

Item No. 1 – Cleaning of PVC water tank high pressure and vacuum pumping disinfection treatment using necessary brush travel gresh chemical ultraviolet lamp including dewatering etc. complete as directed (500 liters to 3000 liters)

Specification for Cleaning of PVC Water Tank (500 liters to 3000 liters)

1. Introduction: Cleaning and disinfecting PVC water tanks is essential for maintaining water quality and ensuring the safety of stored water. This specification outlines the procedures and requirements for high-pressure cleaning, vacuum pumping, disinfection treatment, and dewatering of PVC water tanks ranging from 500 liters to 3000 liters.

2. Equipment and Materials Required:

- **High-Pressure Washer:** A machine capable of delivering water at a pressure of at least 1500 psi to effectively remove dirt, algae, and other contaminants from the tank surfaces.
- **Vacuum Pump:** A device used to remove residual water after cleaning and before disinfection.
- **Brushes:** Various sizes of brushes with soft bristles suitable for cleaning PVC surfaces without causing damage.
- **Disinfectant Chemicals:** Approved chemicals such as sodium hypochlorite or hydrogen peroxide that are effective against bacteria, viruses, and biofilms.
- **Ultraviolet (UV) Lamp:** A UV-C lamp designed for disinfection purposes that can be used post-cleaning to ensure any remaining pathogens are neutralized.
- **Personal Protective Equipment (PPE):** Gloves, goggles, masks, and protective clothing for personnel involved in the cleaning process.

3. Cleaning Procedure

- **Site Assessment:** Conduct a thorough assessment of the PVC Tank condition to identify any hazardous materials or structural issues that may need addressing before cleaning.

1. Preparation:

- Ensure that the tank is emptied completely before starting the cleaning process.
- Disconnect any inlet/outlet pipes and cover them to prevent contamination during cleaning.

2. High-Pressure Cleaning:

- Use the high-pressure washer to spray the interior surfaces of the tank thoroughly. Start from the top and work downwards to ensure all debris is removed.

- Pay special attention to corners and joints where dirt tends to accumulate.

3. Brushing:

- After high-pressure washing, use brushes to scrub any stubborn stains or biofilm present on the walls of the tank.
- Ensure that all areas are reached without damaging the PVC material.

4. Rinsing:

- Rinse off any remaining debris or detergent using clean water through the high-pressure washer.

5. Vacuum Pumping:

- Utilize a vacuum pump to remove excess water left in the tank after rinsing. This step is crucial for effective disinfection.

4. Disinfection Treatment

1. Chemical Application:

- Prepare a solution of disinfectant according to manufacturer instructions (typically a concentration between 50–200 mg/L depending on chemical type).
- Apply this solution evenly across all surfaces inside the tank using a sprayer or by pouring it directly into the tank.

2. Contact Time:

- Allow the disinfectant solution to sit on surfaces for a minimum contact time as specified by chemical guidelines (usually around 30 minutes).

3. UV Treatment:

- After draining excess disinfectant solution, use a UV lamp inside the tank for additional disinfection.
- Position the UV lamp in such a way that it covers all areas within reach; typically run it for at least 15–30 minutes.

5. Dewatering Process

- After disinfection, ensure complete drainage of any remaining liquids from the tank using vacuum pumping again if necessary.
- Inspect for any residual disinfectant or contaminants before refilling with potable water.

6. Final Inspection & Reporting : After completing all cleaning steps:

- Conduct a final inspection of cleaned tanks ensuring no residues remain.
- Document each step taken during cleaning including dates, chemicals used, personnel involved, and observations made during inspections.

7. Conclusion Following this specification will ensure thorough cleaning and disinfection of PVC water tanks ranging from 500 liters to 3000 liters while adhering to health standards for safe drinking water storage. The rate shall be for a unit of Nos.

Item No. 2 - Cleaning of PVC water tank high pressure and vacuum pumping disinfection treatment using necessary brush travel gresh chemical ultraviolet lamp including dewatering etc. complete as directed (3001 liters to 5000 liters)

Specification for Cleaning of PVC Water Tank (3001 liters to 5000 liters)

1. Introduction Cleaning and disinfecting PVC water tanks is essential for maintaining water quality and ensuring the safety of stored water. This specification outlines the procedures and requirements for high-pressure cleaning, vacuum pumping, disinfection treatment, and dewatering of PVC water tanks ranging from 3001 liters to 5000 liters.

2. Equipment and Materials Required

- High-Pressure Washer: A machine capable of delivering water at a pressure of at least 1500 psi to effectively remove dirt, algae, and other contaminants from the tank surfaces.
- Vacuum Pump: A device used to remove residual water after cleaning and before disinfection.
- Brushes: Various sizes of brushes with soft bristles suitable for cleaning PVC surfaces without causing damage.
- Disinfectant Chemicals: Approved chemicals such as sodium hypochlorite or hydrogen peroxide that are effective against bacteria, viruses, and biofilms.
- Ultraviolet (UV) Lamp: A UV-C lamp designed for disinfection purposes that can be used post-cleaning to ensure any remaining pathogens are neutralized.
- Personal Protective Equipment (PPE): Gloves, goggles, masks, and protective clothing for personnel involved in the cleaning process.

3. Cleaning Procedure

Site Assessment: Conduct a thorough assessment of the PVC Tank condition to identify any hazardous materials or structural issues that may need addressing before cleaning.

1. Preparation:

- Ensure that the tank is emptied completely before starting the cleaning process.
- Disconnect any inlet/outlet pipes and cover them to prevent contamination during cleaning.

2. High-Pressure Cleaning:

- Use the high-pressure washer to spray the interior surfaces of the tank thoroughly. Start from the top and work downwards to ensure all debris is removed.
- Pay special attention to corners and joints where dirt tends to accumulate.

3. Brushing:

- After high-pressure washing, use brushes to scrub any stubborn stains or biofilm present on the walls of the tank.
- Ensure that all areas are reached without damaging the PVC material.

4. Rinsing:

- Rinse off any remaining debris or detergent using clean water through the high-pressure washer.

5. Vacuum Pumping:

- Utilize a vacuum pump to remove excess water left in the tank after rinsing. This step is crucial for effective disinfection.

4. Disinfection Treatment

1. Chemical Application:

- Prepare a solution of disinfectant according to manufacturer instructions (typically a concentration between 50–200 mg/L depending on chemical type).
- Apply this solution evenly across all surfaces inside the tank using a sprayer or by pouring it directly into the tank.

2. Contact Time:

- Allow the disinfectant solution to sit on surfaces for a minimum contact time as specified by chemical guidelines (usually around 30 minutes).

3. UV Treatment:

- After draining excess disinfectant solution, use a UV lamp inside the tank for additional disinfection.

- Position the UV lamp in such a way that it covers all areas within reach; typically run it for at least 15–30 minutes.

5. Dewatering Process

- After disinfection, ensure complete drainage of any remaining liquids from the tank using vacuum pumping again if necessary.
- Inspect for any residual disinfectant or contaminants before refilling with potable water.

6. Final Inspection & Reporting : After completing all cleaning steps:

- Conduct a final inspection of cleaned tanks ensuring no residues remain.
- Document each step taken during cleaning including dates, chemicals used, personnel involved, and observations made during inspections.

7. Conclusion Following this specification will ensure thorough cleaning and disinfection of PVC water tanks ranging from 3001 liters to 5000 liters while adhering to health standards for safe drinking water storage. The rate shall be for a unit of Nos.

Item No. 3 - Cleaning of Under Ground Sump high pressure and vacuum pumping disinfection treatment using necessary brush travel fresh chemical ultraviolet lamp including dewatering etc. complete as directed (5,001 liters to 30,000 liters)

Specification of Cleaning of Underground Sump (5,001 liters to 30,000 liters)

1. Introduction Cleaning and disinfecting Under Ground Sump is essential for maintaining water quality and ensuring the safety of stored water. This specification outlines the procedures and requirements for high-pressure cleaning, vacuum pumping, disinfection treatment, and dewatering of Under Ground Sump ranging from 5,001 liters to 30,000 liters.

2. Equipment and Materials Required

- High-Pressure Washer: A machine capable of delivering water at a pressure of at least 1500 psi to effectively remove dirt, algae, and other contaminants from the Under Ground Sump surfaces.
- Vacuum Pump: A device used to remove residual water after cleaning and before disinfection.
- Brushes: Various sizes of brushes with soft bristles suitable for cleaning surfaces without causing damage.
- Disinfectant Chemicals: Approved chemicals such as sodium hypochlorite or hydrogen peroxide that are effective against bacteria, viruses, and biofilms.

- Ultraviolet (UV) Lamp: A UV-C lamp designed for disinfection purposes that can be used post-cleaning to ensure any remaining pathogens are neutralized.
- Personal Protective Equipment (PPE): Gloves, goggles, masks, and protective clothing for personnel involved in the cleaning process.

3. Cleaning Procedure

Site Assessment: Conduct a thorough assessment of the Under Ground Sump condition to identify any hazardous materials or structural issues that may need addressing before cleaning.

1. Preparation:

- Ensure that the Under Ground Sump is emptied completely before starting the cleaning process.
- Disconnect any inlet/outlet pipes and cover them to prevent contamination during cleaning.

2. High-Pressure Cleaning:

- Use the high-pressure washer to spray the interior surfaces of the Under Ground Sump thoroughly. Start from the top and work downwards to ensure all debris is removed.
- Pay special attention to corners and joints where dirt tends to accumulate.

3. Brushing:

- After high-pressure washing, use brushes to scrub any stubborn stains or biofilm present on the walls of the Under Ground Sump.
- Ensure that all areas are reached without damaging the material.

4. Rinsing:

- Rinse off any remaining debris or detergent using clean water through the high-pressure washer.

5. Vacuum Pumping:

- Utilize a vacuum pump to remove excess water left in the Under Ground Sump after rinsing. This step is crucial for effective disinfection.

4. Disinfection Treatment

1. Chemical Application:

- Prepare a solution of disinfectant according to manufacturer instructions (typically a concentration between 50–200 mg/L depending on chemical type).

- Apply this solution evenly across all surfaces inside the Under Ground Sump using a sprayer or by pouring it directly into the Under Ground Sump.

2. Contact Time:

- Allow the disinfectant solution to sit on surfaces for a minimum contact time as specified by chemical guidelines (usually around 30 minutes).

3. UV Treatment:

- After draining excess disinfectant solution, use a UV lamp inside the tank for additional disinfection.
- Position the UV lamp in such a way that it covers all areas within reach; typically run it for at least 15–30 minutes.

5. Dewatering Process

- After disinfection, ensure complete drainage of any remaining liquids from the Under Ground Sump using vacuum pumping again if necessary.
- Inspect for any residual disinfectant or contaminants before refilling with potable water.

6. Final Inspection & Reporting : After completing all cleaning steps:

- Conduct a final inspection of cleaned Under Ground Sump ensuring no residues remain.
- Document each step taken during cleaning including dates, chemicals used, personnel involved, and observations made during inspections.

7. Conclusion Following this specification will ensure thorough cleaning and disinfection of Under Ground Sump ranging from 5,001 liters to 30,000 liters while adhering to health standards for safe drinking water storage. The rate shall be for a unit of Nos.

Item No. 4 - Cleaning of Under Ground Sump high pressure and vacuum pumping disinfection treatment using necessary brush travel gresh chemical ultraviolet lamp including dewatering etc. complete as directed (30,001 liters to 60,000 liters)

Specification of Cleaning of Underground Sump (30,001 liters to 60,000 liters)

1. Introduction Cleaning and disinfecting Under Ground Sump is essential for maintaining water quality and ensuring the safety of stored water. This specification outlines the procedures and requirements for high-pressure cleaning, vacuum pumping, disinfection treatment, and dewatering of Under Ground Sump ranging from 30,001 liters to 60,000 liters.

2. Equipment and Materials Required

- **High-Pressure Washer:** A machine capable of delivering water at a pressure of at least 1500 psi to effectively remove dirt, algae, and other contaminants from the Under Ground Sump surfaces.
- **Vacuum Pump:** A device used to remove residual water after cleaning and before disinfection.
- **Brushes:** Various sizes of brushes with soft bristles suitable for cleaning surfaces without causing damage.
- **Disinfectant Chemicals:** Approved chemicals such as sodium hypochlorite or hydrogen peroxide that are effective against bacteria, viruses, and biofilms.
- **Ultraviolet (UV) Lamp:** A UV-C lamp designed for disinfection purposes that can be used post-cleaning to ensure any remaining pathogens are neutralized.
- **Personal Protective Equipment (PPE):** Gloves, goggles, masks, and protective clothing for personnel involved in the cleaning process.

3. Cleaning Procedure

Site Assessment: Conduct a thorough assessment of the Under Ground Sump condition to identify any hazardous materials or structural issues that may need addressing before cleaning.

1. Preparation:

- Ensure that the Under Ground Sump is emptied completely before starting the cleaning process.
- Disconnect any inlet/outlet pipes and cover them to prevent contamination during cleaning.

2. High-Pressure Cleaning:

- Use the high-pressure washer to spray the interior surfaces of the Under Ground Sump thoroughly. Start from the top and work downwards to ensure all debris is removed.
- Pay special attention to corners and joints where dirt tends to accumulate.

3. Brushing:

- After high-pressure washing, use brushes to scrub any stubborn stains or biofilm present on the walls of the Under Ground Sump.
- Ensure that all areas are reached without damaging the material.

4. Rinsing:

- Rinse off any remaining debris or detergent using clean water through the high-pressure washer.

5. Vacuum Pumping:

- Utilize a vacuum pump to remove excess water left in the Under Ground Sump after rinsing. This step is crucial for effective disinfection.

4. Disinfection Treatment

1. Chemical Application:

- Prepare a solution of disinfectant according to manufacturer instructions (typically a concentration between 50–200 mg/L depending on chemical type).
- Apply this solution evenly across all surfaces inside the Under Ground Sump using a sprayer or by pouring it directly into the Under Ground Sump.

2. Contact Time:

- Allow the disinfectant solution to sit on surfaces for a minimum contact time as specified by chemical guidelines (usually around 30 minutes).

3. UV Treatment:

- After draining excess disinfectant solution, use a UV lamp inside the tank for additional disinfection.
- Position the UV lamp in such a way that it covers all areas within reach; typically run it for at least 15–30 minutes.

5. Dewatering Process

- After disinfection, ensure complete drainage of any remaining liquids from the Under Ground Sump using vacuum pumping again if necessary.
- Inspect for any residual disinfectant or contaminants before refilling with potable water.

6. Final Inspection & Reporting : After completing all cleaning steps:

- Conduct a final inspection of cleaned Under Ground Sump ensuring no residues remain.
- Document each step taken during cleaning including dates, chemicals used, personnel involved, and observations made during inspections.

7. Conclusion Following this specification will ensure thorough cleaning and disinfection of Under Ground Sump ranging from 30,001 liters to 60,000 liters while

adhering to health standards for safe drinking water storage. The rate shall be for a unit of Nos.