage in the town, Work Proposed by RUDSICO (EAP), Willingness to pay for improved services.</p> <p>ust control measures by proposed sewerage work during construction. Air quality and Noise level in the town during proposed sewerage work.</p>	<p>People are aware of the project and supportive of the project. (Especially women), People are willing to pay for improved services.</p> <p>Dust should be controlled by water sprinkling measures regularly at site.</p> <p>Plantation activities in the area will help to mitigating the dust and fugitive emission in the nearby area of subproject. Ambient air quality and noise level should be kept as National Ambient Air Quality Standards.</p> <p>Environmental Monitoring to I be done and report submitted to concerned authority to check the existing scenario of environmental quality of Air and Noise in the town during subproject work.</p> <p>All the mitigation measures of environment must I be adopted at site.</p> <p>By the proposed project of sewerage in the town, aesthetic quality of town will be improved.</p> <p>Health and hygiene condition will improve</p>

S.No	Name of Persons	Location	Topic Discussed	Peoples Perceptions/ Outcome
4	Roop Chandra Mali, Pritiviraj, Firoj Khan, Dharamendra Mali, Bhanwarlal, MangilalMali	Near Nagar Parishad	Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP), Willingness to pay for improved services. Environment, Health & Hygiene issues etc.	<p>People are aware of the project and indicated their willingness to participate; they are willing to pay for improved services.</p> <p>By the proposed sewerage work, environmental quality of town, health and hygiene will improve.</p> <p>By proposed STP, the waste water should be treated and discharge in the environment at agreeable standards.</p> <p>Treated water may be reuse in agriculture etc.</p> <p>There is a need for treated water in agriculture and ground water resources shall be conserved.</p> <p>By the proposed project of sewerage in the town, aesthetic quality of town will be improved.</p> <p>Health and hygiene condition will improve</p>
5.	Suresh Kumar Meghwal, Varvi Gir and Goswami, Anchal Goswami, Prakash, Jannat&Kala Bai	In around the Town and SPS sites	<p>Awareness of the project—including Project Coverage area.</p> <p>Employment during construction time</p> <p>Environmental Impacts of proposed sewerage work</p> <p>Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP), Environmental Health & Hygiene Treated water reuse etc.</p> <p>Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP).</p> <p>Remove the foul smell and vector borne diseases Dust and noise pollution and disturbances during construction work</p>	<p>People are aware about the project and their benefits</p> <p>People will be employed from nearby habitation, preference will be given to nearby habitants</p> <p>Environmental impact will be positive after implementation of the proposed sewerage project in the town.</p> <p>People express willingness and supportive of the project. Sewerage condition in the city is not satisfactory.</p> <p>By the proposed project of sewerage, better environment health and hygiene maintained in the town.</p> <p>Treated water can be reuse in agricultural activities.</p> <p>People are concerned about the existing sewer problems in the town which is flows in open drains.</p> <p>By the proposed sewerage project, foul smell and vector borne diseases will be removed and mitigated.</p>

S.No	Name of Persons	Location	Topic Discussed	Peoples Perceptions/ Outcome
			<p>Drainage and Sewerage Problem facing</p> <p>Requirement of enhancement of other facilities</p> <p>Ambient air quality, soil and groundwater problems etc.</p> <p>Safety of residents during construction phase and applying of vehicle for construction activities</p> <p>Presence of any forest, wild life or any sensitive/ unique environmental components nearby the project</p>	<p>There is no proper sewerage system in the town. People feel necessity of the proposed sewerage in the town.</p> <p>Drainage and sewerage condition is poor in the town.</p> <p>People are aware of the the project.</p> <p>Solid waste collection and disposal is major issue in the town. There is no waste disposal system in the town.</p> <p>People suggested to implant the tree along the roads and unworked area to enhance aesthetic beauty of the town.</p> <p>Present condition of sewerage is poor in the town and not satisfactory.</p> <p>The proposed project of sewerage in the town is a good effort in town make neat and cleanness.</p> <p>Adequate safety measures to be adopted during construction time in view point of environment, health and safety. Health and safety of workers and nearby residents .</p> <p>Proper care and all necessary arrangement to be ensured at the site regarding environmental, health and safety.</p> <p>There are no such environmental sensitive components in the vicinity of project area.</p>

Consultation with Stakeholder and public held on 11 April 2018 at Nagar Parishad office

Meeting with Stakeholder and public was held and project components, Importance of sewerage system, property connection, Environment, health and hygiene issues were discussed along with desired public participation. Public was satisfied with the components identified and assured for required support.

Attendance Sheet

Pratapganj

S.No.	Name	Occupation	Signature
1	कुंवर कुमार बिहान	मिठाई	Om
2	वसुधा गिरी बोरवासी	ब्यापारी	Pratapganj
3	श्रीवती देवी	श्रीवती देवी	Shriwati
4	Nanchal Bodumio	Student	Nanchal
5	Om	-	Om
6	Om	Om	Om

Om
M.C. Pratapganj

Date:- 11/04/2018 Pratapganj

S.No.	Name	Occupation	Signature
1	कुंवर कुमार बिहान	मिठाई	Om
2	वसुधा गिरी बोरवासी	ब्यापारी	Pratapganj
3	श्रीवती देवी	श्रीवती देवी	Shriwati
4	Nanchal Bodumio	Student	Nanchal
5	Om	-	Om
6	Om	Om	Om

Om
M.C. Pratapganj

Consultation Photographs**Consultation at Nagar Parishad Office****Consultation near Bus Stand****Consultation near District Hospital****Consultation at Bhatpura gate near SPS site****Consultation at NH circle****Consultation near Deepeshwar Talab**



Consultation with Stakeholder and public held on 09.03.2021 near STP and SPS sites-

During site visit by CMSC-2 Environmental Safeguard Professional for impact assessment of new locations of STP and SPS and due diligence of works in Pratapgarh, consultations were done with nearby residents near the location of STP and SPS. Project information was disseminated to people and their suggestions and opinion about the proposed works and sites were taken. It was found that people are not having any issue for proposed works and they were willing to extend their cooperation to the project. Details of consultations are given below-

Date of Consultation- 09.03.2021

Place- near proposed STP and SPS site at Kila road, Pratapgarh

Name of Persons	Location	Topic Discussed	Outcome of consultations
Rajesh Prjapat Vikas Paliwal Lalita Sahu Badam Chand Choudhary	Near STP site at Kila Road	<ul style="list-style-type: none"> •Present Status of Sewerage in the town, Work Proposed by RUDSICO (EAP) •Environmental, Health & Sanitation in the town. •Safety of residents during construction phase and applying of vehicle for construction activities •Opinion about proposed sites of STP and SPS at Kila Road •Presence of any forest, wild life or any sensitive/ unique environmental components nearby the project 	<ul style="list-style-type: none"> •People are aware and supportive of the project. •They welcome about the proposed works of sewerage in town and expect that sanitation conditions of their locality will improved from proposed works •Proposed site for STP and SPS is Government land and they have no issue with proposed works •There are no wildlife reported in the vicinity of the site •People want to extend their cooperation in the project

Photographs of Consultations



Attendance Sheet of Consultation

PUBLIC CONSULTATION SIGNATURE SHEET

Project name: Rajasthan Secondary Towns Development Sector Project – Sewerage
Subproject in Pratapgarh Town, Pratapgarh District, Rajasthan

Date and Time: 09/03/2021 Afternoon

Place: Near 7 MLD STP Site

S.No.	Name of Participant	Occupation	Address	Signature	Phone Number
1.	ROHINI PRASAD	OWNER	WAZO CHAK BAGHAPUR	2/1/21	94623598
2.	VARS PRASAD	OWNER	DEER BAZAR, BAGHAPUR TOWNSHIP	2/1/21	820819541
3.	LALITA JAU	OWNER	INDRAPUR BAZAR, BAGHAPUR TOWNSHIP	2/1/21	94623597
4.	DEER BAZAR CHAUDHARY	HOUSE HOLDER	PRINATH VILLAGE	2/1/21	94623595
5.					
6.					
7.					
8.					
9.					
10.					

Appendix 19: Minutes of City level Stakeholder Committee (CLC) Meeting

Minutes of CLC meeting- Pratapgarh

RUIDP

Government of Rajasthan
Office of Project Director
Rajasthan Urban Infrastructure Development Project
 AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017
 (Tel No.: 141 2721966, Fax No.: 141 2721919, email : mailruidp@gmail.com, mail.ruidp@rajasthan.gov.in
 web site : www.ruidp.rajasthan.gov.in)

Minutes of CLC meeting held on 26.08.17 at Pratapgarh for sewerage Project Pratapgarh under RUIDP phase-IV

A City Level Committee (CLC) meeting was held under the chairmanship of District Collector Pratapgarh on 26.08.2017 to discuss the sewerage project proposed under RUIDP phase-IV. List of members/officers attended the meeting is at Annex-A.

RUIDP Personnel informed that the sewerage project DPR which was prepared by the Consultant M/s Creative computers Jaipur engaged by the Municipal Council Pratapgarh is considered by RUIDP for Phase-IV project. RUIDP apprised the DPR and suggestions were given to the engaged consultant. Consultant has submitted modified DPR along with revised estimate as per RUIDP SOR- 2017.

The scope of work was briefed to the committee. It was informed that the DPR prepared is for capital cost of work proposed & 10 year O&M cost. The capital cost part execution is to be done by RUIDP for which funds are to be made available by Government through ADB under phase-IV. The O&M cost is to be borne by the Municipal Council as per actual basis along with power charges. The scope under project to provide sewer network of about 105 Km length, one STP for 9 MLD (round off 8.68 MLD) & one sewage pumping station near Govt. secondary school in ward no.19 to pump sewage of low laying area to main sewer. It was informed that STP is proposed on latest Sequential Batch Reactor (SBR) technology to meet out the latest effluent parameters & treated water will be used by Nagar Parishad at his own level such as irrigation, gardening and industrial etc. Property house sewer connections are included and approx 95% area of Pratapgarh city is covered in this project. The O&M payment will be on performance based under the contract. To reduce inconvenience to public deeper depth (3.5 mtr above) & crossing of NH & circles where traffic is more, trenchless technology for laying of sewer is proposed.

For sewer pipes the matter was discussed considering PHED experience of water line work. It was informed that strata in Pratapgarh is varying from mostly is rocky, therefore it was proposed that HDPE pipe should be considered in place of DWC pipe which may be damaged during laying in rocky strata & got punctured from outside.

Chairman Municipal Council was of the view that project will also put up in their board meeting in 1st week of September-17. The total estimated cost of project is Rs. 159.57 cr (works cost Rs. 145.50 crore + 10 yr O&M cost Rs. 14.12 cr). It was also deliberated that for public complaint redressal, provision of toll free number along with set up of a control room should be taken in the provision. The project was agreed by the committee for further course of action by RUIDP level.

Meeting ended with vote of thanks to the chair

Executive Engineer
RUIDP, Udaipur
 Date: 04.09.2017

F3(201) (K)/RUIDP/PMU/Ph-IV/Pratapgarh/189-201
 Copy to the following for information and necessary action:

1. Shri C.P. Joshi, Hon'ble M.P. Chittorgarh.
2. Sh. Nand Lal Meena, Hon'ble Minister of Tribal Area Development, Government of Rajasthan, Jaipur.
3. The Project Director, R.U.I.D.P., Jaipur.
4. The District Collector & Chairman, City Level Committee, Pratapgarh
5. The Chairman/Vice Chairman/Commissioner, Nagar Parishad, Pratapgarh.
6. The Deputy Town Planner, Udaipur
7. The Superintending Engineer, (WW), R.U.I.D.P., Jaipur.
8. The Superintending Engineer, (WS), R.U.I.D.P., Jaipur.
9. The Superintending Engineer, P.W.D. / PHED/ WRD, Pratapgarh.
10. The Executive Engineer, Nagar Parishad, Pratapgarh.
11. The city stake holders, Pratapgarh.

Executive Engineer
RUIDP, Udaipur

[illegible]

बैठक

जिले में आरयूआईडीपी का चौथा चरण देगा राहत

सीवर लाइन में
प्रतापगढ़ जिले में
आई नई सौगात

पत्रिका न्यूज नेटवर्क

rajasthanpatrika.com

प्रतापगढ़, मिनी सचिवालय सभागार में शनिवार को सीएलसी को लेकर अधिकारियों की बैठक आयोजित की। बैठक में जिला कलक्टर नेहा गिरि ने प्रतापगढ़ शहर के लिए सीवर लाइन की जयपुर से आई डीपीआर स्वीकृति पर चर्चा की। सीवर लाइन बनाने की स्वीकृति जारी की। बैठक में बताया कि प्रतापगढ़ जिले में आरयूआईडीपी का कार्यालय खुलेंगा जिसमें अधिशाषी अभियंता स्तर के अधिकारियों का पदस्थापन किया जाएगा। आरयूआईडीपी का चौथा चरण शहर में जलापूर्ति समस्या से परेशान उपभोक्ताओं को राह देगा। शहरी क्षेत्र में सिवरेज का कार्य होगा। इसके लिए तैयार की गई डीपीआर को अनुमोदित कर दिया गया है। सिवरेज लाइन का कार्य 159 करोड़ की लागत से 2018 में फरवरी- मार्च से कार्य को प्रारंभ किया जाएगा। इससे गंदा पानी की निकासी इस तरह की जाएगी जिससे आमजन को कोई परेशानी का सामना नहीं करना पड़ेगा। ब्यासवाड़ा रोड स्थित राजकीय



बैठक... प्रतापगढ़ जिले सचिवालय में बैठक में मौजूद अधिकारी।

अभियंता स्तर के अधिकारियों का पदस्थापन किया जाएगा। आरयूआईडीपी का चौथा चरण शहर में जलापूर्ति समस्या से परेशान उपभोक्ताओं को राह देगा। शहरी क्षेत्र में सिवरेज का कार्य होगा। इसके लिए तैयार की गई डीपीआर को अनुमोदित कर दिया गया है। सिवरेज लाइन का कार्य 159.00 करोड़ की लागत से 2018 में

फरवरी, मार्च माह से कार्य को प्रारंभ किया जाएगा। गंदे पानी की निकासी इस तरह की जाएगी, जिससे आमजन को कोई परेशानी नहीं करना पड़ेगा। एससीएस का ब्यासवाड़ा रोड स्थित राजकीय स्कूल के पास सिवरेज पम्प स्टेशन बनाया जाएगा। शहर से निकलने वाले गंदा पानी के लिए एक प्लान्ट लगाया जाएगा। जिससे उस पानी को शुद्ध करके खेती के उपयोग के लिए लिया जा सके। इसमें टॉल फ्री नम्बर भी बनाया जाएगा। डीपीआर इस प्रोजेक्ट पर डीपीआर की ओर से दस साल की अनुमति दी गई। जो 13.20 करोड़ रूपय की लागत से ठेकेदार की ओर से दस साल तक देखभाल एवं

रखरखाव की जाएगी। पूरे प्रतापगढ़ में 105 किलोमीटर के दायरे में सीवर लाइन पाईप बिछाया जाएगा। प्रतापगढ़ के सभी वार्डों एवं पूरे जिले को सीवर लाइन में जोड़ जाएगा। मुक्तिधाम के पीछे एसटीपी आठ एमएलडी बनाया जाएगा। बैठक के दौरान अतिरिक्त जिला कलक्टर हेमेश नागर, नगर परिषद सभापति कमलेश डोसी, उपसभापति विद्या राठी, एसई डॉ. डीआर जगिंद, नगर परिषद आयुक्त अशोक जैन, पीएचडीई एक्सईन रामकेश मीणा, उदयपुर डीटीपी विरेन्द्र सिंह परिहार, अरविन्द सिंह कुमावत, एईन प्रेम कुमार, मोहनलाल तंवर सहित कई अधिकारी मौजूद थे।

प्रतापगढ़ सीवरलाइन को मिली मंजूरी

प्रतापगढ़। जिला कलक्टर नेहा गिरि की अध्यक्षता में शनिवार को सीएलसी को लेकर मिनी सचिवालय कलक्टर सभागार में अधिकारियों की बैठक आयोजित हुई।

बैठक में जिला कलक्टर नेहा गिरि ने प्रतापगढ़ शहर के लिए सिवर लाइन की जयपुर से आई डीपीआर स्वीकृति पर चर्चा की। बैठक में जिला कलक्टर नेहा गिरि ने बताया कि प्रतापगढ़ जिले में आरयूआईडीपी का कार्यालय खुलेंगा जिसमें अधिशाषी अभियंता स्तर के अधिकारियों का पदस्थापन किया जाएगा। आरयूआईडीपी का चौथा चरण शहर में जलापूर्ति समस्या से परेशान उपभोक्ताओं को राह देगा। पूरे शहरी क्षेत्र में सिवरेज का कार्य होगा। इसके लिए तैयार की गई डीपीआर को अनुमोदित कर दिया गया है। सिवरेज लाइन का कार्य 159 करोड़ की लागत से 2018 में फरवरी- मार्च से कार्य को प्रारंभ किया जाएगा।

इससे गंदा पानी की निकासी इस तरह की जाएगी जिससे आमजन को कोई परेशानी का सामना नहीं करना पड़ेगा। ब्यासवाड़ा रोड स्थित राजकीय



प्रतापगढ़। सीएलसी को लेकर आयोजित बैठक की संबोधित करती जिला कलक्टर नेहा गिरि।

स्कूल के पास सिवरेज पम्प स्टेशन बनाया जाएगा एवं शहर से निकलने वाले गंदे पानी के लिए एक प्लान्ट लगाया जाएगा जिससे उस पानी को शुद्ध करके खेती के उपयोग में लिया जाएगा। डीपीआर इस प्रोजेक्ट पर डीपीआर द्वारा दस साल की अनुमति दी गई जो कि 13.20 करोड़ रूपय की लागत से ठेकेदार द्वारा दस साल तक देखभाल एवं रखरखाव की जाएगी। पूरे प्रतापगढ़ में 105 किलोमीटर के दायरे में सिवर लाइन के पाईप बिछाये

जाएंगे। प्रतापगढ़ के सभी वार्डों एवं पूरे जिले को सिवर लाइन में जोड़ा जाएगा।

बैठक में अतिरिक्त जिला कलक्टर हेमेश नागर, सभापति कमलेश डोसी, उपसभापति विद्या राठी, सुपरीटेन्डेंट इंजिनियर डॉ. डीआर जगिंद, आयुक्त अशोक जैन, पीएचडीई एक्सईन रामकेश मीणा, उदयपुर डीटीपी विरेन्द्र सिंह परिहार, अरविन्द सिंह कुमावत, एईन प्रेम कुमार, मोहनलाल तंवर आदि मौजूद थे।

Appendix 20: Sample Grievance Registration Form

The _____ Project welcomes complaints, suggestions, queries and comments regarding project implementation.

Aggravated persons may provide grievance with their name and contact information to enable us to get in touch for clarification and feedback.

In case, someone chooses not to include personal details and wants that the information provided to remain confidential, please indicate by writing/typing ***(CONFIDENTIAL)*** above Grievance Format.

Thank you.

Date		Place of registration			
Contact Information/Personal Details					
Name		Gender	* Male * Female	Age	
Home Address					
Place					
Phone no.					
E-mail					
Complaint/Suggestion/Comment/Question Please provide the details (who, what, where and how) of your grievance below: If included as attachment/note/letter, please tick here:					
How do you want us to reach you for feedback or update on your comment/grievance?					

FOR OFFICIAL USE ONLY

Registered by: (Name of Official registering grievance)	
Mode of communication: Note/Letter E-mail Verbal/Telephonic	
Reviewed by: (Names/Positions of Official(s) reviewing grievance)	
Action Taken:	
Whether Action Taken Disclosed:	Yes No
Means of Disclosure:	

Appendix 21: Officer order for establishing GRM

167

RUIDP
Government of Rajasthan
Office of Project Director
Rajasthan Urban Infrastructure Development Project
 AVS Building, Jawahar Circle, JLN Marg, Jaipur - 302017
 Tel No.: 0141-2721966, Fax No.: 0141-2721919, email : mail@ruidp.gov.in, web site : www.ruidp.gov.in
 F3(301)(50)RUIDP/PMU/PH-IV/WS/GENERAL/1282 Dated: 04.2018
 04/05/18

Office - Order

Subject:- Grievance Redress Mechanism for Rajasthan Secondary Town Development Investment Program (RSTDIP) - RUIDP Phase IV

Reference:- Agreed Resettlement & Environmental framework -3183 IND (RUIDP Phase III) - <https://www.adb.org/projects/42267-026/main#project-documents>

It is directed that Grievance Mechanism of RUIDP Phase III will be replicated in RUIDP Phase IV and accordingly, PIU will maintain/ ensure proper records of safeguard related Grievances received in their town. PIU will also ensure that the safeguard related Grievances received are resolved as per Grievance Redress Mechanism (GRM) prescribed in RP which is summarized as under (for ready reference):-

Methodology of multi-tier GRM	Responsibility/Action to be taken	Time Frame	Record Keeping
1st level: Grievances that are immediate and urgent in the perception of the complainant, the contractor, and supervision personnel from PIU will provide the most easily accessible or first level of contact for quick resolution of grievances	SE/EE PIU will resolve issues in consultation with supervision personnel, Contractor.	PIU will resolve issues within 3 days of receipt of a complaint/ grievance.	The grievance register will be endorsed by all field agencies involved in implementation of EMP and RP.
2nd level: All grievances that cannot be redressed within 3 days at field will be referred to PMU through PO Social/Environment by PIU.	Project Officers (Environment/Social) PMU in consultation with PMU, PIU and the Contractor will resolve the issued referred.	PMU will resolve issues within 7 days of receipt of a complaint/ grievance	PIU will keep records of the matter referred to PMU and will documents the outcome of each grievance resolved in the Grievance Register.
3rd level: All the grievances that are not addressed by PMU within 7 days, will be brought to the notice of Grievance Redress Committee (GRC). The City Level Committee (CLC), which will be established in every project town will act as GRC.	SE/EE PIU will coordinate with PO Social/ PO Environment or other official of PMU and will prepare agenda for the GRC meeting accordingly and ensure keeping the same in GRC.	The GRC will resolve the grievance within 15 days of receiving the complaint.	PIU will be responsible to see through the process of redress of each grievance and document the outcomes.
4th level: Very major issues that are beyond the jurisdictional authority of the CLC or those that have the potential to cause social conflicts or environmental damage or those that remain unresolved at PMU/CLC level, will be referred to the Empowered Committee (EC).	SE/EE PIU will assist PMU officials to prepare agenda for the Empowered committee meeting.		SE/EE PIU will keep records of Empowered committee meeting and will ensure documentation of outcome.

Please note that an aggrieved person shall have access to the country's legal system at any stage, and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

PIUs will be responsible to ensure redressal of grievances as per GRM procedures summarized above and intimate to the complainant.

Contractor's will keep information board depicting Grievance registration numbers at each working site. Grievance registration form and will maintain Grievance Registers (refer annexure 1 & 2).

Addl. Project Director, RUIDP
 Dated: 04.2018
 04/05/18
 (K. M. Mandawaria)
 PO(Co-ord.&Social)

F3(301)(50)RUIDP/PMU/PH-IV/WS/GENERAL/ 1283-84
 Copy to following for information and necessary action.
 1) PA to PD /CE /FA/DyPD(A)/SE(WS)/SE(WW)/PO(Environment)/PO(Social)/, RUIDP, Jaipur
 2) All EE, PIU, Phase-IV for ensuring maintenance of the Grievance register and helpline and for resolving of Grievances.

Appendix 22: Sample Environmental Site Inspection Checklist

Project Name
Contract Number

NAME: _____ DATE: _____

TITLE: _____ DMA: _____

LOCATION: _____ GROUP: _____

WEATHER: _____

Project Activity Stage	Survey	
	Design	
	Implementation	
	Pre-Commissioning	
	Guarantee Period	

Monitoring Items	Compliance
Compliance marked as Yes / No / Not applicable (NA) / Partially Implemented (PI)	
EHS supervisor appointed by contractor and available on site	
Construction site management plan (spoils, safety, schedule, equipment etc..) prepared	
Traffic management plan prepared	
Dust is under control	
Excavated soil properly placed within minimum space	
Construction area is confined; no traffic/pedestrian entry observed	
Surplus soil/debris/waste is disposed without delay	
Construction material (sand/gravel/aggregate) brought to site as & when required only	
Tarpaulins used to cover sand & other loose material when transported by vehicles	
After unloading, wheels & undercarriage of vehicles cleaned prior to leaving the site	
No chance finds encountered during excavation	
Work is planned in consultation with traffic police	
Work is not being conducted during heavy traffic	
Work at a stretch is completed within a day (excavation, pipe laying & backfilling)	
Pipe trenches are not kept open unduly	
Road is not completely closed; work is conducted on edge; at least one line is kept open	
Road is closed; alternative route provided & public informed, information board	

provided	
Pedestrian access to houses is not blocked due to pipe laying	
Spaces left in between trenches for access	
Wooden planks/metal sheets provided across trench for pedestrian	
No public/unauthorized entry observed in work site	
Children safety measures (barricades, security) in place at works in residential areas	
Prior public information provided about the work, schedule and disturbances	
Caution/warning board provided on site	
Guards with red flag provided during work at busy roads	
Workers using appropriate PPE (boots, gloves, helmets, ear muffs etc)	
Workers conducting or near heavy noise work is provided with ear muffs	
Contractor is following standard & safe construction practices	
Deep excavation is conducted with land slip/protection measures	
First aid facilities are available on site and workers informed	
Drinking water provided at the site	
Monitoring Items	Compliance
Toilet facility provided at the site	
Separate toilet facility is provided for women workers	
Workers camps are maintained cleanly	
Adequate toilet & bath facilities provided	
Contractor employed local workers as far as possible	
Workers camp set up with the permission of PIU	
Adequate housing provided	
Sufficient water provided for drinking/washing/bath	
No noisy work is conducted in the nights	
Local people informed of noisy work	
No blasting activity conducted	
Pneumatic drills or other equipment creating vibration is not used near old/risky buildings	

Signature

Sign off

Name
Position

Name
Position

Appendix 23: Semi Annual Environmental Monitoring Report Format

I. INTRODUCTION

- Overall project description and objectives
- Environmental category as per ADB Safeguard Policy Statement, 2009
- Environmental category of each subproject as per national laws and regulations
- Project Safeguards Team

Name	Designation/Office	Email Address	Contact Number
1. PMUs			
2. PIUs			
3. Consultants			

- Overall project and sub-project progress and status
- Description of subprojects (package-wise) and status of implementation (preliminary, detailed design, on-going construction, completed, and/or O&M stage)

[illegible]

^a If on-going construction, include %physical progress and expected date of completion.

II. COMPLIANCE STATUS WITH NATIONAL/STATE/LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS^a

Package No.	Subproject Name	Statutory Environmental Requirements ^b	Status of Compliance ^c	Validity if obtained	Action Required	Specific Conditions that will require environmental monitoring as per Environment Clearance, Consent/Permit to Establish ^d

^a All statutory clearance/s, no-objection certificates, permit/s, etc. should be obtained prior to award of contract/s. Attach as appendix all clearance obtained during the reporting period. If already reported, specify in the "remarks" column.

^b Specify (environmental clearance? Permit/consent to establish? Forest clearance? Etc.)

^c Specify if obtained, submitted and awaiting approval, application not yet submitted.

^d Example: Environmental Clearance requires ambient air quality monitoring, Forest Clearance/Tree-cutting Permit requires 2 trees for every tree, etc.

III. COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS

No. (List schedule and paragraph number of Loan Agreement)	Covenant	Status of Compliance	Action Required

IV. COMPLIANCE STATUS WITH THE ENVIRONMENTAL MANAGEMENT PLAN (REFER TO EMP TABLES IN APPROVED IEE/S)

- Confirm if IEE/s require contractors to submit site-specific EMP/construction EMPs. If not, describe the methodology of monitoring each package under implementation.

Package-wise Implementation Status

Package	Component	Design Status (Preliminary	Final IEE based on Detailed Design	Site-specific EMP (or	Remarks

Number		Design Stage/Detailed Design Completed)	Not yet due (detailed design not yet completed)	Submitted to ADB (Provide Date of Submission)	Disclosed on project website (Provide Link)	Final IEE provided to Contractor/s (Yes/No)	Construction EMP) approved by Project Director? (Yes/No)	

- Identify the role/s of Safeguards Team including schedule of on-site verification of reports submitted by consultants and contractors.
- For each package, provide name/s and contact details of contractor/s' nodal person/s for environmental safeguards.
- Include as appendix all supporting documents including **signed** monthly environmental site inspection reports prepared by consultants and/or contractors.
- With reference to approved EMP/site-specific EMP/construction EMP, complete the table below
- Provide the monitoring results as per the parameters outlined in the approved EMP (or site-specific EMP/construction EMP when applicable).
- In addition to the table on EMP implementation, the main text of the report should discuss in details the following items:
 - (i) **Grievance Redress Mechanism.** Provide information on establishment of grievance redress mechanism and capacity of grievance redress committee to address project-related issues/complaints. Include as appendix Notification of the GRM (town-wise if applicable).
 - (ii) **Complaints Received during the Reporting Period.** Provide information on number, nature, and resolution of complaints received during reporting period. Attach records as per GRM in the approved IEE. Identify safeguards team member/s involved in the GRM process. Attach minutes of meetings (ensure English translation is provided).
- Confirm if any dust was noted to escape the site boundaries and identify dust suppression techniques followed for site/s.

- Identify muddy water was escaping site boundaries or muddy tracks were seen on adjacent roads.
- Identify type of erosion and sediment control measures installed on site/s, condition of erosion and sediment control measures including if these were intact following heavy rain;
- Identify designated areas for concrete works, chemical storage, construction materials, and refueling. Attach photographs of each area.
- Confirm spill kits on site and site procedure for handling emergencies.
- Identify any chemical stored on site and provide information on storage condition. Attach photograph.
- Describe management of stockpiles (construction materials, excavated soils, spoils, etc.). Provide photographs.
- Describe management of solid and liquid wastes on-site (quantity generated, transport, storage and disposal). Provide photographs.
- Provide information on barricades, signages, and on-site boards. Provide photographs.
- Checking if there are any activities being under taken out of working hours and how that is being managed.

Summary of Environmental Monitoring Activities (for the Reporting Period)^a

Impacts (List from IEE)	Mitigation Measures (List from IEE)	Parameters Monitored (As a minimum those identified in the IEE should be monitored)	Method of Monitoring	Location of Monitoring	Date of Monitoring Conducted	Name of Person Who Conducted the Monitoring
Design Phase						
Pre-Construction Phase						
Construction Phase						
Operational Phase						

^a Attach Laboratory Results and Sampling Map/Locations

Overall Compliance with CEMP/EMP

No.	Subproject Name	EMP/ CEMP Part of Contract Documents (Y/N)	CEMP/ EMP Being Implemented (Y/N)	Status of Implementation (Excellent/ Satisfactory/ Partially Satisfactory/ Below Satisfactory)	Action Proposed and Additional Measures Required

V. APPROACH AND METHODOLOGY FOR ENVIRONMENTAL MONITORING OF THE PROJECT

- Brief description on the approach and methodology used for environmental monitoring of each sub-project

VI. MONITORING OF ENVIRONMENTAL IMPACTS ON PROJECT SURROUNDINGS (ambient air, water quality and noise levels)

- Brief discussion on the basis for monitoring
- Indicate type and location of environmental parameters to be monitored
- Indicate the method of monitoring and equipment to be used

- Provide monitoring results and an analysis of results in relation to baseline data and statutory requirements

As a minimum the results should be presented as per the tables below.

Air Quality Results

Site No.	Date of Testing	Site Location	Parameters (Monitoring Results)			
			PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)

Surface Water Quality Results

S.No.	Parameters	Results		
		Location-1 (Name)	Location-2 (Name)	Location-3 (Name)
1.	pH			
2.	Turbidity			
3.	Total Hardness			
4.	DO			
5.	BOD			
6.	COD			
7.	Chloride			
8.	Iron			
9.	TSS			
10.	Arsenic			
11.	Cadmium			
12.	Fluoride			
13.	Potassium			
14.	Sodium			
15.	Calcium			
16.	Zn			
17.	Cr ⁺⁶			
18.	Magnesium			
19.	Copper			
20.	Manganese			
21.	Sulphate			
22.	Cyanide			
23.	Nitrate			
24.	Lead			
25.	Boron			
26.	Selenium			
27.	Aluminium			
28.	Total residual Chlorine			

Ground water Quality Results

S. No.	Parameters	Results		
		Location-1 (Name)	Location-2 (Name)	Location-3 (Name)
1.	pH			
2.	Total Alkalinity			

3.	Total Hardness			
4.	Chloride			
5.	Iron			
6.	TDS			
7.	Arsenic			
8.	Fluoride			
9.	Zn			
10.	Cr+6			
11.	Copper			
12.	Manganese			
13.	Sulphate			
14.	Phosphate			
15.	Nitrate			
16.	Lead			
17.	Phenolic Compound			

Noise Quality Results

Site No.	Date of Testing	Site Location	LA _{eq} (dBA) (Monitoring Results)	
			Day Time	Night Time

VII. SUMMARY OF KEY ISSUES AND REMEDIAL ACTIONS

- Summary of follow up time-bound actions to be taken within a set timeframe.

APPENDIXES

- Photos
- Summary of consultations
- Copies of environmental clearances and permits
- Sample of environmental site inspection report
- Other

Appendix 24: Environmental Monitoring Plan - Ambient Air, Noise, Water and Soil

1. Under RUDSICO (EAP) works Environmental Monitoring will done for ambient air, noise, surface water, ground water and soils with following parameters-
 - A. **Ambient Air Quality-** Particulate Matters PM₁₀, Particulate Matter PM_{2.5}, SO_x, NO_x, Carbon Monoxide (CO) as per methods and norms approved by CPCB
 - B. **Ambient Noise Quality-** L_{day} and L_{night} (in Leq dBA) 24 hrs basis as per methods and norms approved by CPCB
 - C. **Surface Water Quality-** pH, Turbidity, Total Hardness, DO, BOD, COD, Chloride, Hg, Iron, TDS, TSS, Calcium, Zn, Cr⁺⁶, Magnesium, Copper, Manganese, Sulphate, Cyanide, Nitrate, Sodium, Potassium, Fluoride, Cadmium, Arsenic, Lead, Boron, Selenium, Aluminium, Total residual Chlorine
 - D. **Ground Water Quality-** pH, TDS, Total Hardness, Zn, Chloride, Iron, Copper, DO, Manganese, Suplhate, Nitrate, Fluiride, Hg, Cadmium, Cr⁺⁶, Arsenic, Lead, Total Alkalinity, Phosphate, Phenolic compound
 - E. **Soil quality-** pH, Elect. Conductivity (at 25°C), Moisture (at 105°C), Texture (silt, clay, sand), Calcium (as CaO), Magnesium (as Mg), Permeability, Nitrogen (as N), Sodium (as Na), Phosphate (as PO₄), Potassium (as K), Organic Matter, oil and grease
2. During pre-construction stage monitoring is required to establish baseline at following sites-

Environmental Monitoring in Pre-Construction Period

S.N.	Type of monitoring	Location of monitoring and no. of samples	Total No. of samples
1	Ambient Air Monitoring	STP site -1 SPS site -1 Pipe laying site-1	3
2.	Ambient Noise monitoring	STP site -1 SPS site-1 Pipe laying site -1	3
3.	Ground Water quality	STP site-1 SPS site-1	2
4.	Soil Quality	STP site -1 SPS site -1	2

3. During construction stage below monitoring should be done on minimum quarterly basis at the following sites-

Environmental Monitoring in Construction Period

Proposed sites	Ambient Air quality	Ambient Noise quality	Ground Water Quality	Soil Quality
Pipe laying site within the town preferably near sensitive receptor*	1	1	Nil	Nil
STP site	1	1	1	1
SPS site	1	1	1	1
Total number of	3	3	2	2

samples in each quarter (A)				
Total number of samples in construction period (B)	33	33	22	22

Calculation of total Number of samples-

Project duration= 4 years=16 quarters

Pre-construction phase= 3 months=1quarter

Monsoon period in each year=3 months=1 quarter (July-Sept)

Monsoon period in project duration=4 quarter

Effective period of environmental monitoring (C) = $16-1-4= 11$ quarters

Total number of samples in construction period (B)= $A \times C$

Note –

- i. All the tests should be done by labs approved by CPCB and/or RPCB and should be accredited by NABL
 - ii. All the tests should be done as per the norms and methods approved by CPCB/RPCB
 - iii. All the meteorological data like weather, wind, location, nearby features etc. should be recorded during sampling and indicated in the report for ambient air quality
 - iv. If surface water is not available within 500 meters of the site, ground water quality monitoring should be done from the vicinity within 500 meters and if both surface and ground water is available at any site both should be taken
 - v. For air quality monitoring, if any two sites are within the distance of 2 kms from each other, only one sampling can be done at any site
- * Sensitive receptors are hospitals, schools, any major religious place etc

Appendix 25: Details of land availability, ownership and NOCs for sites

Sr. No	Project Component	Location	Ownership	Area of government land available at the location (sq mtr)	Area required (m²)	Khasra No.	Khata No.	Remarks
1	Construction of STP of 7 MLD and TEER, TESR, and EPS	On Kila Road	Nagar Parishad	5000	5000	3035/3026	1122	Land available and allotted to Nagar Parishad
2	One sewage pumping station (SPS) of 7 mld	Near Jain Gausala	Nagar Parishad	600	600	3027/263	1119	Land available and allotted to Nagar Parishad
3	One MWP – 0.10 MLD	In Manpur	Nagar Parishad	----	----	---	---	Land available, NOC obtained

Appendix 266: NOC and Land Documents of STP, SPS and CRMC

कार्यालय नगर परिषद प्रतापगढ़, जिला-प्रतापगढ़(राज.)
 Fax No. 01478-222043 E-Mail-municipal.board.pratapgarh@gmail.com
 क्रमांक/नपप्र/संस्थापन/2021/169 दिनांक:- 29/1/2021

श्रीमान् मुख्य अभियन्ता महोदय
 RUUDP, जयपुर राज. ।

विषय :- STP (सीवरेंज ट्रीटमेंट प्लान्ट) के निर्माण हेतु आराजी संख्या 263
 रकबा 0.97 हेक्टर भूमि की अनापत्ति प्रमाणपत्र जारी करने बाबत ।

महोदय,

उपरोक्त विषय में निवेदन है कि नगर परिषद द्वारा पूर्व पत्र क्रमांक 6047 दिनांक 10.07.2019 से RUUDP Phase IV के अन्तर्गत SPS-2 के तहत 60 वर्गमीटर की NOC जारी की गई थी । उक्त जमीन के पास ही STP (सीवरेंज ट्रीटमेंट प्लान्ट) के लिए आराजी नम्बर 263 रकबा 0.97 हेक्टर किस्म चरनोट मेंसे 0.50 हेक्टर (लगभग 5000 वर्गमीटर) भूमि श्रीमान् जिला कलेक्टर महोदय के पत्र क्रमांक 220-224 दिनांक 19.01.2021 से नगर परिषद को आवंटित की गई है, जिसकी NOC आप द्वारा चाही गई है ।

जिस क्रम में उपरोक्त खसरा संख्या 263 रकबा 0.97 हेक्टर किस्म चरनोट मेंसे 0.50 हेक्टर भूमि की NOC आपको STP (सीवरेंज ट्रीटमेंट प्लान्ट) के लिए जारी की जाती है ।

अतः आप उक्त STP (सीवरेंज ट्रीटमेंट प्लान्ट) का प्लान्ट खसरा संख्या 263 रकबा 0.97 हेक्टर किस्म चरनोट मेंसे 0.50 हेक्टर भूमि पर स्थापित करें ।

क्रमांक/नपप्र/2021/
 प्रतिलिपि :-

1. श्रीमान् जिला कलेक्टर महोदय, प्रतापगढ़ राज. ।
2. श्रीमान् तहसीलदार साहब, प्रतापगढ़ राज. ।

प्रशासक कम आयुक्त
 नगर परिषद प्रतापगढ़ राज.
 दिनांक-

प्रशासक कम आयुक्त
 नगर परिषद प्रतापगढ़ राज.

NOC of Nagar Parishad for proposed STP land at Kila Road

Transcript in English

No: 769

dtd. 29.01.2021

To,
The Chief Engineer,
RUIDP, Jaipur

Sub: Regarding NoC for construction of proposed STP at Araj no. 263, area 0.97 hectare

Ref: Your letter no-1686 on dated 13.05.2019

Sir,

With reference to the above cited subject, this is to inform that this office previous letter no. 6047 dtd. 10.07.2019 NOC was issued for 60 sq. mt land for proposed SPS-2. Near to that land there is availability of 0.97 hectare land out of which 0.50 hectare (approx.. 5000 sq. mt.) land has been allotted to Nagar Parishad by District Collector's letter no. 220-224 dtd. 19.01..2021 for the construction of proposed STP in Araj no. 263..

Nagar Parishad, Pratapgarh hereby giving no objection certificate for construction of STP at above mentioned land.

Signed by

Commissioner,

Nagar Parishad,

Pratapgarh



राजस्थान - सरकार

कार्यालय जिला कलक्टर प्रतापगढ़ (राज.)

E-mail :- dm-pra-rj@nic.in

Fax No - 01478-222262

क्रमांक : राजस्व/भू.आ./2020-21/220-224

दिनांक 13/01/2021

आदेश

उपखण्ड अधिकारी प्रतापगढ़ के पत्र क्रमांक :- राजस्व/2021/78 दिनांक 19.01.2021 के द्वारा सीवरेज टीटमेंट प्लान्ट (RUDIP) नगरपरिषद प्रतापगढ़ के लिए राजस्व ग्राम प्रतापगढ़ पटवार हल्का प्रतापगढ़ की आराजी संख्या 283 रकबा 0.97 हैक्टर किस्म घरनोट में से 0.50 हैक्टर (लगभग 5000 वर्गमीटर) भूमि प्रस्तावित की गई है।

तथा किस्म घरनोट की क्षतिपूर्ति हेतु राजस्व ग्राम गोपालपुरा पटवार हल्का अचलपुरा की आराजी संख्या 249 रकबा 0.51 हैक्टर किस्म बिलानाम (भटवेड़) भूमि प्रस्तावित की गई है।

प्रस्तुत भूमि आवंटन प्रस्ताव की बाद जांच एवं विभागीय प्रचलित विधियों के अनुसार राजकीय कार्यालय भवनों हेतु प्रस्तावित भूमियां राजस्थान भू-राजस्व अधिनियम 1956 की धारा 82 के तहत सेंटअपार्ट की जाकर राज्य सरकार राजस्व (ग्रुप-6) विभाग से जारी अधिसूचना क्रमांक :- प. 10(03) राज-6/2001/95 दिनांक 03.11.2020 के अनुसार राजस्थान काश्तकारी (सरकारी) नियम 1955 के नियम 7 के तहत किस्म घरनोट भूमियों का आवंटन/आरक्षण मय क्षतिपूर्ति के साथ अधिकतम 2.00 हैक्टर तक संबंधित जिला कलक्टर द्वारा राजकीय कार्यालय भवनों एवं लोकोपयोगी प्रयोजनार्थ आवंटित/आरक्षित किये जाने के प्रावधान किए गए हैं तथा राजस्व (ग्रुप-6) विभाग से जारी अधिसूचना क्रमांक :- 6(25)राज-6/2014 पार्ट/96 दिनांक 03.11.2020 के अनुसार माननीय सर्वोच्च/उच्च न्यायालय से प्रतिबंधित भूमियों को छोड़कर अन्य भूमियों का आवंटन/आरक्षण राजकीय कार्यालय भवनों एवं लोकोपयोगी प्रयोजनार्थ आवंटन नियम 1963 के उप नियम 2 में विहित प्रावधानों अनुसार अधिकतम क्षेत्र एवं उप नियम 4 के अनुसार ससम आवंटन प्राधिकारी स्तर से बिना राज्य सरकार के अनुमोदन पर भी दिनांक 31.03.2021 तक आवंटन/आरक्षण हेतु सिधिलन प्रदान किया गया है।

अतः उपखण्ड अधिकारी प्रतापगढ़ की अनुराधा से प्राप्त भूमि आवंटन प्रस्ताव अनुसार राजस्व ग्राम प्रतापगढ़ पटवार हल्का प्रतापगढ़ की आराजी संख्या 283 रकबा 0.97 हैक्टर किस्म घरनोट में से 0.50 हैक्टर (लगभग 5000 वर्गमीटर) भूमि सीवरेज टीटमेंट प्लान्ट (RUDIP) नगरपरिषद प्रतापगढ़ हेतु आवंटित की जाती है।

तथा किस्म घरनोट की क्षतिपूर्ति हेतु राजस्व ग्राम गोपालपुरा पटवार हल्का अचलपुरा की आराजी संख्या 249 रकबा 0.51 हैक्टर किस्म बिलानाम (भटवेड़) भूमि को घरनोट दर्ज करने की स्वीकृति प्रदान की जाती है।

तहसीलदार प्रतापगढ़ आवंटित भूमियों एवं क्षतिपूर्ति हेतु प्रस्तावित भूमियों का राजस्व रिकार्ड एवं नक्शे में आवश्यक तरमीम करें।



क्रमांक :- राजस्व/भू.आ./2020-21/220-224
प्रतिनिधि :- सूचना एवं आवश्यक कार्यवाही हेतु

1. उपखण्ड अधिकारी, प्रतापगढ़
2. तहसीलदार, प्रतापगढ़
3. अधीक्षण अभियन्ता (PIU, RUDIP, Phase IV) बांसवाड़ा
4. आयुक्त नगरपरिषद प्रतापगढ़
5. आदेश पत्रावली

—sd—
(अनुपमा जोरपाल)
जिला कलक्टर
प्रतापगढ़

दिनांक :- 13/01/2021

44/1/21
जिला कलक्टर
प्रतापगढ़ (राज.)



PRAKASH SECTION

- 381 -

Land allotment letter for STP land

Transcript in English

No:220-224

dtd. 19.01.2021

ORDER

(Summary of Order)

0.50 hectare (approx.. 5000 sq. mt.) of land from the land Araj no. 263 under revenue village, Pratapgarh, Patwar Halka Pratapgarh is proposed by SDM Pratapgarh through his letter no. 78 dtd. 19.01.2021 for the construction of proposed STP by RUIDP.



As per recommendation of SDM, Pratapgarh, 0.50 hectare (approx.. 5000 sq. mt.) of land from the land Araj no. 263 under revenue village, Pratapgarh, Patwar Halka Pratapgarh is being allotted to Nagar Parishad, Pratapgarh for the construction of STP under RUIDP project.

Signed

Anupama Jorwal

District Collector

Pratapgarh

जमाबन्दी (खेवट/खतोनी) (प्रतिलिपि)		प्रपत्र पी-26 (सी) (देखिये नियम 153 ए)	
ग्राम का नाम :- प्रतापगढ़	अंतिम चौसला आधार संख्या :- 2074 - 2077 जमाबंदी 2075 (वर्ष 2018) से स्थायी		
पटवार हल्का :- प्रतापगढ़	भूमि धारक का नाम :- राज.सरकार		
भू.अभि.नि. :- प्रतापगढ़	क्षेत्रफल की ईकाई :- हेक्टेयर		
तहसील :- प्रतापगढ़	खाता संख्या नया :- 1122		
जिला :- प्रतापगढ़	खाता संख्या पुराना :- 900		
काश्तकार का नाम:-			
1. सीवरेज ट्रीटमेंट प्लांट (RUIDP) नगरपरिषद प्रतापगढ़ हिस्सा- पूर्ण विभागीय,			
खसरा संख्या	क्षेत्रफल	भूमि वर्गीकरण	कृषक द्वारा सिंचाई के अन्तरण के क्रम में प्रमाणित नामान्तरकरण संख्या व दिनांक
3035/3026	0.5000	सीवरेज ट्रीटमेंट प्लांट	0.5000
कुल खसरे - 1		0.5000	स्वीकृत नामान्तरकरण : 5379 18/02/2021 आवंटन
यह प्रपत्र केवल प्रार्थी की जानकारी के लिए है।			
इसका उपयोग किसी भी न्यायालय में साक्षी के रूप में नहीं किया जा सकता है।			
नकल जारी करने की तिथि :- 12-Mar-2021			
		 प.ह. प्रतापगढ़ तह. व जिला प्रतापगढ़ (राज.)	

Jamabandi of STP land

राजस्थान सरकार		NIC-BHUNAKSHA
खसरा नक्शा एवं जमाबंदी (प्रतिलिपि)		दिनांक : 21/02/2021 05:54:46 PM
जिला : प्रतापगढ़	तहसील : प्रतापगढ़	भू. अ. नि. क्षेत्र : प्रतापगढ़
पटवारी हल्का : प्रतापगढ़	ग्राम : प्रतापगढ़	

Scale 1:2000

खसरा संख्या : 3035/3026 क्षेत्रफल : 0.5000 Hectare खाता संख्या : 1122 पुराना खाता संख्या : 900

भूमि किस्म [क्षेत्रफल लगान] :

1.) सीवरेज ट्रीटमेंट प्लांट (RUDIP) नगरपरिषद प्रतापगढ़ हिस्सा- पूर्ण विभागीय

22-02-21

सक्षम अधिकारी एवं सील

प.ह. प्रतापगढ़

तह. व जिला प्रतापगढ़ (राज.)

राज. कार्य

नि. भू. कार्य

नोट :-

- यह प्रपत्र केवल प्रार्थी की जानकारी के लिए है।
- इसका उपयोग किसी भी न्यायालय में साक्ष्य के रूप में नहीं किया जा सकता है।
- प्रविष्टियों में संशोधन/सत्यापित प्रतिलिपि हेतु सम्बंधित जिला/तहसील कार्यालय में संपर्क करें।

Khasra Map of STP land



जमाबन्दी (खेबट/खतोनी)
(प्रतिलिपि)

प्रपत्र पी-26 (सी)
(देखिये नियम 153 ए)

ग्राम का नाम :- प्रतापगढ़	अंतिम चोगला आधार सम्बत :- 2074 - 2077 जमाबंदी 2075 (वर्ष 2018) से स्थायी
पटवार हल्का :- प्रतापगढ़	भूमि धारक का नाम :- राज.सरकार
भू.अभि.नि. :- प्रतापगढ़	क्षेत्रफल की ईकाई :- हैक्टेयर
तहसील :- प्रतापगढ़	खाता संख्या नया :- 1119
जिला :- प्रतापगढ़	खाता संख्या पुराना :- 900

काश्तकार का नाम:-

1. SPS CRMC (RUIDP) IV नगरपरिषद प्रतापगढ़ हिस्सा- पूर्ण विभागीय,

खसरा संख्या	क्षेत्रफल	भूमि वर्गीकरण	कृषक द्वारा संदत्त लगान	सिंचाई के साधन	अन्तरण के क्रम में प्रमाणित नामान्तरकरण संख्या व दिनांक	टिप्पणी
3027/263	0.0600	-	0.0600		स्वीकृत नामांतरकरण : 5297 15/01/2021 न्याया, आदेश	
कुल खसरे - 1	0.0600		0.0600			

यह प्रपत्र केवल प्रार्थी की जानकारी के लिए है।

इसका उपयोग किसी भी न्यायालय में साक्षी के रूप में नहीं किया जा सकता है।

नकल जारी करने की तिथि :- 12-Mar-2021



12-03-21
पटवारी
प.ह. प्रतापगढ़
तह. व जिला प्रतापगढ़ (राज.)

राज.कर्मचारी नि: कुशल!

Jamabandi of SPS Land

राजस्थान सरकार		NIC-BHUNAKSHA
खसरा नक्शा एवं जमाबंदी(प्रतिलिपि)		दिनांक : 21/02/2021 06:57:37 PM
जिला : प्रतापगढ़	तहसील : प्रतापगढ़	भू. अ. नि. क्षेत्र : प्रतापगढ़
पटवारी हल्का : प्रतापगढ़	ग्राम : प्रतापगढ़	

Scale 1:500

खसरा संख्या : 3027/263 क्षेत्रफल : 0.0600 Hectare खाता संख्या : 1119 पुराना खाता संख्या : 900
भूमि किस्म [क्षेत्रफल लगान] :
1.) SPS CRMC (RUIDP) IV नगरपरिषद प्रतापगढ़ हिस्सा- पूर्ण विभागीय

नोट :-

- यह प्रपत्र केवल प्रार्थी की जानकारी के लिए है।
- इसका उपयोग किसी भी न्यायालय में साक्ष्य के रूप में नहीं किया जा सकता है।
- प्रविष्टियों में संशोधन/सत्यापित प्रतिलिपि हेतु सम्बंधित जिला/तहसील कार्यालय में संपर्क करें।

22-02-21

सक्षम अधिकारी के हस्ताक्षर एवं सील


प.ह. प्रतापगढ़

तह. व जिला प्रतापगढ़ (राज.)

राज. न. नि. क्षेत्र

नि. प्रतापगढ़

Khasra Map of SPS land

कार्यालय नगर परिषद प्रतापगढ़, जिला-प्रतापगढ़ (राज.)	
Fax No. 01478-222043	E-Mail- municipal.board.pratapgarh@gmail.com
क्रमांक / नपप्र / सामान्य / 2020-21 / 5949	दिनांक:- 06/10/2020
<p>श्रीमान् अधिशाषी अभियन्ता महोदय, आर.यू.आई.डी.पी, प्रतापगढ़ राज.।</p> <p style="text-align: center;">विषय :- RUIDP द्वारा किए जाने वाले सिवरेज प्रोजेक्ट के लिए कार्यालय हेतु भूमि उपलब्ध कराने हेतु।</p> <p>महोदय जी,</p> <p>उपरोक्त विषय में लेख है की सिवरेज प्रोजेक्ट प्रतापगढ़ का कार्य आपके विभाग द्वारा किया जाना है। कार्यालय निर्माण हेतु RUIDP को भूमि की आवश्यकता है। परिषद कार्यालय में परिसर के पुराने क्वाटरों की भूमि साईज 44x22 मीटर उपलब्ध है। जिसे RUIDP को कार्यालय निर्माण हेतु देने के लिए परिषद सैद्धांतिक रूप से सहमत है। एवं मालिकाना हक नगर परिषद का होगा।</p> <p>संलग्न :- साईट प्लान।</p> <div style="text-align: right; margin-top: 20px;">  प्रशासक कम आयुक्त नगर परिषद प्रतापगढ़ राज.। </div>	

Transcript in English

No: 5949

dtd. 06.10.2020

To,
The Executive Engineer,
RUIDP, Pratapgarh

Sub: availability of land for proposed sewerage project by RUIDP

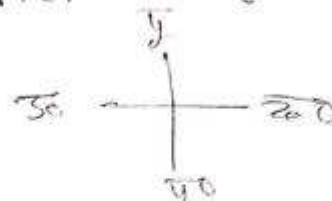
Sir,

With reference to the above cited subject, this is to inform sewerage project in Pratapgarh is being undertaken by your department for which RUIDP required land for construction of building for office. A piece of land of 44x22 mt. within the office campus of Nagar Parishad, near old quarters, Nagar Parishad is agree that this land can be used for proposed construction works by RUIDP. This land will be under jurisdiction of Nagar Parishad. Site plan is attached herewith.

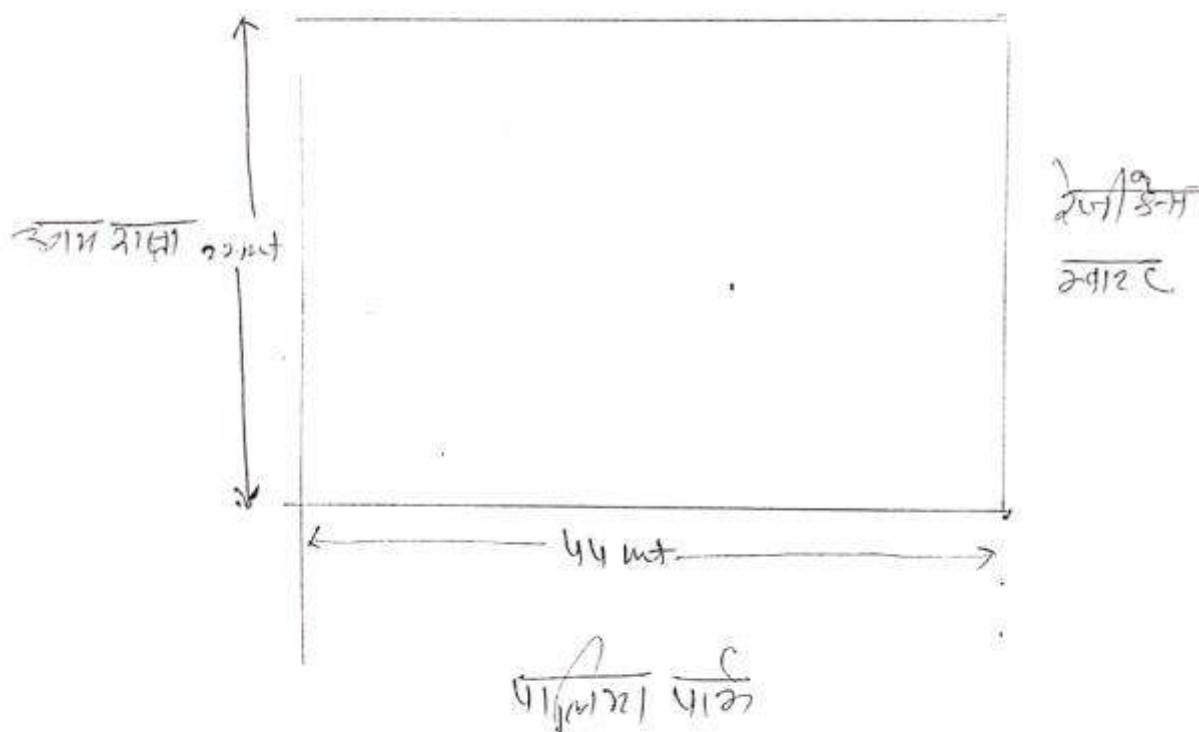
Signed by

Commissioner,
Nagar Parishad,
Pratapgarh

* समाप्त नगरी
SITE PLAN OF LAND BACK OF
MUNICIPAL OFFICE FOR PROPOSED RUIDP
OFFICE



21/11/2012



EB
542

25/11/2020
AE

NOC for proposed CRMC at Nagar Parishad premises

राजस्थान - सरकार

कार्यालय तहसीलदार प्रतापगढ़ जिला प्रतापगढ़ (राजस्थान) -

संक्रमांक/राजप/2021/177-178

दिनांक 17/3/2021

निमित्त

श्रीमान् अधीक्षण अभियन्ता

आरम्भ आर्किटेक्चर की आर्किटेक्चर

परियोजना - वास्तव्य (राज.)

विषय :- हरे वृक्ष काटने की अनुमति वास्तव

उपरोक्त विषयवास्तव केब है कि रिपोर्ट परकारी दफ्तर प्रतापगढ़ के अनुसार प्रार्थी श्री अधीक्षण अभियन्ता आरम्भ आर्किटेक्चर की आर्किटेक्चर परियोजना (राज.) द्वारा प्रतापगढ़ शहर के सीवरेज वर्क आगने हेतु आरपी नं. 1135 स्कान 0-85 हे. में स्थित तीन वृक्षों को काटने की स्वीकृति दी जाती है। प्रार्थी को वृक्षों को काटने की स्वीकृति निम्न शर्तों पर दी जाती है :-

- (1) प्रार्थी वृक्षों को स्वयं के खर्चे पर काटवाने की व्यवस्था को छोड़ कर निम्नानुसार अधि में काटने /
- (2) किसी भी प्रकार की क्षति / जन हानि के लिए स्वयं जिम्मेदार होगे /
- (3) काटी गई वृक्षों की लकड़ी निम्नानुसार निष्कासक कारखाने उचित मूल में राजकोष में जमा करावे /
- (4) प्रार्थी एक वृक्ष के बदले 5 वृक्षों को लगावेगे /

तहसीलदार प्रतापगढ़
जिला प्रतापगढ़ (राज.)

प्रतिलिपि :- परकारी दफ्तर प्रतापगढ़ को आवश्यक कार्यवाही एवं कार्रवाई

51
तहसीलदार प्रतापगढ़
जिला प्रतापगढ़ (राज.)

Tree Cutting Permission from Tehsildar for 3 trees at CRMC site

Transcript in English-

No- Revenue/2021/177-178

Date- 17.03.2021

To,
The Superintending Engineer,
RUIDP, PIU, Banswara

Subject- Permission for tree cutting

Sir,
In the subject as above, as per report of Patwari, Pratapgarh, permission for cutting of three numbers of green trees, situated at Araj no. 1135, area 0.85 hectare, is hereby given to you for proposed sewerage works; as per following conditions-

1. Applicant shall cut the tree at his own cost as per applicable rules
2. He will be responsible for any loss/damage to any life or property
3. Wood of cut trees shall be auctioned as per rules and amount shall be submitted in government account
4. 5 new trees shall be planted against each cut tree

Signed by-
Tehsildar,
Distt. Pratapgarh, Rajasthan

Appendix 277: Guidelines for Safety during Monsoon/Heavy rainfall

Excavation and refilling of earth are common activities, which, if not carefully executed may pose problems to the safety of works as well as passersby and road users during the impending Monsoon.

Normal and heavy rainfall event affect our ongoing works, It should be our conscientious effort to ensure that such events do not prove to be problematic to people and structures in town. During monsoon PIU/PMCBC should ensure that any further excavation work is taken up only after ensuring that the earlier work is in safe stage. It is desired that DCM/ACM & Ex En PIU should inspect all sites during rains and take proactive actions.

Some of the precautions and mitigation measures to be taken are discussed below-

1. The execution of works having deep excavation in smaller lanes and congested areas should be completed well before monsoon. The works of deep excavation during monsoon should not be preferably taken up or extensive care should be taken for execution of such works.
2. The settlement in refilled trenches of sewerage and water supply lines may occur during monsoon. CAPC and PIU team should inspect all sites after a storm to identify such reaches and take immediate corrective action by proper refilling and compacting. It is responsibility of all engineers to look after this activity during monsoon and ensure corrective actions from Contractor's side.
3. The contractor's crew should be equipped with vehicle, gum boots, raincoats, torch etc. to tackle such situation during and after rains. Adequate quantities of earth, debris and gravel should be stacked at strategic places so that no time is lost in procuring such material.
4. In trenches where pipe laying has been done and duly tested and approved, refilling should be done and all surplus material relocated to safe disposal sites such that it does not obstruct traffic or waterways.
5. All open ends of WS and WW pipelines should be firmly plugged to prevent debris from entering the pipeline. Manhole covers of sewer lines should be fixed in place to avoid any harm to road users.
6. Drains are primary or secondary carriers of storm water. Any unutilized construction material should be relocated to allow free passage of storm water. Surplus earth should be suitably and immediately be relocated to avoid earth from falling into the drain so that choking does not occur.
7. Overhead works should not be carried on in-weather conditions that threaten the safety of workers. More frequent checks on scaffold and bracings should be done during monsoon season.
8. Additional precautions should be taken of the power lines, ignorance and carelessness can cause major accidents and casualty.
9. Take preventive measures for water logging in working areas by providing dewatering pumps. Place bright and reflective warning signs.
10. Inspection should also be carried out before resumption of work after a shower/rain.
11. Storage of Construction Material: Steel & Cement are vital ingredients for quality construction work but in absence of proper storage, especially during monsoon, cement and steel may rapidly decline in quality and strength. Care should be taken to protect these materials and use of any exposed material should be allowed only after conducting fresh tests. Improper storage of such material should be reported to SE PIU/ACM, CAPC and use of any apparently affected material should be done after permission of SE PIU/DCM/ACM.

Additional Precautions

1. Adequate set up and resources such as dewatering pumps, electrical routings etc should be planned ahead. Water logging on main roads to be avoided, where construction works are going on.
2. Ensuring the monsoon specific PPE's issued in adequate and are used during monsoon.
3. Use of electric extension box should be avoided; extension cables (if used) should not be wet and damaged. Cables connections should be only weatherproof/waterproof. Electrical and HSE personnel of contractor should visit permanent and running sites regularly. Transparent protective sheets/rain sheds should be placed for the power distribution boards.
4. Welding machines, bar cutting machines etc. should be kept in dry conditions; should not stand in water logged area. Brakers and Drill machines should not be used when raining; dirt/mud should be scrubbed with cloth.
5. Special Trainings to all drivers and operators on safe practices and all vehicles/equipment's maintenance checks to be more frequent.
6. High boom equipment to be stopped during blowing of high speed wind and rain storm. Arresting of parked vehicles, equipment during monsoon should be done.
7. All chemicals should be stored as per MSDS, chemicals to be protected from water ingress. Chemical waste should be disposed for preventing overflow of chemicals.
8. At labor camps following precautions should be taken:-
 - Maintaining hygiene & proper housekeeping.
 - Additional health checkup camp to identify seasonal diseases
 - Preventive measures on mosquito/parasite breeding mainly in work locations and camps
 - Frequent cleaning of toilets
 - To avoid water borne diseases, high level of cleanliness to be maintained, drinking water containers need to be cleaned and kept covered. Walk areas and pathways to be covered with Murom and soft rock particles (to avoid soft soil conditions).
 - Obstacle free approach to rest sheds, camp and toilets.
 - Proper illumination, provision of battery operated emergency lights
 - No bonfires inside resting sheds. No use of wood.

SE-PIU and DCM/ACM-PMCBC should oversee the arrangements to effectively deal with the eventuality.

EHS Engineer of contractor should visit each site and camps more frequently. Contractor/EHS officer will also impart training on safe working methods during Monsoon and will keep a daily watch on weather conditions to share with site team to act accordingly.

Contractor should organize Monsoon Health Camps and Monitor Workmen Habitat and Hygiene.

Appendix 28: NOC for disposal of treated effluent

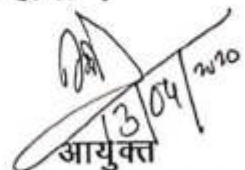
कार्यालय नगर परिषद, प्रतापगढ़, जिला-प्रतापगढ़ (राज.)

Fax No. 01476-222043 E-Mail-municipal.board.pratapgarh@gmail.com

क्रमांक / नपप / 2020-21 / SPL-1 दिनांक- 13/04/2020

अनापत्ति प्रमाण-पत्र

यह प्रमाणित किया जाता है कि फ़ैज-4 के अन्तर्गत किये जाने वाले सीवरेज कार्य प्रतापगढ़ का सीवरेज डिस्चार्ज, एस.टी.पी. के समीप से गुजरने वाले सरकारी नाले में किया जावेगा जिससे भविष्य में किसी प्रकार के भराव की संभावना नहीं होगी ।


 आयुक्त
 नगर परिषद प्रतापगढ़ राज.

Transcript in English

Office of Municipal Council, Banswara

No: NPP/2020-21/SPL-01.

Dtd. 13.04.2020

No Objection Certificate

It is certified that treated effluent from sewage treatment under Phase-4 shall be discharge in the government drain passing nearby the STP, there will be no any problem of impoundment or flooding due to this in future.

Signed by

Commissioner
Nagar Parishad, Pratapgarh

Appendix 29: WHO Interim Guidance on Water, Sanitation, Hygiene and Waste Management for the COVID-19 virus



Water, sanitation, hygiene, and waste management for the COVID-19 virus

Interim guidance
19 March 2020

Background

This interim guidance supplements the infection prevention and control (IPC) documents by summarizing WHO guidance on water, sanitation and health care waste relevant to viruses, including coronaviruses. It is intended for water and sanitation practitioners and providers and health care providers who want to know more about water, sanitation and hygiene (WASH) risks and practices.

The provision of safe water, sanitation, and hygienic conditions is essential to protecting human health during all infectious disease outbreaks, including the COVID-19 outbreak. Ensuring good and consistently applied WASH and waste management practices in communities, homes, schools, marketplaces, and health care facilities will help prevent human-to-human transmission of the COVID-19 virus.

The most important information concerning WASH and the COVID-19 virus is summarized here.

- Frequent and proper hand hygiene is one of the most important measures that can be used to prevent infection with the COVID-19 virus. WASH practitioners should work to enable more frequent and regular hand hygiene by improving facilities and using proven behavior-change techniques.
- WHO guidance on the safe management of drinking-water and sanitation services applies to the COVID-19 outbreak. Extra measures are not needed. Disinfection will facilitate more rapid die-off of the COVID-19 virus.
- Many co-benefits will be realized by safely managing water and sanitation services and applying good hygiene practices.

Currently, there is no evidence about the survival of the COVID-19 virus in drinking-water or sewage. The morphology and chemical structure of the COVID-19 virus are similar to those of other human coronaviruses for which there are data about both survival in the environment and effective inactivation measures. This document draws upon the evidence base and WHO guidance on how to protect against viruses in sewage and drinking-water. This document will be updated as new information becomes available.

1. COVID-19 transmission

There are two main routes of transmission of the COVID-19 virus: respiratory and contact. Respiratory droplets are generated when an infected person coughs or sneezes. Any person who is in close contact with someone who has respiratory symptoms (sneezing, coughing) is at risk of being exposed to potentially infective respiratory droplets.¹ Droplets may also land on surfaces where the virus could remain viable; thus, the immediate environment of an infected individual can serve as a source of transmission (contact transmission).

Approximately 2–10% of cases of confirmed COVID-19 disease present with diarrhoea,^{2,3} and two studies detected COVID-19 viral RNA fragments in the faecal matter of COVID-19 patients.^{5,6} However, only one study has cultured the COVID-19 virus from a single stool specimen.⁷ There have been no reports of faecal–oral transmission of the COVID-19 virus.

2. Persistence of the COVID-19 virus in drinking-water, faeces and sewage and on surfaces

Although persistence in drinking-water is possible, there is no evidence from surrogate human coronaviruses that they are present in surface or groundwater sources or transmitted through contaminated drinking water. The COVID-19 virus is an enveloped virus, with a fragile outer membrane. Generally, enveloped viruses are less stable in the environment and are more susceptible to oxidants, such as chlorine. While there is no evidence to date about survival of the COVID-19 virus in water or sewage, the virus is likely to become inactivated significantly faster than non-enveloped human enteric viruses with known waterborne transmission (such as adenoviruses, norovirus, rotavirus and hepatitis A). For example, one study found that a surrogate human coronavirus survived only 2 days in dechlorinated tap water and in hospital wastewater at 20°C.⁸ Other studies concur, noting that the human coronavirus transmissible gastroenteritis coronavirus and mouse hepatitis virus demonstrated a 99.9% die-off in from 2 days⁹ at 23°C to 2 weeks¹⁰ at 25°C. Heat, high or low pH, sunlight, and common disinfectants (such as chlorine) all facilitate die off.

It is not certain how long the virus that causes COVID-19 survives on surfaces, but it seems likely to behave like other coronaviruses. A recent review of the survival of human

coronaviruses on surfaces found large variability, ranging from 2 hours to 9 days.¹¹ The survival time depends on a number of factors, including the type of surface, temperature, relative humidity, and specific strain of the virus. The same review also found that effective inactivation could be achieved within 1 minute using common disinfectants, such as 70% ethanol or sodium hypochlorite (for details, see Cleaning practices).

3. Keeping water supplies safe

The COVID-19 virus has not been detected in drinking-water supplies, and based on current evidence, the risk to water supplies is low.¹² Laboratory studies of surrogate coronaviruses that took place in well-controlled environments indicated that the virus could remain infectious in water contaminated with faeces for days to weeks.¹⁰ A number of measures can be taken to improve water safety, starting with protecting the source water; treating water at the point of distribution, collection, or consumption; and ensuring that treated water is safely stored at home in regularly cleaned and covered containers.

Conventional, centralized water treatment methods that use filtration and disinfection should inactivate the COVID-19 virus. Other human coronaviruses have been shown to be sensitive to chlorination and disinfection with ultraviolet (UV) light.¹³ As enveloped viruses are surrounded by a lipid host cell membrane, which is not robust, the COVID-19 virus is likely to be more sensitive to chlorine and other oxidant disinfection processes than many other viruses, such as coxsackieviruses, which have a protein coat. For effective centralized disinfection, there should be a residual concentration of free chlorine of ≥ 0.5 mg/L after at least 30 minutes of contact time at pH < 8.0 .¹² A chlorine residual should be maintained throughout the distribution system.

In places where centralized water treatment and safe piped water supplies are not available, a number of household water treatment technologies are effective in removing or destroying viruses, including boiling or using high-performing ultrafiltration or nanomembrane filters, solar irradiation and, in non-turbid waters, UV irradiation and appropriately dosed free chlorine.

4. Safely managing wastewater and faecal waste

There is no evidence that the COVID-19 virus has been transmitted via sewerage systems with or without wastewater treatment. Further, there is no evidence that sewage or wastewater treatment workers contracted the severe acute respiratory syndrome (SARS), which is caused by another type of coronavirus that caused a large outbreak of acute respiratory illness in 2003. As part of an integrated public health policy, wastewater carried in sewerage systems should be treated in well-designed and well-managed centralized wastewater treatment works. Each stage of treatment (as well as retention time and dilution) results in a further reduction of the potential risk. A waste stabilization pond (an oxidation pond or lagoon) is generally considered a practical and simple wastewater treatment technology particularly well suited to destroying pathogens, as relatively long retention times (20 days or longer) combined with sunlight, elevated pH levels, biological activity, and other factors serve to accelerate pathogen destruction. A final disinfection step may be considered if existing wastewater treatment plants are not optimized to remove viruses. Best practices for protecting the health of workers at sanitation treatment facilities should

be followed. Workers should wear appropriate personal protective equipment (PPE), which includes protective outerwear, gloves, boots, goggles or a face shield, and a mask; they should perform hand hygiene frequently, and they should avoid touching eyes, nose, and mouth with unwashed hands.

WASH in health care settings

Existing recommendations for water, sanitation and hygiene measures in health care settings are important for providing adequate care for patients and protecting patients, staff, and caregivers from infection risks.¹⁴ The following actions are particularly important: (i) managing excreta (faeces and urine) safely, including ensuring that no one comes into contact with it and that it is treated and disposed of correctly; (ii) engaging in frequent hand hygiene using appropriate techniques; (iii) implementing regular cleaning and disinfection practices; and (iv) safely managing health care waste. Other important measures include providing sufficient safe drinking-water to staff, caregivers, and patients; ensuring that personal hygiene can be maintained, including hand hygiene, for patients, staff and caregivers; regularly laundering bedsheets and patients' clothing; providing adequate and accessible toilets (including separate facilities for confirmed and suspected cases of COVID-19 infection); and segregating and safely disposing of health care waste. For details on these recommendations, please refer to Essential environmental health standards in health care.¹⁴

1. Hand hygiene practices

Hand hygiene is extremely important. Cleaning hands with soap and water or an alcohol-based hand rub should be performed according to the instructions known as "My 5 moments for hand hygiene".¹⁵ If hands are not visibly dirty, the preferred method is to perform hand hygiene with an alcohol-based hand rub for 20–30 seconds using the appropriate technique.¹⁶ When hands are visibly dirty, they should be washed with soap and water for 40–60 seconds using the appropriate technique.¹⁷ Hand hygiene should be performed at all five moments, including before putting on PPE and after removing it, when changing gloves, after any contact with a patient with suspected or confirmed COVID-19 infection or their waste, after contact with any respiratory secretions, before eating, and after using the toilet.¹⁸ If an alcohol-based hand rub and soap are not available, then using chlorinated water (0.05%) for handwashing is an option, but it is not ideal because frequent use may lead to dermatitis, which could increase the risk of infection and asthma and because prepared dilutions might be inaccurate.¹⁹ However, if other options are not available or feasible, using chlorinated water for handwashing is an option.

Functional hand hygiene facilities should be present for all health care workers at all points of care and in areas where PPE is put on or taken off. In addition, functional hand hygiene facilities should be available for all patients, family members, and visitors, and should be available within 5 m of toilets, as well as in waiting and dining rooms and other public areas.

2. Sanitation and plumbing

People with suspected or confirmed COVID-19 disease should be provided with their own flush toilet or latrine that has a door that closes to separate it from the patient's room. Flush toilets should operate properly and have functioning drain traps. When possible, the toilet should be flushed with the lid down to prevent droplet splatter and aerosol clouds. If it is not possible to provide separate toilets, the toilet should be cleaned and disinfected at least twice daily by a trained cleaner wearing PPE (gown, gloves, boots, mask, and a face shield or goggles). Further, and consistent with existing guidance, staff and health care workers should have toilet facilities that are separate from those used by all patients.

WHO recommends the use of standard, well-maintained plumbing, such as sealed bathroom drains, and backflow valves on sprayers and faucets to prevent aerosolized faecal matter from entering the plumbing or ventilation system,²⁰ together with standard wastewater treatment.²¹ Faulty plumbing and a poorly designed air ventilation system were implicated as contributing factors to the spread of the aerosolized SARS coronavirus in a high-rise apartment building in Hong Kong in 2003.²² Similar concerns have been raised about the spread of the COVID-19 virus from faulty toilets in high-rise apartment buildings.²³ If health care facilities are connected to sewers, a risk assessment should be conducted to confirm that wastewater is contained within the system (that is, the system does not leak) before its arrival at a functioning treatment or disposal site, or both. Risks pertaining to the adequacy of the collection system or to treatment and disposal methods should be assessed following a safety planning approach,²⁴ with critical control points prioritized for mitigation.

For smaller health care facilities in low-resource settings, if space and local conditions allow, pit latrines may be the preferred option. Standard precautions should be taken to prevent contamination of the environment by excreta. These precautions include ensuring that at least 1.5 m exists between the bottom of the pit and the groundwater table (more space should be allowed in coarse sands, gravels, and fissured formations) and that the latrines are located at least 30 m horizontally from any groundwater source (including both shallow wells and boreholes).²⁵ If there is a high groundwater table or a lack of space to dig pits, excreta should be retained in impermeable storage containers and left for as long as feasible to allow for a reduction in virus levels before moving it off-site for additional treatment or safe disposal, or both. A two-tank system with parallel tanks would help facilitate inactivation by maximizing retention times, as one tank could be used until full, then allowed to sit while the next tank is being filled. Particular care should be taken to avoid splashing and the release of droplets while cleaning or emptying tanks.

3. Toilets and the handling of faeces

It is critical to conduct hand hygiene when there is suspected or direct contact with faeces (if hands are dirty, then soap and water are preferred to the use of an alcohol-based hand rub). If the patient is unable to use a latrine, excreta should be collected in either a diaper or a clean bedpan and immediately and carefully disposed of into a separate toilet or latrine used only by suspected or confirmed cases of COVID-19. In all health care settings, including those with suspected or confirmed COVID-19 cases, faeces must be treated as a biohazard and handled as little as possible. Anyone handling

faeces should follow WHO contact and droplet precautions¹⁸ and use PPE to prevent exposure, including long-sleeved gowns, gloves, boots, masks, and goggles or a face shield. If diapers are used, they should be disposed of as infectious waste as they would be in all situations. Workers should be properly trained in how to put on, use, and remove PPE so that these protective barriers are not breached.²³ If PPE is not available or the supply is limited, hand hygiene should be regularly practiced, and workers should keep at least 1 m distance from any suspected or confirmed cases.

If a bedpan is used, after disposing of excreta from it, the bedpan should be cleaned with a neutral detergent and water, disinfected with a 0.5% chlorine solution, and then rinsed with clean water; the rinse water should be disposed of in a drain or a toilet or latrine. Other effective disinfectants include commercially available quaternary ammonium compounds, such as cetylpyridinium chloride, used according to manufacturer's instructions, and peracetic or peroxyacetic acid at concentrations of 300–2000 mg/L.²⁶

Chlorine is ineffective for disinfecting media containing large amounts of solid and dissolved organic matter. Therefore, there is limited benefit to adding chlorine solution to fresh excreta and it is possible that this may introduce risks associated with splashing.

4. Emptying latrines and holding tanks, and transporting excreta off-site

There is no reason to empty latrines and holding tanks of excreta from suspected or confirmed COVID-19 cases unless they are at capacity. In general, the best practices for safely managing excreta should be followed. Latrines or holding tanks should be designed to meet patient demand, considering potential sudden increases in cases, and there should be a regular schedule for emptying them based on the wastewater volumes generated. PPE (long-sleeved gown, gloves, boots, masks, and goggles or a face shield) should be worn at all times when handling or transporting excreta off-site, and great care should be taken to avoid splashing. For crews, this includes pumping out tanks or unloading pumper trucks. After handling the waste and once there is no risk of further exposure, individuals should safely remove their PPE and perform hand hygiene before entering the transport vehicle. Soiled PPE should be put in a sealed bag for later safe laundering (see Cleaning practices). Where there is no off-site treatment, in-situ treatment can be done using lime. Such treatment involves using a 10% lime slurry added at 1-part lime slurry per 10 parts of waste.

5. Cleaning practices

Recommended cleaning and disinfection procedures for health care facilities should be followed consistently and correctly.¹⁹ Laundry should be done and surfaces in all environments in which COVID-19 patients receive care (treatment units, community care centres) should be cleaned at least once a day and when a patient is discharged.²⁷ Many disinfectants are active against enveloped viruses, such as the COVID-19 virus, including commonly used hospital disinfectants. Currently, WHO recommends using:

- 70% ethyl alcohol to disinfect small areas between uses, such as reusable dedicated equipment (for example, thermometers);
- sodium hypochlorite at 0.5% (equivalent to 5000 ppm) for disinfecting surfaces.

All individuals dealing with soiled bedding, towels, and clothes from patients with COVID-19 infection should wear appropriate PPE before touching soiled items, including heavy duty gloves, a mask, eye protection (goggles or a face shield), a long-sleeved gown, an apron if the gown is not fluid resistant, and boots or closed shoes. They should perform hand hygiene after exposure to blood or body fluids and after removing PPE. Soiled linen should be placed in clearly labelled, leak-proof bags or containers, after carefully removing any solid excrement and putting it in a covered bucket to be disposed of in a toilet or latrine. Machine washing with warm water at 60–90°C (140–194°F) with laundry detergent is recommended. The laundry can then be dried according to routine procedures. If machine washing is not possible, linens can be soaked in hot water and soap in a large drum using a stick to stir and being careful to avoid splashing. The drum should then be emptied, and the linens soaked in 0.05% chlorine for approximately 30 minutes. Finally, the laundry should be rinsed with clean water and the linens allowed to dry fully in sunlight.

If excreta are on surfaces (such as linens or the floor), the excreta should be carefully removed with towels and immediately safely disposed of in a toilet or latrine. If the towels are single use, they should be treated as infectious waste; if they are reusable, they should be treated as soiled linens. The area should then be cleaned and disinfected (with, for example, 0.5% free chlorine solution), following published guidance on cleaning and disinfection procedures for spilled body fluids.²⁷

6. Safely disposing of greywater or water from washing PPE, surfaces and floors.

Current WHO recommendations are to clean utility gloves or heavy duty, reusable plastic aprons with soap and water and then decontaminate them with 0.5% sodium hypochlorite solution after each use. Single-use gloves (nitrile or latex) and gowns should be discarded after each use and not reused; hand hygiene should be performed after PPE is removed. If greywater includes disinfectant used in prior cleaning, it does not need to be chlorinated or treated again. However, it is important that such water is disposed of in drains connected to a septic system or sewer or in a soakaway pit. If greywater is disposed of in a soakaway pit, the pit should be fenced off within the health facility grounds to prevent tampering and to avoid possible exposure in the case of overflow.

7. Safe management of health care waste

Best practices for safely managing health care waste should be followed, including assigning responsibility and sufficient human and material resources to dispose of such waste safely. There is no evidence that direct, unprotected human contact during the handling of health care waste has resulted in the transmission of the COVID-19 virus. All health care waste produced during the care of COVID-19 patients should be collected safely in designated containers and bags, treated, and then safely disposed of or treated, or both, preferably on-site. If waste is moved off-site, it is critical to understand where and how it will be treated and destroyed. All who handle health care waste should wear appropriate PPE (boots, apron, long-sleeved gown, thick gloves, mask, and goggles or a face shield) and perform hand hygiene after removing it. For more information refer to the WHO guidance, Safe management of wastes from health-care activities.²⁸

Considerations for WASH practices in homes and communities

Upholding best WASH practices in the home and community is also important for preventing the spread of COVID-19 and when caring for patients at home. Regular and correct hand hygiene is of particular importance.

1. Hand hygiene

Hand hygiene in non-health care settings is one of the most important measures that can prevent COVID-19 infection. In homes, schools and crowded public spaces – such as markets, places of worship, and train or bus stations – regular handwashing should occur before preparing food, before and after eating, after using the toilet or changing a child's diaper, and after touching animals. Functioning handwashing facilities with water and soap should be available within 5 m of toilets.

2. Treatment and handling requirements for excreta.

Best WASH practices, particularly handwashing with soap and clean water, should be strictly applied and maintained because these provide an important additional barrier to COVID-19 transmission and to the transmission of infectious diseases in general.¹⁷ Consideration should be given to safely managing human excreta throughout the entire sanitation chain, starting with ensuring access to regularly cleaned, accessible, and functioning toilets or latrines and to the safe containment, conveyance, treatment, and eventual disposal of sewage.

When there are suspected or confirmed cases of COVID-19 in the home setting, immediate action must be taken to protect caregivers and other family members from the risk of contact with respiratory secretions and excreta that may contain the COVID-19 virus. Frequently touched surfaces throughout the patient's care area should be cleaned regularly, such as bedside tables, bed frames and other bedroom furniture. Bathrooms should be cleaned and disinfected at least once a day. Regular household soap or detergent should be used for cleaning first and then, after rinsing, regular household disinfectant containing 0.5% sodium hypochlorite (that is, equivalent to 5000 ppm or 1-part household bleach with 5% sodium hypochlorite to 9 parts water) should be applied. PPE should be worn while cleaning, including mask, goggles, a fluid-resistant apron, and gloves,²⁹ and hand hygiene with an alcohol-based hand rub or soap and water should be performed after removing PPE.

References

1. Coronavirus disease (COVID-19) advice for the public. Geneva: World Health Organization; 2020 (<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public>, accessed 3 March 2020).
2. Huang C, Wang Y, Li X, Ren L, Zhao J, Hu Y, et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*. 2020;395:497–506. doi:10.1016/S0140-6736(20)30183-5.

3. Chen N, Zhou M, Dong X, Qu J, Gong F, Han Y, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet*. 2020;395:507–13. doi:10.1016/S0140-6736(20)30211-7.
4. Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA*. 2020. Feb 7. doi:10.1001/jama.2020.1585.
5. Xiao E, Tang M, Zheng Y, Li C, He J, Hong H, et al. Evidence for gastrointestinal infection of SARS-CoV-2. medRxiv. doi:10.1101/2020.02.17.20023721.
6. Holshue ML, DeBolt C, Lindquist S, Lofy KH, Wiesman J, Bruce H et al. for the Washington State 2019-nCoV Case Investigation Team. First case of 2019 novel coronavirus in the United States. *N Engl J Med*. 2020. Jan 31. doi:10.1056/NEJMoa2001191.
7. Zhang Y, Chen C, Zhu S et al. [Isolation of 2019-nCoV from a stool specimen of a laboratory-confirmed case of the coronavirus disease 2019 (COVID-19)]. *China CDC Weekly*. 2020;2(8):123–4. (In Chinese.)
8. Wang XW, Li JS, Zhen B, Kong QX, Song N, Xiao WJ et al. Study on the resistance of severe acute respiratory syndrome-associated coronavirus. *J Virol Methods*. 2005;126:171–7. doi:10.1016/j.jviromet.2005.02.005.
9. Gundy P, Gerba CP, Pepper IL. Survival of coronaviruses in water and wastewater. *Food Environ Virol*. 2009;1:10–14. doi:10.1007/s12560-008-9001-6.
10. Casanova L, Rutlal WA, Weber DJ, Sobsey MD. Survival of surrogate coronaviruses in water. *Water Res*. 2009;43(7):1893–8. doi:10.1016/j.watres.2009.02.002.
11. Kampf G, Todt D, Pfaender S, Steinmann E. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. *J Hosp Infect*. 2020;104(3):246–51. doi:10.1016/j.jhin.2020.01.022.
12. Guidelines for drinking-water quality, fourth edition, incorporating the first addendum. Geneva: World Health Organization; 2017. <http://apps.who.int/iris/bitstream/10665/254637/1/9789241549950-eng.pdf>, accessed 3 March 2020).
13. SARS-CoV-2 – water and sanitation. Adelaide: Water Research Australia; 2020. (http://www.waterra.com.au/r9544/media/system/attribfile/2199/WaterRA_FS_Coronavirus_V10.pdf, accessed 3 March 2020).
14. Essential environmental health standards in health care. Geneva: World Health Organization; 2008. (https://apps.who.int/iris/bitstream/handle/10665/43767/9789241547239_eng.pdf?sequence=1&isAllowed=y, accessed 3 March 2020).
15. My 5 moments for hand hygiene. In: WHO/Infection prevention and control [website]. Geneva: World Health Organization; 2020. (<https://www.who.int/infection-prevention/campaigns/clean-hands/5moments/en/>, accessed 3 March 2020).
16. Siddharta A, Pfaender S, Viellé NJ, Dijkman R, Friesland M, Becker B, et al. Virucidal activity of World Health Organization-recommended formulations against enveloped viruses, including Zika, Ebola, and emerging coronaviruses. *J Infect Dis*. 2017;215(6):902–6. doi:10.1093/infdis/jix046.
17. WHO guidelines on hand hygiene in health care settings. Geneva: World Health Organization; 2009. (https://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906_eng.pdf?sequence=1&isAllowed=y, accessed 3 March 2020).
18. Infection prevention and control during health care when novel coronavirus (nCoV) infection is suspected: interim guidance, 25 January 2020. Geneva: World Health Organization. ([https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125), accessed 3 March 2020).
19. Q&A on infection prevention and control for health care workers caring for patients with suspected or confirmed 2019-nCoV. In: WHO/Newsroom [website]. Geneva: World Health Organization; 2020. (<https://www.who.int/news-room/q-a-detail/q-a-on-infection-prevention-and-control-for-health-care-workers-caring-for-patients-with-suspected-or-confirmed-2019-ncov>, accessed 3 March 2020).
20. Health aspects of plumbing. Geneva: World Health Organization; 2006. (<https://apps.who.int/iris/handle/10665/43423>, accessed 3 March 2020).
21. Guidelines on sanitation and health. Geneva: World Health Organization; 2018. (<https://apps.who.int/iris/bitstream/handle/10665/274939/9789241514705-eng.pdf?ua=1>, accessed 3 March 2020).
22. Yu ITS, Li Y, Wong TW, Tam W, Chan A, Lee JHW, et al. Evidence of airborne transmission of the severe acute respiratory syndrome virus. *N Engl J Med*. 2004;350(17):1731–9. doi:10.1056/NEJMoa032867.
23. Regan H. How can the coronavirus spread through bathroom pipes? Experts are investigating in Hong Kong. CNN. 12 February 2020. (<https://edition.cnn.com/2020/02/12/asia/hong-kong-coronavirus-pipes-intl-hnk/index.html>).
24. Sanitation safety planning: manual for safe use and disposal of wastewater, greywater and excreta. Geneva: World Health Organization; 2015. (<https://apps.who.int/iris/handle/10665/171753>, accessed 3 March 2020).
25. How to put on and take off personal protective equipment. Geneva: World Health Organization; 2008. (<https://apps.who.int/iris/handle/10665/70066>, accessed 3 March 2020).
26. Chemical disinfectants: guideline for disinfection and sterilization in healthcare facilities (2008). In: CDC/Infection Control [website]. Atlanta: US Centers for Disease Control and Prevention; 2019. (<https://www.cdc.gov/infectioncontrol/guidelines/disinfection/disinfection-methods/chemical.html>, accessed 3 March 2020).

27. Best practices for environmental cleaning in healthcare facilities in resource-limited settings. Atlanta: US Centers for Disease Control and Prevention; 2019.
(<https://www.cdc.gov/hai/pdfs/resource-limited/environmental-cleaning-508.pdf>, accessed 3 March 2020).
28. Safe management of wastes from health-care activities: a summary. Geneva: World Health Organization; 2017.
(<https://apps.who.int/iris/handle/10665/259491>, accessed 3 March 2020).
29. Home care for patients with suspected novel coronavirus (COVID-19) infection presenting with mild symptoms, and management of their contacts: interim guidance, 4 February 2020.
([https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts), accessed 3 March 2020).

US Centers for Disease Control and Prevention, United States of America; David Berendes, US Centers for Disease Control and Prevention, United States of America; Lisa Casanova, Georgia State University, United States of America; David Cunliffe, SA Health, Australia; Rick Gelting, US Centers for Disease Control and Prevention, United States of America; Dr Thomas Handzel, US Centers for Disease Control and Prevention, United States of America; Paul Hunter, University of East Anglia, United Kingdom; Ana Maria de Roda Husman, National Institute for Public Health and the Environment, the Netherlands; Peter Maes, Médecins Sans Frontières, Belgium; Molly Patrick, US Centers for Disease Control and Prevention, United States of America; Mark Sobsey, University of North Carolina-Chapel Hill, United States of America.

WHO continues to monitor the situation closely for any changes that may affect this interim guidance. Should any factors change, WHO will issue a further update. Otherwise, this interim guidance document will expire 2 years after the date of publication.

Contributors

This interim guidance was written by staff from WHO and UNICEF. In addition, a number of experts and WASH practitioners contributed. They include Matt Arduino,

© World Health Organization 2020. Some rights reserved. This work is available under the [CC BY-NC-SA 3.0 IGO](#) licence.

WHO reference number: WHO/2019-nCoV/IPC_WASH/2020.2

Appendix 30: Site Visit Report environmental safeguards compliance and orientation in Pratapgarh town

Site visit of Pratapgarh was conducted in the month of March 2021, for the orientation of PIU, consultant and contractor's team in town regarding requirements of environmental safeguard during project implementation and visit of sites of STP and SPS for updating the IEE and RP in the compliance of ADB SPS. Following is the observations of site visit-

Report on Orientation for Environmental Safeguard Compliance at Pratapgarh

Date: 09.03.2021

Place: RUIDP-PIU Office, Pratapgarh

Orientation done by: Dr. Mahaveen Saini, Environmental Safeguard Professional, CMSC-2, Jodhpur

Participants: following participants were present during orientation-

PIU: 1. Mr. Shashikant Sharma, Assistant Engineer, PIU, Pratapgarh

CMSC-2: 1. Mr. KH.Darmender, Senior Construction Engineer (CMSC-2), Pratapgarh
2. Mr. Lokesh Singh Sekhawat, Support Engineer, (CMSC-2), Pratapgarh

Contractor: 1. Mr. Lalit Trivedi, Project Manager (KIPL)
2. Mr. Ashutosh Kumar, HSE Officer (KIPL)

Attendance Sheet of Orientation program is attached as Annexure 1 with this report.







Photographs of orientation program is attached as Annexure 2.

Topics Discussed: A presentation was given by Environmental Safeguard Specialist, CMSC, Jaipur to all participants covering following topics-

1. ADB SPS 2009 and RUIDP safeguards requirements
2. Contractual and legal requirements as per ADB, RUIDP, Govt. of Rajasthan and Govt. of India legislations, requirement of consents (CTE/CTO) from RSPCB for WTP/STP/DG set etc.,
3. Safeguard provisions in contract documents, pre-construction requirements
4. Safeguards implementation arrangements and roles and responsibility of different functionaries in the project
5. Assessment of environmental impacts and planning for mitigation measures, including best management practices, in the design, construction, operation and maintenance of water supply subprojects
6. Preparation, updating and review of IEE
7. Preparation of site-specific EMPs/EHS Plan
8. Occupational and community health and safety
9. Labor and public safety and labor laws
10. Heritage conservation, Biodiversity conservation, Asbestos Management
11. Solid waste (domestic, construction and demolition wastes) management
12. Environmental monitoring including air, noise, water and soil
13. Preparation of monitoring checklists and reports
14. Areas of safety concerns in construction works
15. Public consultations and grievance redress mechanism of RUIDP
16. Good practices, labor camp management, tree plantations

Annexure-1 Attendance Sheet of Orientation program

Attendance sheet for Training/OrientationOrientation/Training Topic: Contractual and Legal Requirement, and Environment health & Safety

S.no	Name of participant	Department /Agency	Designation	Mobile Number/MailID	Signature
1.	SHASHI KAMATH	PIU RUIDP	Asst	9460202389	
2	Kh. Damodar Singh	CMSC-II, Pratapgarh	S.C.E	9366220983	
3	Lalit Trivedi	PM, KIPL	PM	9929209118	
4	Dharmendra Singh	Project Incharge KIPL	Project Incharge	7976074981	
5	Lokendra Singh Shekhawat	CMSC-II Pratapgarh	Support Engineer	9602629766	
6.	Ashutosh Kumar	Safety Engineer KIPL	Safety Engineer	8861200971	
7.					

Annexure 2- Photographs of Orientation program






Sites Visited- Following sites were visited by CMSC-2 Environmental Safeguards Professional-

Environmental Impact Assessment of Proposed sites for construction of CRMC:

Proposed New 7 MLD STP Location:

- ❖ The proposed site is changed from original site proposed in IEE report and new location is proposed on old SPS location on Kila Road.
- ❖ This Proposed STP Site is situated along the Kila Road, near Jain Gaushala in Pratapgarh (**Photo**).
- ❖ Along this proposed STP Site a city sewage Nallah is observed in downstream director (**Photo**).
- ❖ One nos. Aam tree is observed in the proposed STP site (**Photo**). All efforts should be made to save this tree and if it is required to be cut in unavoidable circumstances, prior tree cutting permission from concerned authority to be taken and compensatory plantation in the ratio of 1:3 should be done as per RUIDP policy. Site is having approach road, boundary wall and gate.
- ❖ Terrain of this location is rolling.
- ❖ The proposed site is situated on rocky earth surface (**Photo**).
- ❖ A small temple is observed in 100 meter radius (**Photo**).



Photo : Proposed 7 MLD STP Site along Kila Road, Pratapgarh	Photo : Waste Water Nallah along the Proposed STP Site, Pratapgarh
	
Photo : Mango Tree in the Proposed STP Site, Pratapgarh	Photo : A Small Temple is observed near proposed STP site, Pratapgarh
	
Photo : Rocky ground surface of proposed STP Site	

Proposed SPS Location:-

- ❖ SPS location has been changed and new location is allocated to adjoining to boundary wall of Jain Gausala;
- ❖ At downstream and upstream direction a waste water Nallah in left hand side and boundary wall of Jain Gaushala are observed to adjoining (**Photo**).
- ❖ 11 kV electrical line passing over to this proposed site and same power electrical pole is observed near this proposed site (**Photo**).



Photo : Waste Water Nallah along the Proposed STP Site, Pratapgarh



Photo : Boundary Wall of Jain Gaushala in Right hand Side of Proposed SPS Location, Pratapgarh



Photo : 11 kV electrical line passing over the proposed SPS site, Pratapgarh



Photo : 11 kV electrical pole at adjoining to proposed SPS site , Pratapgarh

A. Proposed MWP Location

- ❖ This proposed site is situated on bank of city waste water Nallah, in Manpur, Pratapgarh (**Photo**).
- ❖ On the ground surface of the proposed site, no vegetation cover or houses are found (**Photo**).

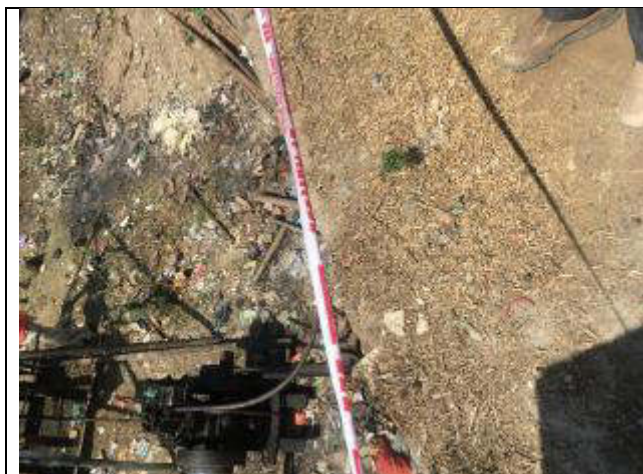


Photo : Proposed site of MWP, Pratapgarh



Photo : Nearby location of MWP, Pratapgarh

Compliance of environmental safeguards in Pratapgarh: During site visit, environmental safeguard compliance of the project was checked. Following is the compliance status of environmental safeguards in Pratapgarh-

1. Contractor has mobilized full time EHS officer at site;
2. Application for Consent to Establish for proposed STP (7 MLD) is in process. No works has been started in STP, SPS and MWP except site clearance at STP and SPS locations, and bore hole at MWP for geo-tech investigation;
3. It was instructed to contractor that no physical works should be started at STP site before CTE is obtained;
4. No tree cutting is required in approved areas for pipe laying works and contractor was informed to access the requirement of tree cutting and take prior permission before any tree cutting;
5. During consultation with nearby habitants of STP and SPS sites, it was noted that social outreach team of contractor have consulted the nearby habitants about the nature of works and pamphlets of proposed project were also circulated in the area and people are well aware about the works being carried out;
6. Project information boards are provided at permanent sites

**Appendix 31: Environmental Monitoring of Ambient Air, Noise, Water and Soil in
Pratapgarh town
Ambient Air Quality Monitoring**

Date of Monitoring	Locations	Results				
		CO (mg/m³)	NO ₂ (µg/m³)	SO ₂ (µg/m³)	PM ₁₀ (µg/m³)	PM _{2.5} (µg/m³)
India Ambient Air Quality Standard		2,000 (8-hr) 4,000 (1-hr)	40 (Annual) 80 (24-hr)	50 (Annual) 80 (24-hr)	60 (Annual) 100 (24-hr)	40 (Annual) 60 (24-hr)
IFC acceptable limits (µg/m³)		2,000 (8-hr) 4,000 (1-hr) 100,000 (15-min)	40 (Annual) 80 (24-hr) 200 (1-hr)	50 (Annual) 20 (24-hr) 500 (10-min)	20 (Annual) 50 (24-hr)	10 (Annual) 25 (24-hr)
15.06.2021	Labour Yard, Housing Board	0.540	26.43	9.25	80.27	39.86
15.06.2021	Bhatpura Darwaza	0.520	24.18	8.45	85.36	42.79
15.06.2021	At Sewage Treatment Plant, Near Ahinsa Circle	0.550	25.70	9.08	88.40	45.36

Source: NAAQS - National Ambient Air Quality Standards; Schedule-VII, [Rule 3 (3B)], [Part-II-sec.-3(i)] 16.11.2009

Ambient Noise Level Monitoring

Date	Locations	Leq day time dB(A)	Leq night time dB(A)
CPCB Standards for Noise monitoring (Residential)		55	45
15.06.2021	Labour Yard, Housing Board	55.4	46.2
15.06.2021	Bhatpura Darwaza	59.2	45.5
15.06.2021	At Sewage Treatment Plant, Near Ahinsa Circle	56.2	48.5

CPCB Limits for

Industrial area (I): Day Time= 75 dB(A), Night Time (10 PM to 6 AM)= 70 dB(A)

Commercial (C) area: Day Time= 65 dB(A), Night Time (10 PM to 6 AM)= 55 dB(A)

Residential (R) area: Day Time= 55 dB(A), Night Time (10 PM to 6 AM)= 45 dB(A)

Silence Zone (S): Day Time= 50 dB(A), Night Time (10 PM to 6 AM)= 40 dB(A)

IFC's limits for Noise Level

Residential; institutional; educational - Day Time= 55 dB(A), Night Time (10 PM to 7 AM)= 45 dB(A)

Industrial area and commercial : Day Time= 70 dB(A), Night Time (10 PM to 7 AM)= 70 dB(A)

**Ground Water Quality Monitoring
(Date of sampling 15.06.2020)**

S. No	Parameters	Units	Results	
			Raj Mandir Kila Parisar, Near STP site	Bhatpura Darwaza
1	pH	-	7.34	7.47
	Turbidity	NTU	<01	<01
2	Total Dissolved Solids (TDS)	mg/l	532.06	795.18

S. No	Parameters	Units	Results	
			Raj Mandir Kila Parisar, Near STP site	Bhatpura Darwaza
3	Total Suspended Solids (TSS)	mg/l	17.80	21.80
4	Total Hardness (as CaCO ₃)	mg/l	168.16	344.34
5	Calcium (as Ca)	mg/l	62.52	121.84
6	Magnesium (as Mg)	mg/l	2.91	9.72
7	Total alkalinity (as CaCO ₃)	mg/l	124.00	300.00
8	Nitrate (as NO ₃)	mg/l	11.80	28.12
9	Chloride (as Cl)	mg/l	170.16	124.07
10	Sulphate (as SO ₄)	mg/l	68.17	49.63
11	Iron (as Fe)	mg/l	0.06	0.08
12	Fluorides (as F)	mg/l	0.11	0.12
13	Sodium (as Na)	mg/l	37.20	86.18
14	Potassium (as K)	mg/l	16.74	38.78
15	Zinc(as Zn)	mg/l	0.37	0.95
16	Copper (as Cu)	mg/l	0.02	0.02
17	Manganese as Mn	mg/l	BDL	BDL
18	Mercury (as Hg)	Mg/l	BDL	BDL
19	Cadmium (as Cd)	mg/l	BDL	BDL
20	Arsenic (as As)	mg/l	BDL	BDL
21	Lead (as Pb)	mg/l	BDL	BDL
22	Hexavalent Chromium (as Cr+6)	mg/l	BDL	BDL
23	Phosphate (as P)	mg/l	BDL	BDL
24	Phenolic Compounds (as C ₆ H ₅ OH)	mg/l	BDL	BDL
25	Dissolved oxygen	mg/l	5.20	4.80
26	BOD	mg/l	1.80	2.50
27	COD	mg/l	16.70	19.60

BDL= Below Detectible Limits

Soil Quality Monitoring
(Date of sampling-15.06.2020)

S. No.	Parameters	Units	Results		
			Labour Yard, Housing Board	Bhatpura Darwaza	At STP, near Ahinsa Circle
1	pH	-	7.56	7.42	7.58
2	Electrical Conductivity (at 25°C)	mS/cm	612.00	584.00	517.64
3	Moisture Content	%	15.80	13.50	14.96
4	Texture	-	Sandy Loam	Sandy Loam	Sandy Loam
5	Sand	-	70.00	73.00	78.00
6	Silt	-	9.00	7.00	6.00
7	Clay	-	21	20.00	16.00
8	Calcium (as Ca)	mg/Kg	9.60	7.50	10.34
9	Magnesium (as Mg)	mg/Kg	5.40	5.20	8.66
10	Permeability	Cm/sec	12.30	13.80	17.80
11	Total Nitrogen	mg/Kg	212.50	256.20	185.70
12	Sodium (as Na)	mg/Kg	84.60	92.00	79.30
13	Phosphorus	Kg/hect	135.90	142.80	114.50
14	Potassium (as K)	Kg/hect.	55.86	61.90	48.72
15	Organic Matter	%	0.78	0.84	0.64
16	Oil and grease	Mg/kg	BDL	BDL	BDL

BDL= Below Detectible Limits



Locations of environmental monitoring in Google map

SAUW IEE Review - Information Log

Instructions: Provide information based on IEE submitted by Project Management Unit (PMU). This IEE log sheet will serve as record of the review findings, comments, and/or further actions required during implementation. A copy of the IEE log sheet should be (i) provided to PMU for their record and guidance on actions during implementation; (ii) attached in the cleared IEE to be disclosed; (iii) used as reference for review of updated/final IEE and (iv) inputted in the SARD Safeguards Compliance Tracking System.

Project:	IND Rajasthan Secondary Towns Development Sector Project – Pratapgarh Sewerage Subproject		
Loan No.:		Package No.:	RSTDIP/PRT/01
Components:	Sewerage Components <ul style="list-style-type: none"> (i) Construction of 7.0 MLD STP at Pratapgarh on SBR Technology treated effluent pumping stations (ii) One sewage pumping station (SPS) near Depeshwar Talab of 7.0 MLD and one MWP of 0.10 MLD (iii) About 104.68 km sewer collection network including pipes up to property chamber (HDPE DWC SN8 – 90.00 km, RCC pipes NP4 - 3.5 km, Trenchless Method adopting with HDPE PE-100 / PN-6 - 9.4 km), 1.68 km of sewage pumping mains (100 mm and 500 mm diameter) and NH crossing- 0.10 Km (iv) Reuse of Treated Effluent - Design, construction, execution, testing and commissioning of Treated Effluent Elevated Reservoir (TEER), Treated Effluent Storage Reservoir (TESR) and Effluent Pumping Station (EPS); (v) Disposal of Treated Effluent - Design, construction, execution, testing and commissioning of sewer pipe from STP effluent chamber to natural drain identified by Employer; (vi) Sludge Management and Disposal – Safe disposal of sludge up to designated places provided by the employer or line agency within 10 km distance from STP. (vii) Construction of Manholes; (viii) About 10,000 house sewer connection (up to year 2026) from property chamber to sewer outlet from property; (ix) Fecal sludge management: provide 2 nos. of trucks- 4000 L and 1000 L capacities and; (x) Provision of SCADA, Electrical, Mechanical and Allied Works. IEE will be updated if scope of works changes in any stage of detail design or during construction. (xi) Construction of one Consumer Relation and Management Centre (CRMC) 		
Contract Type:	Design – Build - Operate		
Date of IEE:	June 2021		
Draft IEE?	Updated/Revised IEE?		Others
	✓		Updated IEE submitted for disclosure at PMU and ADB websites after revision in original scope of work.

	Activity	Status	Detailed Comments and Further Actions Required
--	----------	--------	--

	Activity	Status		Detailed Comments and Further Actions Required
		Yes	No	
1.	Environmental assessment has been satisfactorily conducted based on ADB REA Checklist and scoping checklist. ⁵²	✓		This Updated IEE covers the impact on construction of Improvement of Sewerage in Pratapgarh town of North Indian state Rajasthan. This is the first updated IEE, and reflects the updated designs of the subproject components
2.	Environmental assessment based on latest project components and design	✓		<p>This is the first updated IEE and reflects the updated designs of the subproject components carried out by DBO contractor.</p> <p>Further action/s: The environmental assessment will be updated again based on detailed completed engineering design.</p>
3.	Statutory Requirements ⁵³		Forest Clearance	Not applicable. The components are not located within forest area.
			No Objection Certificate	No other environment related permission is required
			Site Location Clearance	Not applicable
			Environmental Compliance Certificate	Not applicable. The components are not listed in the Schedule 1 of the EIA Notification Act and its rules and regulations
		✓	Permit to Construct (or equivalent)	<p>Designed STP will require CTE (prior to start of construction works) and CTO (prior to start of operation) from Rajasthan State Pollution Control Board (RSPCB)</p> <p>The following will require CTE and CTO from RSPCB: (i) Diesel generators); (ii)</p>
		✓	Permit to Operate (or equivalent)	

⁵² ADB Rapid Environmental Assessment Checklist for screening and categorization. Scoping Checklist ("No Mitigation Scenario" Checklist) for scope of IEE, identification of impacts and development of environmental management plan.

⁵³ If applicable, include date accomplished or obtained.

	Activity	Status			Detailed Comments and Further Actions Required		
					Batching Plant hot mix plants; and (iii) stone crushers, if installed for construction. Further action/s: The contractor under the supervision of PIU will obtain the Permit to Operate.		
			Permit for water abstraction and intake construction		<u>Not Applicable</u>		
		✓	Others		PIU will obtain the Tree-felling Permission from Forest/Revenue Department. The application will be filed once detailed design is completed. The replacement ratio for trees is 1:3 as per RUIDP policy.		
5.	Policy, legal, and administrative framework	Adequate		Not Adequate	The updated IEE includes discussions on applicable policy, acts and rules. Obtaining the required permits and NOC is the responsibility of PMU/PIU.		
		✓					
		Included discussions and requirements of the:				The updated IEE also confirmed that international best practices (specified in EHS Guidelines) have been incorporated in the preliminary design. Further action/s: Any condition in the permits/NOC will be incorporated in the final design and contractor's SEMP.	
		✓	National regulation/law on EIA				
		✓	Environmental agency				
		✓	Relevant international environmental agreements				
		✓	Environmental standards (IFC's EHS Guidelines)				
6.	Anticipated environmental impacts and mitigation measures	assessed impacts and risks:		mitigation measures included:		The Biodiversity Assessment Study Report for the subproject is carried out and detailed report with recommendation is	
				Yes	No		n/a
			Biodiversity conservation			✓	

	Activity	Status					Detailed Comments and Further Actions Required
							attached in IEE Action Required: update the biodiversity impact assessment in next revision of IEE
			Pollution prevention and abatement	✓			The updated IEE confirms that international best practices (specified in EHS Guidelines) have been incorporated in the preliminary design. IEE also ensures that sludge management protocols are compliant with environmental regulations (Solid Waste Management Rules 2000 and its amendments) should be prepared and solid waste disposal should have a designated site (dumping on vacant lot is not allowed)
			Health and safety	✓			The Updated IEE and EMP includes Health and safety mitigation measures and requirements to be followed by DBO contractor. Further action/s: The contractor is required to (i) designate a EHS Engineer; (ii) develop and implement a Health and Safety Plan; (iii) follow the mitigation measures in the EMP; and (iv) if required, expand in the SEMP the mitigation measures as appropriate in the site conditions.
			Physical cultural resources			✓	Not applicable
			Cumulative impacts			✓	Not applicable. There are no other on-going or planned projects that may

	Activity	Status					Detailed Comments and Further Actions Required
							cause negative cumulative impacts
			Transboundary impacts			✓	Not applicable. The subproject/package is relatively small-scale in nature to have potential Trans boundary impacts
7.	Impacts from Associated Facilities ⁵⁴	Addressed	Not Addressed	Not applicable			Not applicable. There are no associated facilities under this subproject/package.
				x			
8.	Analysis of Alternatives	Yes		No			Section on Analysis of Alternatives included in the updated IEE.
		✓					
9.	EMP budget included	Yes		No			<p>The indicative cost of EMP for Package is INR 1,87,17,685. The bid documents include BOQ item for items related to EMP implementation.</p> <p>Further action/s: The cost of EMP and monitoring program will be reviewed based on detailed engineering design. The final IEE will include the costs/budget of the DBO contractor to implement the SEMP and other requirements related to environmental safeguards</p>
		✓					
10.	EMP implementation integrated in FAM/PAM and bid documents	Yes		No			<p>(i) The draft Project Administration Manual included sections on environmental safeguards. Information in the PAM has been considered in the preparation of the draft IEE.</p> <p>(ii) The EARF also provided detailed requirements on EMP implementation. These are included in the</p>
		✓					

⁵⁴ ADB SPS (Appendix 1 para 6) defines associated facilities as not funded as part of the project (funding may be provided separately by the borrower/client or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project.

	Activity	Status		Detailed Comments and Further Actions Required
				draft IEE. (iii) The draft IEE (cleared by ADB) was included in the contract documents and was provided to the contractor.
11.	Consultation and Participation	Yes	No	Meaningful consultations were done with Government officials, women and residents of Pratapgarh town in April 2018.
		✓		Further action/s: Meaningful consultations with stakeholders and affected people will be conducted by PIU / CAPPC during detailed engineering design and monthly frequency during construction,
12.	Grievance Redress Mechanism	Yes	No	.
		✓		
		Description of GRM:		
		Yes		Included in section VIII IEE
		GRC members identified:		
		Yes		Details are provided in office order for GRM
		GRM established and notified?		
13.	Disclosure	✓	Endorsement to disclose on ADB website	Endorsement to disclose draft IEE on ADB website was already done. Upon approval from ADB, PMU will endorse to disclose the updated IEE.
		✓	Disclosed on project website	The Draft IEE was disclosed, and this updated IEE will also be disclosed to ADB and RUDSICO websites Upon approval from ADB and PMU.
		✓	Relevant information available to stakeholders and affected	City stakeholder committee meeting was organized in

	Activity	Status		Detailed Comments and Further Actions Required
			people in language and form they understand.	<p>Fatehpur on 11.04.2018 and discussion on proposed works was done under the chairmanship of District Collector, Sikar in presence of consultants, RUIDP officials, PHED/ Municipal officials and other invitee members. Proposed scope of works and technology was discussed in the meeting.</p> <p>Pamphlets in English and local languages were distributed to the participants, describing the need and benefits provided by the project.</p> <p>Further action/s: Information sharing will be continued, recorded, and reported in the monitoring report during implementation</p>
14.	Mobilized PMU Environment Specialist	Yes ✓	No	Mr. Vijay Choudhary., PO, Environment, PMU and Mr. Rohit Jangid, APO, Environment, PMU
15.	Mobilized PIU Environment Specialist	Yes ✓	No	
16.	Mobilized Environment Specialist at PMU level	Yes ✓	No	Mr. Abhay Srivastava, Environmental Safeguard Specialist, PMCBC and Ms. Priya Goyal, Environmental Safeguard Support, PMCBC
17.	Mobilized Environment Specialist at PIU level	Yes ✓	No	
18.	Confirm bid and contract documents and/or EMP include requirement for the contractor to appoint EHS supervisor and/or nodal person for environment safeguards	Yes ✓	No	
19.	If contract awarded	Yes	No	

	Activity	Status		Detailed Comments and Further Actions Required
	already, confirm contractor's appointment of EHS supervisor and/or nodal person for environmental safeguards	✓		Mr Asutosh Kumar, EHS officer.
20.	Awareness training on compliance to safeguard requirements	Yes	No	The indicative training program is included in IEE Further action/s: The final IEE will include detailed training program to be provided by the PMCBC. The over-all Environmental Training Program will be submitted in the first semi-annual environmental monitoring report.
		✓		
21.	Monitoring and Reporting	Yes	No	
		✓		Detailed in the EARF and the Draft IEE.
22.	Others/Remarks	<ul style="list-style-type: none"> • The PMU to finalize and approve the SEMP Submitted by the contractor • Maps showing detailed alignment and approved components to be added in updated IEE. • Biodiversity plan to be updated in next update of IEE 		
	Prepared by: (<i>name, designation and date</i>)	Updated by Govind Singh Rathore, August 25, 2021		
	Noted and Checked By: (<i>name, designation and date</i>)			
	Documents/References:	1. Updated IEE of June 2021, submitted on 22 July 2021 and revised submission on 24 August 2021		