Eco-Friendly Sanitizing Solutions

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Eco-Friendly Sanitizing Solutions

DIGESTOR

A BIO ENZYMATIC SOLUTION

From
ADS ENZYMES PVT.. LTD.

SOLID ORGANIC & LIQUID WASTE MANAGEMENT (SLWIIII) AND WASTE WATER TREATMENT

DIGESTOR

A BIO ENZYMATIC SOLUTION

CONVERTING WASTE TO VIABILITY

From

ADS ENZYMES PVT.. LTD.

The Challenges of Water Scarcity & Sanitation

- 50% of rivers are polluted.
- 80% of all sewage flows directly into rivers untreated.
- Only 9% of wastewater is treated in the country, before it is discharged into water bodies.
- 80% of our surface waters are contaminated and 80% of water pollution was due to untreated sewage.
- Only 20% of 38bn liters of daily sewage is treated, and most of it is discharged into fresh water bodies.
- The number of polluted rivers are increasing
- The sewage generated has increased to

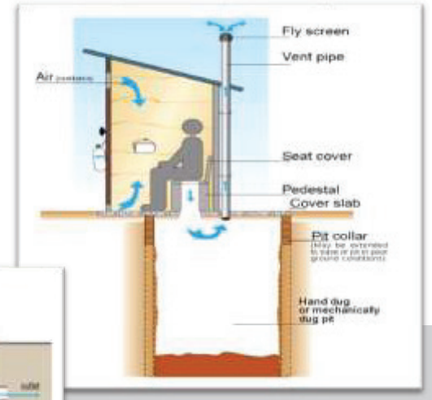
Current Challenges in Septic Tank, Pit Toilets & Polluted Lake & Pound, Defunct Toilet

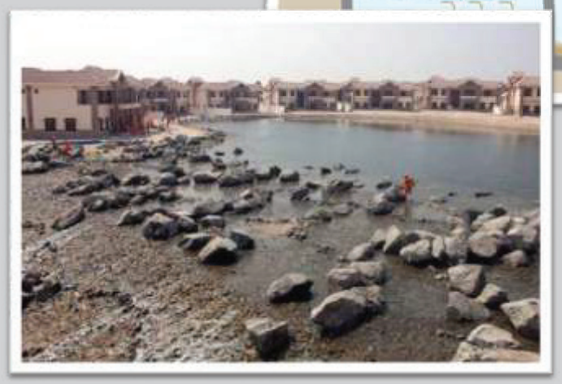
A septic tank is a small-scale sewage treatment system common in areas that lack connection to main sewage pipes provided by local governments or private corporations.

The term 11septic11 refers to the anaerobic bacterial environment that develops in the tank which decomposes or mineralizes the waste discharged into the tank.

Issues

- Periodic preventive maintenance to remove solids
- Bad Odour
- Manual/ machine Cleaning
- Underground water pollution
- Flies and Pests
- Water Bourne Diseases





Current Challenges in Grease Traps in Restaurants, Hotels & Resort

Grease trap is a receptacle that kitchen wastewater flows through before entering the sanitary sewer lines. This receptacle interceptors, captures, or 11traps11 grease.

Grease is 10 to 15 percent less dense than water. Grease also won1t mix with water. As a result, fats and oils float on top of water.

Issues

- The grease and food stuff solidifies inside Grease traps The Grease traps have foul odour
- The Grease traps are needed to be emptied frequently (every 3-4 days).
- Pests and Insects Growth
- The drain lines are often clogged
- There is a backflow of bad odour in Kitchen and surroundings Oil and Grease to be manually removed.
- Can be a cause of water borne diseases

Current Challenges in Sewage/ Effluent Treatment Plant

Sewage treatment is the process of removing contaminants from wastewater, primarily from household sewage. It includes physical, chemical, and biological processes to remove these contaminants and produce environmentally safe treated wastewater (or treated effluent).

A by-product of sewage treatment is usually a semi-solid waste or slurry, called sewage sludge that has to undergo further treatment before being suitable for disposal or land application.

Issues

- The STP area is always emitting foul Odour
- The current system does not treat Oil and fats.
- The solids needs to be digested and STP cycle time is longer
- The Water coming out of STP has foul smell leading to issues with water being used in Gardening.
- It's difficult to maintain the right environment to maintain bacteria. The initial set up and maintenance cost is high

Current Challenges in Hog & Poultry Farming /Animal Husbandry

Issues

- Disposal of wastes that contribute to Air and water Pollution
- Foul Smell In surrounding Area
- Space Problem for stacking

Current Challenges in Slaughter House

Issues

- Bad Odour
- Blood, flash and fat create water pollution Line clogging of drain line
- Heavy oil and grease

Current Challenges in Solid Organic Waste

Solid Waste Management - Organic

Municipal solid waste (MSW), commonly known as trash or garbage is a waste type consisting of everyday items that are discarded by the public. 11Garbage11 can also refer specifically to food waste, as in a garbage disposal; the two are sometimes collected separately

Approx. 65% of all solid waste is organic

Issues

- Organic waste is going to land fills Degrading Organic waste emits foul smell.
- Organic Waste leaches water that pollutes Ground water/ lakes and river system
- Causes Air, Water and soil pollution.
- New Dump sites are not available and expensive

PROBLEM AREAS
PONDS AND LAKES

Sewage dumping in the lakes Household waste being dumped in the lake
Upstream water pollution

PROBLEM AREAS
WEEDS IN LAKES

WEEDS IS GROWING DUE TO :

- Sewage dumping
- Excessive of fertilizers
- Dead plant acts as fertilizers for the weed

PROBLEM AREAS

ALGAE AND DEAD BIOMASS

CURRENT CHALLENGES

CURRENT CHALLENGES











Issues Due to the Problems

- Bad odor in ponds and lakes
- BOD, COD, TSS Nitrates and Phosphate percentage increase in Ponds
- Due to High BOD & Lack of Dissolved Oxygen Aquamarine life dead
- Water Hyacinth harvest in ponds due to that dissolved oxygen reduced in water
- Water pollution
- Water pollution
- No ground water recharge due to oily surface at the pond bottom

TRAPPING OF WASTE WATER

- Construction of Drains to collect waste water on surface
- Construction of silt chamber in drains
- Connect all the drains at one point before to discharge in Pond.
- Connect all the drains at one point before to discharge in Pond.
- Start treatment from silt chambers

WATER HYACINTH HARVESTING

- The best method of elimination of Water Hyacinth is harvesting equipment. It cuts the plant deep from the root and crushes the plant and having the storage space allowing to throw out of reach of water.



DIGESTOR - A BIO ENZYMATIC SOLUTION

For restoring the lake ecosystem. The major benefits of the sludge digester (Bacteria):

- Reduction in COD/BOD levels
- Reduction in sludge yield and accumulation
- Removal of odor generation
- Improves nutrient removal
- In Nature all animal and vegetable matter, from insects to mighty oaks, in broken down and recycled into plant food by enzymes and bacteria. Digester uses this same principle to biodegrade animal and vegetable waste. Enzymes act like short order cooks. They prepare food for bacteria by breaking large molecules down into a size the bacteria can “eat” . each enzyme works on one specific type of molecule. For example, the protease enzyme only works on protein.
- Dosage of DIGESTOR depends on organic load , BOD,TSS,PH,Oil& Grease.

AERATION OF LAKE WATER

- The aeration will oxidise the organic matter helping in reducing the level of pollution in the lake.The oxygen will be added in the whole lake water column which will help in decreasing the concentration of the toxic gases in due course of time. To oxygenratethe lake water which is generally anoxic or has poor oxygen oxygenratethe lake water which is generally anoxic or has poor oxygen concentration, reduce BOD level, optimize nutrient load of nitrogen, phosphorus, and other elements in the whole lake column, lake aeration will be done through approximate aeration discs (on the basis of water volume and culture report) fixed at bottom covering the whole lake area connected with Blower/compressor with ozone system. The amount of muck present in the bottom will start to decrease. The aeration will also decrease Phosphorus (P) concentrations within the lake. Phosphorus is one of the main nutrients that support the growth of algae blooms.


OZONATION

- The benefits of ozonationare as follows:
- Ozone dissolves into water 13 times faster than O2
- Kills viruses, bacteria, molds, spores, and cysts up to 3000 times faster than chlorine times faster than chlorine
- Oxidizes Nitrite to Nitrate
- Oxidizes organic nutrients, chlorohydrocarbons
- Precipitates iron, manganese, and heavy metals from water
- Produces increased water clarity
- Affect soil absorption rates of salts and other compounds

BIO MANIPULATION TO MAINTAIN THE FOOD CHAIN SPECTRUM

The technical intervention will be done in such a manner that the population of the undesirable fish species is reduced. The lake will be stocked with eco-friendly fishes/organisms (beneficial zoo plankton, phytoplanktivorousfishes, weed eating fishes and insectivorous fishes) as per requirement. Also, aquatic weeds present in the lake will be controlled through different de weeding methods.

BIO REMEDEATION By DIGESTOR

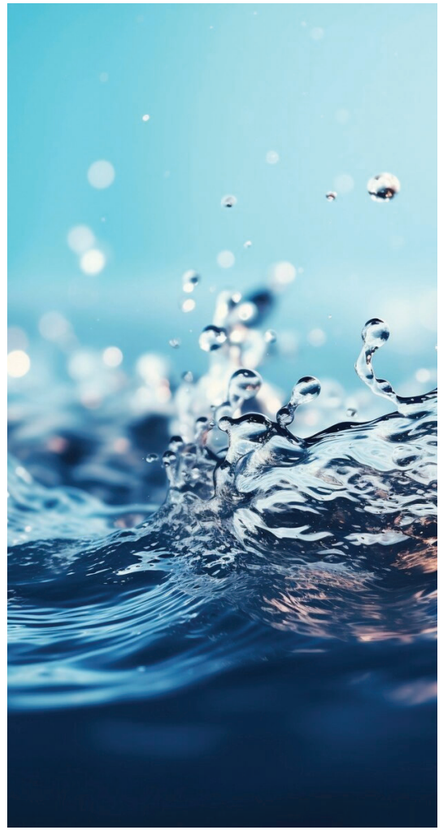
- DIGESTOR is a revolutionary sanitation product, which is primarily a prevention before cure.
- It is made of aerobic and anaerobic bacteria and digestive enzymes. consume food.
- When the mixture is poured into sludge or waste, its bacteria begins digesting it, like we
- It is ideal for sanitizing pit toilets (long-drops), sewage spills, hospitals, slaughterhouses, river algae and everyday contaminated water. river algae and everyday contaminated water.
- DIGESTOR can be used in sanitizing garbage disposal systems, grease traps, eliminating odors, sumps with pumps, pit toilets, drains, river algae and a whole range of pollutants and infectious resources at extremely economic costs. Most importantly with the emission of eco-friendly precipitates.
- It eliminates the needs to clean grease traps and cable drains, buy dangerous chemicals, deodorizers and costly compensation for employees that have been injured by using dangerous chemicals.

How does Digestor Work?

With DIGESTOR	**Induced Enzymatic Digestion**	**Solid Waste is Liquefied**
Source of Odor is Digested	**Pest Attractions are Digested**	**Better Hygiene & Happy Residents**

ADVANTAGES OF DIGESTOR

- No methane emission is involved and hence no exhaust system is required.
- There is no odor due to its reactions.
- There are no micro organism, flies, ants or any other pests left as their food source is depleted-it is consumed by the bacteria.
- Being a simple tank, the discharge outlet can be designed for easy flushing.
- Fiberglass tanks can be used that are lighter in weight and corrosion free.
- Unskilled manpower can be used in its application.
- A simple tank would be needed with a primary mesh filter to keep away the plastic and other such products from entering the tank.
- It can tolerate temperature up to 70*C and common cleaning chemicals.



CONCLUSION

- Increase in the transparency of the pond water.
- The decrease in the concentrations of the toxic gases, like carbon dioxide, ammonia, hydrogen sulphide and methane etc.
- Decrease the concentrations of nutrients like nitrogen and phosphorous.
- Decreasing the production of algae thus increasing the transparency of the water.
- Replace the undesirable flora and fauna to lead to the development of desirable life forms in the water.
- Create conditions suitable for the growth and breeding of environment friendly fish species.
- Increase the concentrations of dissolved oxygen in the pond.
- Restoring the pond ecosystem completely.

WATER REUSE AND SANITATION MARKET

Expected to be one of the top markets for Water Reuse.

We can also create opportunities for water reuse.

Growing at over 16% per annum, the overall sector presents a good opportunity for investors.

Metropolitan cities has number of pit toilets and septic tanks.

We need not only to look for CSR funds and private initiatives from companies and individuals, but we need an actionable plan of ensuring easy degradation of sludge, wastes and pollutants so that they do not continue to affect our water resources.

HOW MUCH DOES THIS COST THE NATION? DRAIN OF WEALTH & LIFE

- The government has earmarked $3 billion for Ganga rejuvenation.
- It plans to pump in $6 billion to increase the country's forest cover to re-equilibrate water resources.
- Since 2015, India has spent $956 million on sewage and waste treatment.
- Over 60 billion rupees have been approved for cleaning rivers in 21 states over the last three years.
- Deaths due to malaria and dengue acount for 300.00 deaths annually
- Diarrhea itself claims the lives of half a million children under 5 years
- India loses about US$5.1 billion, annually, due to lack of hygiene
- The cost of a shower in India is US$ 0.92, which is about 20% of the average daily income

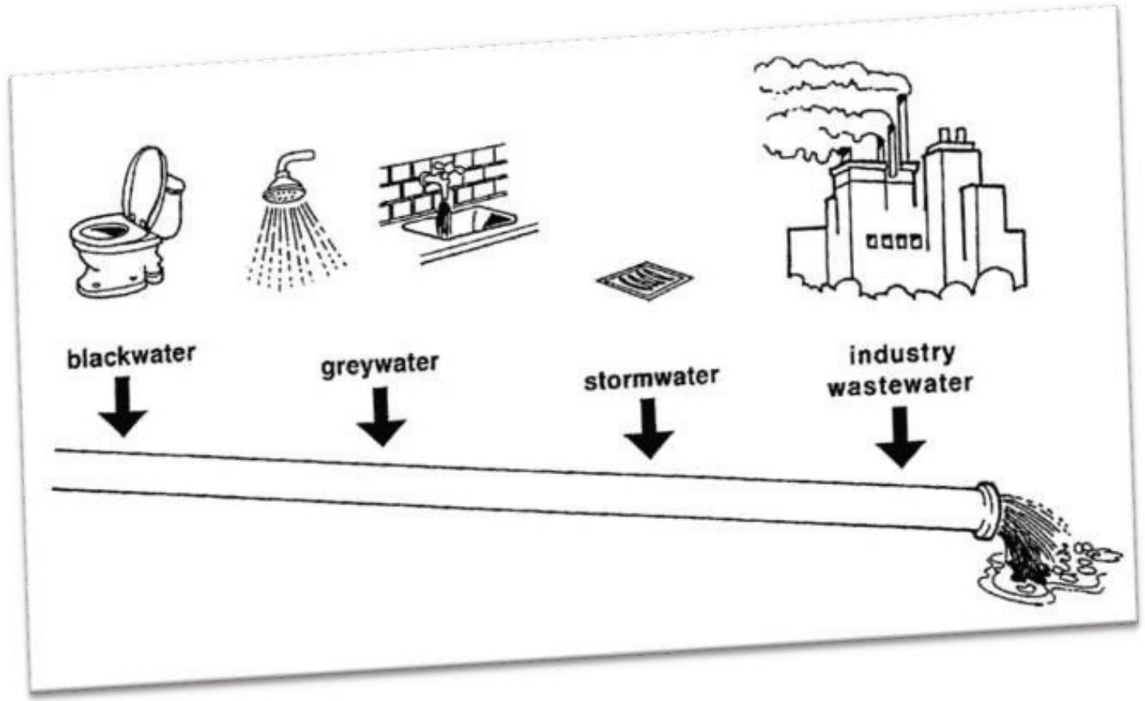
A HUGE TOLL ON THE ECONOMY

- By 2025 annual per capita availability of water will fall from the actual requirement
- The economic losses due to saitation on Country GDP
- Premature mortality and other health-related impacts cost 71.6% of total impacts.
- Sanitation casualties account for $10.7 billion, and drinking water-related impacts, $4.2 billion, 7.8%
- Over three-fourths of the mortality-related losses are due to deaths and diseases in children below five.
- Loses at least 1000 children a day to diarrheal deaths.

FAULTY DISCHARGE SYSTEM

In Flush and Discharge system, a small amount of dangerous material – Huma Feces

is allowed to pollute a huge amount of water



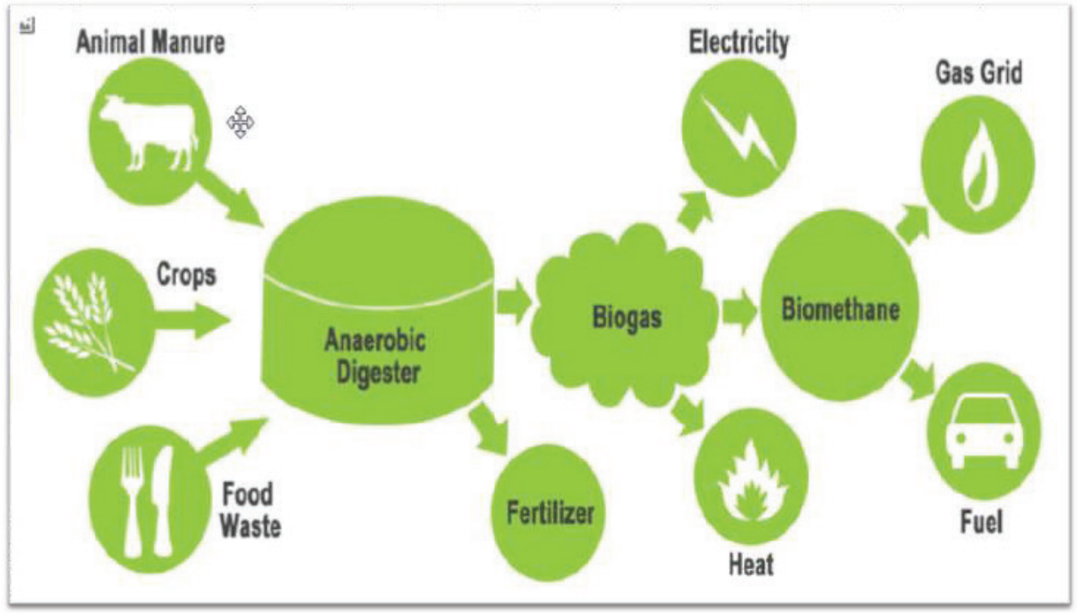
DIGESTOR

A Breakthrough in sanitation management

How can Digesteor help in Sanitation?

- DIGESTOR is a revolutionary sanitation product which is primarily a prevention before a cure
- It is made of aerobic and anaerobic bacteria and digester enzymes
- When the mixture is poured into sludge or waste, its bacteria begins digesting it, like we consume food
- It is ideal for sanitizing pit toilets (long-drops), sewage spills, hospitals, slaughterhouses, river algae and everyday contaminated water
- DIGESTOR can be used in sanitizing garbages disposal systems, grease traps, eliminating odors, sumps with pumps, pit toilets, drains river algae and a whole range of pollutants and infectious resources at extremely economic costs, and more importantly with the emission of eco-friendly precipitates
- It eliminates the needs to clean grease traps and cable drains, buy dangerous chemicals, deodorizers, and costly compensation for employees that have been injured by using dangerous chemicals

How can Digestor help in Hog/Poultry/ Animal Husbandry



A summary of uses & features of Digestor

- A Cost-effective
- Ready to use product
- That's environment friendly
- Provides rapid system recovery
- Degrades tisues, detergents oils, fats and grease
- Accelerates bio-degradation of organic wastes
- While improving the overall ecosystem's biological stability
- Since it is a much safer alternative to caustic or acidic cleaners
- Non-corrosive and easy to use
- It removes bad odors
- Reduces organics that attract pests
- Prevents water-borne disease
- While itself being non-toxic, and containing
- No chemicals or pathogens
- It also reduces load in septic drain fields
- And reduces frequency of pumping






ADVANTAGES OF DIGESTOR

- No methane emission is involved and hence no exhaust system is required.
- There is no odor due to its reactions.
- There are no micro organism, flies, ants or any other pests left as their food source is depleted—it is consumed by the bacteria .
- Being a simple tank, the discharge outlet can be designed for easy flushing.
- Fiberglass tanks can be used that are lighter in weight and corrosion free.
- Unskilled manpower can be used in its application.
- A simple tank would be needed with a primary mesh filter to keep away the plastic and other such products from entering the tank.
- It can tolerate temperature up to 70°C and common cleaning chemicals.

DETAILS USES & FEATURES OF DIGESTOR

- Regular maintenance with DIGESTOR prevents buildup of gunk or clogs in areas which are prone to accumulating biodegradable waste.
- In 2-4 hours of being poured into bowls or pans, the bacteria of the admixture embed themselves onto the waste particles. They are not flushed out after that, even though the toilet is flushed. They keep digesting the waste.
- DIGESTOR does not contain any acid, lye, solvents, perfume or poisonous substances.
- It does not attack tree roots unless they are completely dead. It also discourages growth of tree roots in sewers.
- DIGESTOR is highly effective on oils, fats, grease and paper which are difficult for intestinal bacteria to metabolize.

APPLICATION


Hospitals


Marinas


Passenger Ships


Refugee Camps


Pit Toilets


Schools


Restaurant Sewage


Raw Sewage Plants


Waste Dumps


Rivers and Lakes


Industrial Sewage


Agricultural Sewage

BEFORE AND AFTER

SAFETY PRECAUTIONS & STORAGE

- DIGESTOR is an environmental friendly, safe-to-use product that contains a non-GMO strain of Bacillus Subtilis spore and various Enzymes derived from this organism, for example Bacterial A Amylase and Proteases.
- No product specific certification is provided, however the strain for the active ingredients is non–pathogenic and its enzymes are produced by standard fermentation techniques and conform to
- Generally Recognized as Safe (GRAS) status. They have FDA approval for Foodstuff applications.
- The preparation conforms to FAO/WHO and FCC recommended standards. In the event of an accidental spillage wash the affected area with copious amounts of water.
- To maintain maximum activity of the enzymes and the viability of the bacteria, DIGESTOR should be stored under cool and dry conditions.
- Bacteria/Enzymes present in Digestor will tolerate temperatures up to 70°C. However, the bacteria in the product cannot tolerate temperatures in excess of 50°C. High concentrations of heavy metals will inhibit the activity of the product. Common cleaning agents, containing chlorine (bleaches) and quaternary ammonium compounds (disinfectants) etc., can have a detrimental effect on the product. Neutralization of these inhibitors is necessary before treatment with DIGESTOR.
- DIGESTOR does not guarantee that the above products can be used as described without prior positive testing or the use of these products does not infringe third parties' patent rights

HOW DIGESTOR IS ECONOMICAL

- Digestor is easy to use & transport any where swiftly.
- Digestor clean the pipes as new without any side effect on construction material.
- Digestor is best preventive measure to avoid clogging, bad odor, organic scaling around pipes, ies & pests and water contamination.
- Digestor does not require skilled manpower to apply in position.
- Digestor used at source and no solid accumulation will happen in drains.
- Treated water can be used for horticulture work.
- Digestor resolve the problem at source due to that we said continuous use of Digestor is very economical.
- Machineries (Tankers & Pressure machine) have limited Movement & high pressure can damage Pipes joints.
- Machine & other acid base material can not clean drain pipes effectively. Machine & acid clear the blocking only but also damage pipelines, its joints and also harm human life.
- Machine & Acid base material are not preventive measure.
- For machines need skilled manpower, resources, equipment's & limited access at very high cost.
- Water can not be reused, unless Further treatment is not done.
- Machinery have very high cost and it works only at one place.

ADS ENZYMES PRIVATE LIMITED

BIO-ENZYMATIC CLEANING SOLUTIONS

DIGESTOR

ORGANIC WASTE SOLUTION

A Strong & Superior quality product ensures the effective degradation of solid organic waste in pit toilets, septic tanks, Sewer Lines, Mess Kitchen and more.

INTRODUCTION

In Nature all animal and vegetable matter, from insects to mighty oaks, is broken down and recycled into plant food by enzymes and bacteria. DIGESTOR uses this same principle to degrade animal and vegetable waste.

Like all living things, bacteria must eat to survive. Fortunately, certain types of bacteria will use for food the grease, hair, soap film and all the organic waste.

DIGESTORIS A BLEND OF BACTERIA AND ENZYMES

The bacteria are natural, not genetically engineered. The enzyme concentration is the most powerful on the market. OIGESTOR is a proprietary blend of superior aerobic and anaerobic bacteria selected for their ability to degrade organic waste. The product contains both aerobic (not less than 8 x10•/g) and anaerobic bacteria (not less than 8 x 109/g) in near equal proportions and hence can be used in many different applications.

SPECIFICATIONS

Appearance	Tan coloured
	Low dusting powder in a cereal/salt base
Solubility	> 95%lnH,O
Aerobic bacteria	Not than 8 x 109/g
Anaerobic bacteria	Not than 8 x 10•/g
Heavy metals	Less than 50 ppm
Afflatoxins	Absent
Antibiotic activity	Absent
E.coli	Absent in O.lg

OPERATING CONDITIONS

Optimum pH	4.5-9.0 PH Effluent with a pH outside this range should be pre-treated with a suitable acid or lime prior to dosing with DIGESTOR
Temperature tolerance	Enzymes up to 7 °C

SAFETY

DIGESTOR is non-toxic. It creates no heat, no fumes, no boiling. It does not attack live tissue or inorganic materials, only organic wastes like grease, hair, food particles, paper, cotton & sewage. This makes DIGESTOR safe for people, plumbing and the environment. DIGESTOR changes the waste particles into water, carbon dioxide and mineral ash which run harmlessly out of your waste system. These elements are then available for plant life.

EFFECTIVENESS

Within minutes after pouring the bacteria into the affected area, the bacteria begin to eat their way into the waste that has accumulated. Thisis their natural food.They digest the waste andspread throughout your system, cleaning it completely.

MULTIPURPOSE APPLICATION

Residential andcommercial applications

All drain and sewer pipes, including:

- Pit Toilets(long-drops) or (Poof•Ooofs)
- Kitchen Sinks
- Lavatories
- Bath tubs
- Showers
- Floor drains
- Laundry drains
- Septic tanks anddrain fields
- Garbage disposal odours
- Grease traps
- Sewage ejector sumps
- Outdoor outhouses and cesspools
- R.V. & boat holding tanks
- Lift Stations
- Cat Utter Boxes

HOW IT WILL BE BENIFETTED

- Digester is recognized as GRAS (generally recognized as safe) has no side effect on living organism.
- Digester will reduced Maintenance cost of Machineries in STP/ETP plant by reducing organic load.
- Digest or willreduce frequency of emptying Septic tank, grease Chamber, Pit toilet by reducing organic solids.
- Digestor willhelp in saving water, create hygienic environment, and remove foul smell from STP water.
- Digetor treated water can be useddirectly for Horticulture purpose because No foul smell, No water borne disease bacteria, Nopollution, No side effect.
- Digester is easy to use no machinery required, no specialized manpower required.

ECONOMICAL

- Eliminatesthe need to clean grease trapsand cable drains
- Eliminates the need to buy dangerous chemicals
- Eliminates the need to buy deodorant blocks (urinals)
- Eliminates costly compensation to employees that have been injured by using dangerous chemicals

ECONOMICAL

In Nature all animal and vegetable matter, from insects to mighty oaks, is broken down and recycled into plant food by enzymes and bacteria. DIGESTOR uses this same principle to degrade animal and vegetable waste.

Like all living things, bacteria must eat to survive. Fortunately, certain types of bacteria will use for food the grease, hair, soap film and all the organic waste.

HOW TOUSE DIGESTOR

In Nature all animal and vegetable matter, from insects to mighty oaks,is broken downand recycled into plant food by enzymes and bacteria. DIGESTOR uses this same principle to biodegrade animal and vegetable waste.

Like all living things, bacteria must eat to survive. Fortunately, certain types of bacteria will use for food the grease, hair, soap film and all the organic waste that tend to clogpeoples drains and fillpit toilets.

Enzymes act like short order cooks. They prepare food for bacteria by breaking large molecules down into a size the bacteria can "eat.• Each enzyme works on one specific type of molecule. For example, the protease enzyme onlyworks on protein. Lipase works only on fats.

The bacteria in OIGESTOR are dormant while in the container. When exposed to or mixed with water they come to life in fewminutes. In the meantime, the enzymes are breaking down the waste. They act very fast. In fact, theywork on contact. When the bacteria revive theyare hungry. Each one eats its weight of waste every minute • and they never sleep! Asa result of eating and growing they start to multiply through cell division. Their numbers will double rapidly under favourable conditions.

In the treatment of drains for example DIGESTOR should be mixed with wanm (not hot) water and applied when no water will be drained for six to eight hours. Thisallows some of the bacteria time to embed theminto the waste so they won't be washed out when water isdrained again.

Periodic maintenance treatment prevents new organic waste build-up, sono slower drains or clogs!

SEPTICS SYSTEMS

Most septic systems in operation do not function well. The tanks need pumping frequently because of solidsbuild up. All too often the fields stop absorbing water prematurely. The number one reason is the vast array of household chemicals which either inhibit or kill biological action. The coliform bacteria normally present in sewage are in no way equal to present daily demands. They are used to warm body temperatures and are poor enzyme producers. They cannot handle synthetic materials present in detergents even under the best conditions.

DIGESTOR contains not only potent enzymes, but also contains bacteria that outperform the coliform species in very important ways. They are high producers of enzymes and they are acclimated so that they feed on a larger variety of materials in the waste such as fats and grease, vegetable oil, paper, detergents, fabric softeners, aliphatic and aromatic organic compounds as well assynthetic organics.

Chemicals, bleaches, detergents, food preservatives and bowl cleaners inhibit or kill bacterial action within your septic system. This lets solids accumulate in the tank, some of which flow out and clog the drain field. DIGESTOR will restore the necessary bacterial action and make your system work at full efficiency! People on a septic system must select their cleaning products very carefully. Do not use chemical cleaners in conjunction with DIGESTOR.

GARBAGE DISPOSAL SYSTEMS

Odours come from waste that sticks to the disposal wall and slowly moulds and rots. It is hurled there by the high speed rotating blades. By using DIGESTOR the waste will be quickly digested by the live cultures, thus eliminating the odour.

GREASE TRAPS

Cleaning out a grease trapis the worst of jobs in a foodservice operation. After the horrible odorous muck is removed it still has to be disposed of. Unfortunately, we are running out of landfills to put it in. DIGESTOR will digest the grease, eliminating the unwanted task, as well as the disposal of the pollutant. Of course, the grease trap must be large enough to accomplish two things. The flow of the water through the trap must be 1) slowed and 2) cooled, so that the oils and fats can rise and be retained between the baffles while the water continueson down the sewer. Also, a garbage disposal should never discharge into a grease trap. If these criteria are met, daily treatment of the pot sink will maintain the digestive action. By eliminating the need to pump the trap is a significant cost saving?

SUMPS WITH PUMPS

When ground water accumulates in sumps, odours may be noticeable. This is especially true if household or sanitary waste is present. DIGESTOR eliminates the odour by quickly digesting organic material in the waste water. Pumps will require less energy when the rotor, housing and lines are free of build-up. Lower energy costs and longer pump life are added bonuses for using DIGESTOR.

PIT-TOILETS (LONG_DROPS)

Mention a pit-toilet and the first thing that pops to mind is ODOUR, FLIES and MAGGOTS!

DIGESTOR turns the waste Into water and carbon dioxide very quickly. This dramatically reduces odour and flies and without flies there are no maggots. Cleaning and disposal of the pit become easier and it is more pleasant for the user, too. Filling of the pit toilet is significantly prolonged and percolation into the underground is contaminant free.

R.V. & BOAT HOLDING TANKS

As the waste water level increasesin the tank some scum adheres to the sides andsensor. When the tank is drained, more scum is deposited. With continued use, this coating becomes odorous. It is additional weight and reduces tank capacity. There is no large access to the tanks and the build-up is so great that clean-up are difficult and time consuming that replacing the tank is often less expensivel

R.Ver's using chemicals in their tank are also encountering the new problem of not being able to dispose of their chemically treated waste at many dump stations. Waste water treatment plants do not want this chemical toxicity In their plants,so they charge dump stations large fines.

If DIGESTOR is used from the beginning, a tank willdraincleanly,including the sensor, if there is one. Using DIGESTOR in a tank previously treated with chemicals will take larger doses and some time to overcome the toxicity. It will, however, remove the old build-up. Waste from tanks treated with DIGESTOR is accepted anywhere because it isbiologically active.

QUESTIONS & ANSWERS

How does DIGESTOR work in pit-toilets?

How can sucha smallamount of DIGESTOR be effective?

There are millions and millions of bacteria in each spoonful. Each one will eat its weight of waste every 60 seconds. They double in numbers every few minutes, and as they multiply they will spread throughout the entire drainsystem.

Will it work on a clog?

If the material is biodegradable, yes. However, in most cases, the stoppage is not caused by a blob of something in the trap. Most likely, it isseveral feet of pipe that is filled with "gunk", and it may take several days for the bacteria to eat through this long blockage. Therefore, it is suggested that a

mechanical cable be used to restore the flow. Then begin DIGESTOR treatments to remove any remaining waste build-up. Regular maintenance with DIGESTOR will prevent new build-up.

How long will it take to see the results?

Some people notice improvement within an hour other problem areas in a day or two. Almost everyone will see results in one to three weeks. Note: The cleaning process is not completed with the initial treatment. The time is determined by the type of material the build-up is comprised of (grease, soap, hair) and the length of the lines. Hair takes the longest to digest.

Should the toilet beflushed after pouring DIGESTOR into thebowl?

Do not flush for 2-4 hours. The mixture poured into the bowl pushes equivalent of water and mixture out of the bowl into the stack. The enzymes and bacteria carried out leaving the bowl are deposited on the effluent coating the pipe. In the following 2-4 hours they embed themselves in the waste so that when the toilet is next flushed they will not be flushed out.

Are chemical drainopeners much stronger than DIGESTOR?

The strongest chemical in the world can't climb the side walls of horizontal pipes. Gravity makes all chemicals run along the bottom. Nor can chemicals remove much waste in vertical pipes because they flow through so quickly. The bacteria in DIGESTOR are live cultures and will go anywhere there is food. They willremove the waist chemicals leave behind.

Does DIGESTOR contain any acid, lye, solvents, perfume or poisonous substances? No.

Will DIGESTOR attack treeroots?

Only roots that is completely dead. Roots enter sewer pipes seeking the rich organic food supplied by the build-up. As roots feed on the waste they grow, branch out and eventually restrict flow. Periodic use of enough DIGESTOR and water to reach the root area will eliminate the waste they seek. In this manner, the use of DIGESTOR discourages root growth in sewers.

CanDIGESTOR really be of benefit in a septic system?

Absolutely and in several ways. The bacteria in DIGESTOR are specially selected to digest a larger variety of waste, and metabolize it faster than naturally occurring bacteria or yeast additives. Oils, fats, grease and paper are very difficult for intestinal bacteria to handle. DIGESTOR is very effective on these materials. It increases solids destruction, so fewer pumping's needed and that means money saved.

More complete digestion also means fewer undigested solids leaving the tank. These solids would otherwise form a black gooey accumulation in the leach field and prevent water absorption by the soil. Therefore, DIGESTOR extends the life of a leach field.

Are any chemicals incompatible with septic systems?

Yes. Chlorine, germicidal products, anti-septic's, sanitizers, chemical drain openers, paint, lye, acids, cationic surfactants, food preservatives and in general, anything that is inorganic (not biodegradable).

Do garbage disposal and/or automatic dishwasher affect a septic system?

Yes-in two ways. Disposals add greater loads. Without frequent DIGESTOR treatments, faster accumulation of solids in the tank occurs. Most automatic dishwashing compounds, either powder or gel, contain chlorine, which is damaging to all biological activity. For the least overall problems, don't use the disposal for material that could go into solid waste or be composted. Use non chlorinated, biodegradable dishwashing compound and treat regularly with DIGESTOR.

Does DIGESTOR stop odours?

Yes, by digesting the waste which is the source of odour.

Does DIGESTOR digest hair?

Yes. However, it does take much longer than most any other organic material. In drains, soap scum, skin oils, etc. bond hair to pipe surfaces. DIGESTOR digests these other materials more quickly, which releases the hair to wash downstream.

How does DIGESTOR compare with liquid biological products?

DIGESTOR is more concentrated, more uniform, more stable (longer shelf life) and more economical. Liquid products depend upon preservatives to keep the bacteria dormant while in the bottle. Most have a high percent of surfactant to emulsify oils and fats, not digest them. Enzymes in solution interact with each other, which results in shorter shelf life and/or asingle enzyme product.

Does DIGESTOR stop odours coming froma catlitter pan?

Definitely. Best results can be obtained by washing and drying pan and then sprinkling the bottom with DIGESTOR before addingnew litter and coating the top with DIGESTOR.

What is the shelf lifeof DIGESTOR?

Two years if kept dry at normal temperature.

Environmentally,does DIGESTOR help or harm?

DIGESTOR is a great help and in no way harm the ecology. The active ingredients in DIGESTOR are enzymes and bacteria which speed up the natural digestion of organic material. This is the only process that recycles organic waste back to plant food. DIGESTOR is not harmful to pets or marine

life. It is so safe a child can apply it. Because its action is natural, it enhances nature's ability to cope withman's pollution.

INACTIVATIDON OFDIGESTOR

Bacteria/Enzymes present in DIGESTOR will tolerate temperatures up to 70°C. However, the bacteria in the product cannot tolerate temperatures in excess of 50'C. High concentrations of heavy metals will inhibit the activity of the product. Common cleaning agents containing chlorine (bleaches) and quaternary ammonium compounds (disinfectants) etc. can have a detrimental effect on the product. Neutralisationof these inhibitors isnecessary before treatment with DIGESTOR

SAFETYPRECAUTIONS

DIGESTOR is an environmentally friendly, safe-to-use product that contains a non-GMO strain of Bacillus Subtilis spare and various Enzymes derived from this organism, for example Bacterial A Amylase and Proteases.

No product specific certification is provided for however the strain for the active ingredients is non - pathogenic and the Enzymes are produced by standard fermentation techniques and conform to Generally Recognized as Safe(GRAS) status and have FDA approval for Foodstuff applications.

The preparation conforms to FAO/WHO and FCC recommended standards. In the event of an accidental spillage wash the affected area withcopious amounts of water.

STORAGE

To maintain maximum activity of the enzymes and the viability of the bacteria, DIGESTOR should be stored under cool and dry conditionsi.e.<25°C.

ADS ENZYMES does not guarantee that the above products can be used as described without prior positive testing or the use of these products does not infringe third parties' patent rights.

PRODUCT AVAILABILITY

DIGESTOR is available in 1kg, 5 Kg& 25kgbags

MATERIAL SAFETY DATA SHEET

Section 1. IDENTIFICATION OF THE SUBSTANCE /MIXTURE AND THE COMPANY/ UNDERTAKING

1.1.. Product identifier

1.2. Relevant identified uses of the substance or mixture and uses advised against

Multi-Purpose powdered bacterial product

1.3. Details of the supplier of the safety data sheet ADS Enzymes Private Limited, E-91, Street No.5, Main Subhash Vihar Road, Bhajanpura, Delhi - 110053 India
anil@adsenzymes.com

1.4. Emergency telephone number Telephone+91 9818073223 (10am-6.00pm Monday to Friday)

Section 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to 1272/2008/EC

This material is not classified as hazardous according to Regulation 1272/2008/EC as amended on classification,

Labeling and packaging of substances and mixtures.

2.2. Label elements

Labeling according to 1272/2008/EC

No Hazard Pictograms, Signal words, Hazard statements or Precautionary statements required

Supplemental Hazard Statements

2.3. Other hazards

May cause mechanical irritation of the eye. Repeated inhalation of large amounts of Reparable dust may irritate lungs and airways.

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable, material is a mixture of aerobic and anaerobic bacteria in equal proportion in Bacillus spore form in Powder form specification is as per clause no.16.2 on page 6 of 6

3.2. Mixtures No hazardous ingredients declared according to Regulation (EC) No.1272/2008

CAS:	Industrial bran (pollard)	<10%
CAS:7732-18-5	Water	>90%

A full explanation of H-phrases appears in Section 16

Section 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye Contact Rinse immediately with water holding the eyelids open.

Skin Contact Wash off with soap and water. No need for first aid is anticipate.

Inhalation Move the exposed person to fresh air.

Ingestion Rinse mouth thoroughly. No need for first aid is anticipated.

Seek medical attention if any symptoms persist.

4.2. Most important symptoms and effects, both acute and delayed

May cause mechanical irritation of the eye. Repeated inhalation of large amounts of

Respirable dust may irritate lungs and airways.

4.3. Indication of any immediate medical attention and special treatment needed

No special treatment required

Section 5. FIRE FIGHTING MEASURES

5.1. Extinguishing Media Product is a powder and is not flammable. Use extinguishing

Media to the surrounding fire conditions

5.2. Special hazards arising from the substance or mixture

Product is a powder so is not expected to burn or create special hazards

5.3. Advice for firefighters Wear full protective clothing and suitable respiratory equipment when necessary

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

No special protective clothing required.

6.2. Environmental precautions

Do not allow large amounts (i.e. more than 20 kg) of product to enter drains

Undiluted. Do not allow spillages to enter an open water course or surface water.

Prevent further spillage if safe.

6.3. Methods and material for containment and cleaning up

Small spillages (<20 liters) can be washed to drain with water (but not to

One that leads to an open water course or surface water). For larger

Spillages sweep up and transfer to suitable, labeled containers. Transfer to

Suitable, labeled containers for disposal. Clean spillage area thoroughly

With plenty of water

6.4. Reference to other sections

See sections 8 and 13 for additional information

Section 7. HANDLINGAND STORAGE

7.1. Precautions for safe handling

Wash thoroughly after handling. Adopt best Manual Handling

Considerations when handling, carrying and dispensing.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool dry, we l-ventilated area. Keep containers tightly

Closed. Store in correctly labeled containers

7.3. Specific end use(s) No exposure scenario currently available

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Ingredient	CAS	EC	Description	Pap	Mg/m3	Reference
Industrial bran (pollard)			Long term exposure limit (8hour TWA reference period)	-	10	UK EH40 Oct 2007
			Short term exposure limit (15 minutes reference period)	-	20	

8.2. Exposure controls Engineering measures	Although WELs exist for ingredients in this product, normal use, i.e. Dosing of small quantities of product, is not expected to Generate significant dust. However, if use patterns do generate Dust; ensure adequate ventilation of the working area. If use means that dust is generated, wear suitable half mask
Respiratory protection	With Filter P2 (EN143) No chemical resistance gloves required None required
Hand protection	
Eye protection	No special protective clothing required.
Protective equipment	
Environmental measures	Do not allow product to enter open water courses or surface water

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Brown powder

Odour Slight

Not determined Odor threshold (Of 1% solution) 7-8pH:

Not applicable, predominantly a mixture of organic Melting point/ freezing

Point and Inorganic solids

Initial boiling point and boiling range
Not applicable, predominantly a mixture of organic and Inorganic solids

Flash point Not applicable, predominantly a mixture of organic and Inorganic solids

Evaporation rate contains no volatile material

Flammability (solid, gas):

Not a flammable solid

Upper/ lower flammability or explosive limits not applicable, see above

Not applicable, product is an aqueous liquid

Vapour pressure No vapour expected

Vapor density not applicable, see above

Relative density0.75

Solubility's
Partition co efficient n-octane /water

Auto ignition

Temperature

Decomposition

Viscosity

Partially soluble, freely disposed of in water

Not applicable, predominantly a mixture of organic and Inorganic solids

Not applicable, predominantly a mixture of organic and Inorganic solids

Not applicable, product is a powder

No ingredients with explosive properties

Explosive properties
Oxidizing properties

No ingredients with oxidizing properties

Section 10. TOXICOLOGICAL INFORMATION

10.1. Reactivity	No specific hazard
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	No hazardous reaction are expected
10.4. Conditions to avoid	Not determined
10.5. Incompatible materials	None known
10.6. Hazardous decomposition products	None known

Section 11. FIRE FIGHTING MEASURES

11.1. Information on toxicological effects

a) Acute toxicity

Contains no toxic ingredients and therefore no ATE can be calculated.

The microorganisms in this product are all Group 1 (i.e. considered unlikely to cause human disease)

According to EU Directive 2000/54/EC and related legislation.

b) Skin corrosion/irritation: Mixture not classified as corrosive to skin or causing skin irritation.

c) Serious eye damage/irritation: Not classified as causing serious eye damage or irritation.

d) Respiratory or skin sensitization: Does not contain ingredients classified as Respiratory or skin sensitizers.

e) Germ cell mutagen city: Does not contain ingredients that are known germ cell mutagens

f) Carcinogenicity: Does not contain ingredients that are known carcinogens

g) Reproductive toxicity: Does not contain ingredients that are known reproductive toxicants

h) STOT single exposure: Does not contain ingredients that are known to cause single target

Organ toxicity with single exposure

i) STOT repeated exposure: Does not contain ingredients that are known to cause single target

Organ toxicity with repeated exposure

j) Aspiration hazard: Does not contain ingredients that are known to cause aspiration hazards

Section 12. ECOLOGICAL INFORMATION

112.1. Toxicity

Does not contain ingredients that are toxic or harmful to aquatic environment, so no classification of mixture is required for acute or chronic effects.

12.2. Persistence and degradability

Product is predominantly a mixture of organic and inorganic material and a cereal based organic

Carrier and given the nature of the ingredients and their concentration in the mixture, no issues

With persistence or degradability are expected.

12.3. Bio-accumulative potential

Given the classification and environmental behavior information on the ingredients and their Concentration in the mixture, product is not expected to bio accumulate

12.4. Mobility in soil

Product is partially soluble and freely dispersible in water, not expected to be retained in soil to any significant extent.

12.5. Results of PBT and vPvB assessment

Not anticipated to be PBT or vPvB

12.6 Other adverse effects

None known

Section 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Small quantities of product (up to 20 kg on any one occasion) can be disposed of to drain (but not one that leads to an open water course or surface water) with a 10x dilution with water. small quantities of product (<20kg) can also be disposed of with normal refuse.

Section 14. TRANSPORT INFORMATION

14.1. UN number not regulated

Not regulated14.2. UN proper shipping name

Not regulated14.3. Transport hazard class(s)

Not regulated14.4. Packing group

Not applicable14.5. Environmental hazards

14.6. Special precautions for user none required

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable

Section 15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture no known regulations or restrictions exist in EU Member states

Section 16. ADDITIONAL INFORMATION

16.1 Chemical safety assessment	No chemical safety assessment has been carried out
Revision	This SDS has been created to comply with the full implementation of the CLP Regulation (EC) No 1272/2008, namely the classification of ingredients and preparations using the new GHS/CLP symbols and phrases and communication of classification, hazards and advice according to the new rules.
Methods used to classify:	Mixture has been classified by reference to information on ingredients
Further information	The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process.

Section 16.2. Specification

Appearance	Tan colored Low dusting powder in a cereal/salt base
Solubility	>95% in H_2O
Aerobic bacteria	Not less than 8 x 108cfu/g
Anaerobic bacteria	Not less than 8 x 108cfu/g
Aflatoxins	absent
Antibiotic activity	absent
E. coli	absent in 0.1g
OPERATING CONDITIONS	
Optimum pH	4.5 – 9.0 PH Effluent with a pH outside this range should be pre- treated with a suitable acid or lime prior to dosing with **DIGESTOR**
Temperature tolerance	Up to 50°C

CERTIFICATES

Himachal Pradesh
Irrigation & Public Health Department

No-IPH-SE(P&I-I)-D-I-Tech.-Committee/2019-20- 3411-16 Dated: - 11-12-2019

To

M/s Anahita Broadway Services, Sewerline,
Chadiar Complex, Behind MRF Tyre ,
Ner Chowk Distt. Mandi-175008

Subject: **Regarding "Digester" a Bio enzymatic solution for Pit toilets, Sewer line, Septic Tank, Grease Trap, Oil Greases & clogging due to organic solids etc. for approval by the department.**

Your item was presented before 2nd meeting of **State Level Technical Committee** held on 31.10.2019.The committee has accorded the approval for a period of three year as under :

"It was decided by the committee that the " Digester" a bio enzymatic solution of the firm was approved for use in the department for three years."

The above approval is subject to the following terms and conditions:

1. The above approval does not guarantee award of any contract/order from I&PH department.
2. We reserve the right to put under HOLD this approval at any time without notice on any of the under mentioned grounds:
   - i. Adverse feedback from any department under Govt. of HP or Govt. of India.
   - ii. Unsatisfactory performance against a contract.
   - iii. Due to tempering with tender procedure.
   - iv. A vendor declared as inactive.
3. We reserve the right to withdraw this approval at any time without notice on any of the following:
   - i) Vendor Fails to abide by the conditions of approval.
   - ii) Vendor Fails to submit statutory document as and when required.
   - iii) Vendor Violates or circumvents the provisions of labour laws/regulations/rules or important condition of the approval.
   - iv) Vendor Found indulging in malpractices/fraud.
   - v) Vendor has been declared bankrupt,insolvent,wound up,dissolved or partition.

इंडियन ऑयल कॉरपोरेशन लिमिटेड
इंडियन ऑयल पेट्रोलियम प्रबन्धन संस्थान
83, संस्थेतुकणता क्षेत्र, सेक्टर-18,
गुरुग्राम - 122 001 (हरियाणा) भारत
Indian Oil Corporation Ltd.
Indian Oil Institute of Petroleum Management
83, Institutional Area, Sector-18,
Gurgaon - 122 001 (Haryana) India
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IndianOil

इंडियन ऑयल पेट्रोलियम प्रबन्धन संस्थान
Indian Oil Institute of Petroleum Management

To Whomsoever It May Concern

A product by the name of digestor was used on a pilot basis in the STP and OWC for a period of 1 week. The result of the pilot survey was exceptional and it was found that the odor coming out of the plants reduced considerably. The product was also tested on waste food kept in bucket with water and even after a week there was no trace of odor around the bucket. Thus, the product is effective in handling all types of organic waste (Plant & Animal).

The product was also tested in sewer lines. The product has high utility as the clogging in the line was considerably reduced and also the waste encircling the top portion of the manhole was removed by the use of the product.

The procurement of the above digestor is under process by the department.

Yours faithfully,
7/2/18
Vivek Garg
(Vivek Garg)
IndianOil Corporation Limited
INDIANOIL INSTITUTE OF PETROLEUM MANAGEMENT
83, Institutional Area, Sector- 18,
Gurugram- 122001 (Haryana)

पंजीकृत कार्यालय : जी-9, अली यावर जंग मार्ग, बान्द्रा (पूर्व) मुम्बई- 400 051 (भारत)
Regd. Office : G-9, Ali Yavar Jung Marg, Bandra (East) Mumbai-400 051 (India)

CERTIFICATES

NORTH CENTRAL RAILWAY

Office of the
Sr. Section Engineer (
South Agra Cantt, NC

No.

April 23, 2019

To whom it may concern

This is to certify that M/s Brandwatch Communications has given presentation and the Demonstration of Digestor- a bioenzymatic solution at our site at Agra Cantt. Railway colony.

We found that Digestor is effective to degrade bio-organic material & to convert solid organic material to liquid material. It is also effective in bad odor too.

Sr. Section Engineer (W) South
Agra Cantt, NCR

BRIEF REPORT ON PRESENTATION GIVEN BY ADS ENZYMES PVT. LTD.

n the chairmanship of DIG SHQ (L&C) on dtd 30.01.2018 a presentation on how to mprove sanitation management is given by the representatives of ADS Enzymes private imited at Chhawla campus. Following officers of ITBP and representatives of ADS Enzymes private limited were present during the presentation.

ITB Police
Sh. Pawan Singh 2 I/C
Sh. Subodh Sandilya DC/Engr
Sh. Manoj Singh DC/GD
Sh. Devender Singh Negi AC/ESC
Sh. Naresh Prasad AC/MTO

ADS enzymes private limited
Mr. Anil Kumar Sharma
Mr. Harjeet Singh Julta
Mr.Dinesh Raj Sharma

In presentation following points was briefed by the representative of ADS Enzymes private limited:-

i) Digestor is required for Sewer Lines & Drains, Septic Tank & Pit Toilet, STP/ETP. Solid Organic Waste, Organic waste of Mess and Grease Trap
ii) Uses of Digestor
iii) Working procedure of digester
iv) Benefits of Digestor.
v) Application of Digestor.

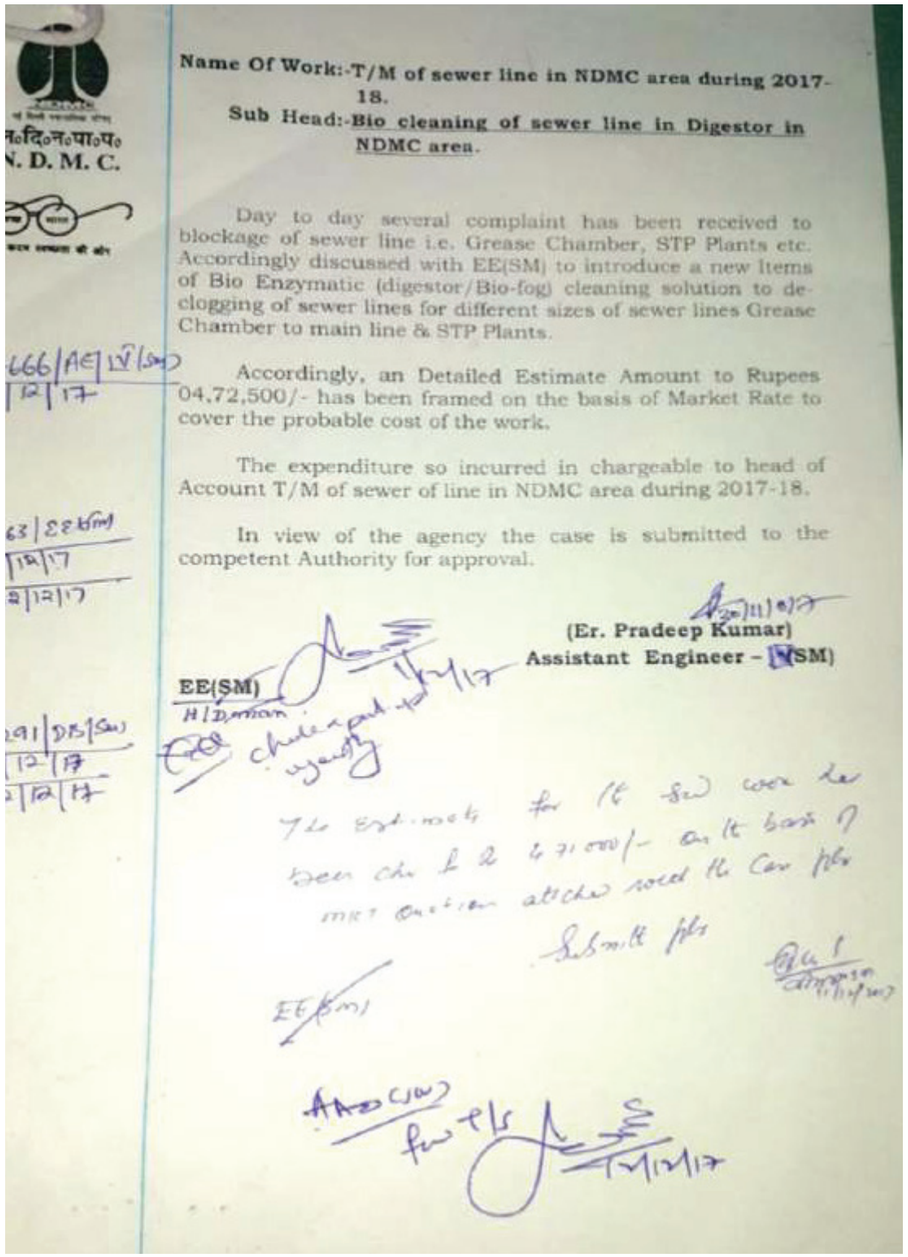
Physical demonstration on how Digestor works was given on ground in septic tank of jawans toilet at Chhawla camp in the presence of DIG (L&C) and other officers by the representatives of ADS Enzymes private limited.

- On checking next day remarks on effectiveness of Digestor is as follows:-
  i) Enzymes/bacteria are active and started decomposition & Liquification of soli waste .
  ii) Less foul smell in surrounding area.
  iii) A thin layer of liquefied solid waste in the tank.
  iv) It may be effective in safe disposal of waste water of septic tanks, as water gets fr from bad smell & odor.

- Recommendation:-
  i) It is highly effective in reducing foul smell and bad odour, reduce organic wast improve drainage facilities and its application is very simple.

STAFF OFFICER
SHQ (L&C), ITB POLICE

CERTIFICATES



N. D. M. C.

Name Of Work:-T/M of sewer line in NDMC area during 2017-18.

Sub Head:-Bio cleaning of sewer line in Digestor in NDMC area.

Day to day several complaint has been received to blockage of sewer line i.e. Grease Chamber, STP Plants etc. Accordingly discussed with EE(SM) to introduce a new Items of Bio Enzymatic (digestor/Bio-fog) cleaning solution to de-clogging of sewer lines for different sizes of sewer lines Grease Chamber to main line & STP Plants.

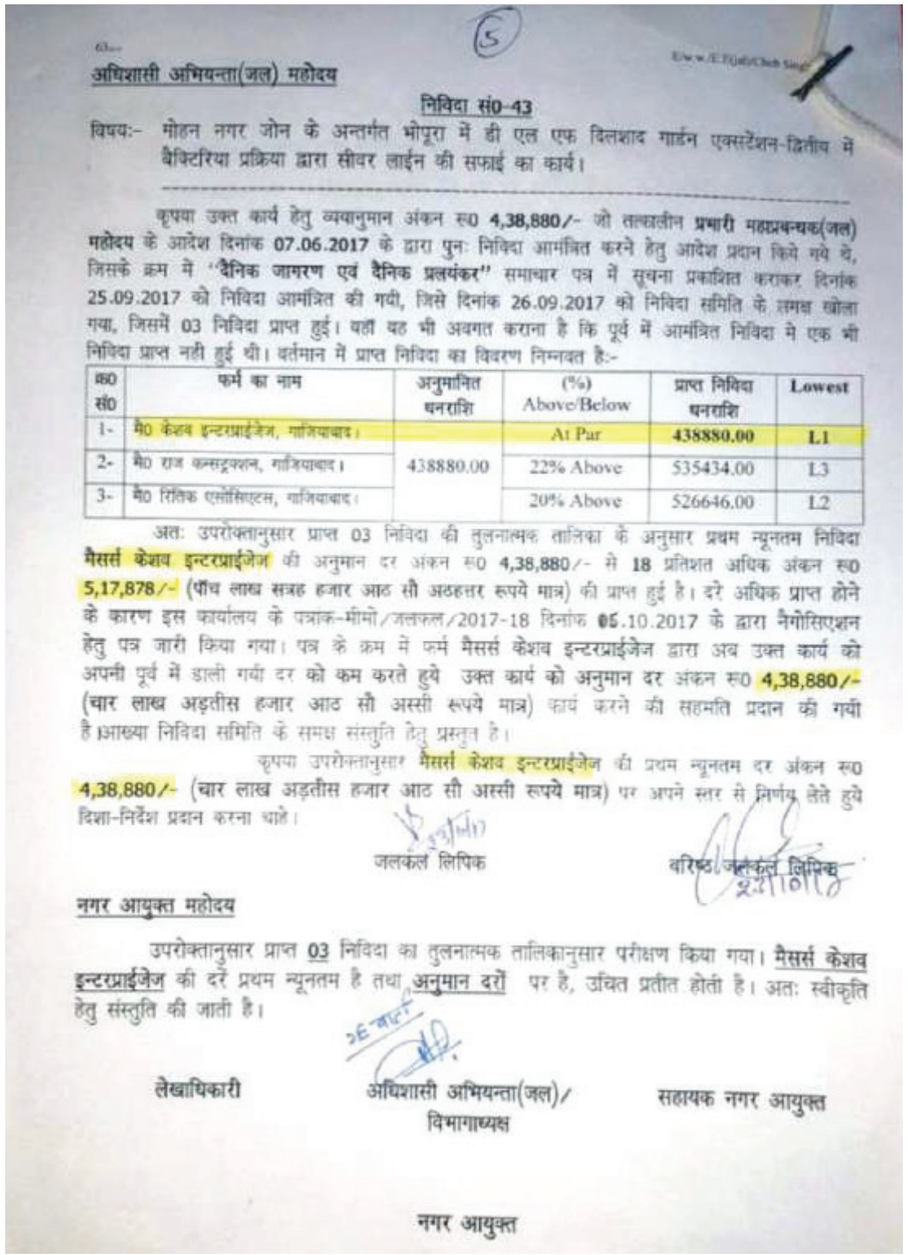
Accordingly, an Detailed Estimate Amount to Rupees 04,72,500/- has been framed on the basis of Market Rate to cover the probable cost of the work.

The expenditure so incurred in chargeable to head of Account T/M of sewer of line in NDMC area during 2017-18.

In view of the agency the case is submitted to the competent Authority for approval.

(Er. Pradeep Kumar)
Assistant Engineer – (SM)

EE(SM)



अधिशासी अभियन्ता(जल) महोदय

निविदा सं0-43

विषय:- मोहन नगर जोन के अन्तर्गत भोपुरा में डी एल एफ दिलशाद गार्डन एक्सटेंशन-द्वितीय में बैक्टिरिया प्रक्रिया द्वारा सीवर लाईन की सफाई का कार्य।

कृपया उक्त कार्य हेतु व्ययानुमान अंकन रू0 **4,38,880/-** जो तत्कालीन **प्रभारी महाप्रबन्धक(जल) महोदय** के आदेश दिनांक **07.06.2017** के द्वारा पुनः निविदा आमंत्रित करने हेतु आदेश प्रदान किये गये थे, जिसके क्रम में **"दैनिक जागरण एवं दैनिक प्रलयंकर"** समाचार पत्र में सूचना प्रकाशित कराकर दिनांक 25.09.2017 को निविदा आमंत्रित की गयी, जिसे दिनांक 26.09.2017 को निविदा समिति के समक्ष खोला गया, जिसमें 03 निविदा प्राप्त हुई। यहाँ यह भी अवगत कराना है कि पूर्व में आमंत्रित निविदा मे एक भी निविदा प्राप्त नही हुई थी। वर्तमान में प्राप्त निविदा का विवरण निम्नवत है:-

क्र0 सं0	फर्म का नाम	अनुमानित धनराशि	(%) Above/Below	प्राप्त निविदा धनराशि	Lowest
1-	मै0 केशव इन्टरप्राईजेज, गाजियाबाद।	438880.00	At Par	**438880.00**	**L1**
2-	मै0 राज कन्सट्रक्शन, गाजियाबाद।		22% Above	535434.00	L3
3-	मै0 रितिक एसोसिएट्स, गाजियाबाद।		20% Above	526646.00	L2

अतः उपरोक्तानुसार प्राप्त 03 निविदा की तुलनात्मक तालिका के अनुसार प्रथम न्यूनतम निविदा **मैसर्स केशव इन्टरप्राईजेज** की अनुमान दर अंकन रू0 **4,38,880/-** से **18** प्रतिशत अधिक अंकन रू0 **5,17,878/-** (पाँच लाख सत्रह हजार आठ सौ अठहत्तर रूपये मात्र) की प्राप्त हुई है। दरें अधिक प्राप्त होने के कारण इस कार्यालय के पत्रांक-मीमो/जलकल/2017-18 दिनांक **05**.10.2017 के द्वारा नैगोसिएशन हेतु पत्र जारी किया गया। पत्र के क्रम में फर्म मैसर्स केशव इन्टरप्राईजेज द्वारा अब उक्त कार्य को अपनी पूर्व में डाली गयी दर को कम करते हुये उक्त कार्य को अनुमान दर अंकन रू0 **4,38,880/-** (चार लाख अड़तीस हजार आठ सौ अस्सी रूपये मात्र) कार्य करने की सहमति प्रदान की गयी है।आख्या निविदा समिति के समक्ष संस्तुति हेतु प्रस्तुत है।

कृपया उपरोक्तानुसार **मैसर्स केशव इन्टरप्राईजेज** की प्रथम न्यूनतम दर अंकन रू0 **4,38,880/-** (चार लाख अड़तीस हजार आठ सौ अस्सी रूपये मात्र) पर अपने स्तर से निर्णय लेते हुये दिशा-निर्देश प्रदान करना चाहे।

जलकल लिपिक

वरिष्ठ जलकल लिपिक

नगर आयुक्त महोदय

उपरोक्तानुसार प्राप्त 03 निविदा का तुलनात्मक तालिकानुसार परीक्षण किया गया। **मैसर्स केशव इन्टरप्राईजेज** की दरें प्रथम न्यूनतम है तथा **अनुमान दरों** पर है, उचित प्रतीत होती है। अतः स्वीकृति हेतु संस्तुति की जाती है।

लेखाधिकारी

अधिशासी अभियन्ता(जल)/ विभागाध्यक्ष

सहायक नगर आयुक्त

नगर आयुक्त

CERTIFICATES

Military Engineer Service
GE (AF) Palam
Delhi Cantt-10

2000/ MEN /E2

18 Oct 2016

E-Green Developers and Promoted Pvt Ltd
Ganesh Villa 153
Sector-46,
Faridabad-121003 (Haryana)

APPROVAL OF SANITATION AND DRAIN CLEANING PRODUCTS ECOSAN G AND ECOSHINE G

1. Ref AGE B/R-II (AF) Palam letter No 200/TUE/E2 dated 18 Oct 2016.

2. It is intimated that, this office has tested the product at Pinto Park and found tha material is very effective on Bad Odor, liquid/solid waste, all organic and human waste However it is not effective on soil sludge, bricks bats & plastic.

3. The product can be used for cleaning organic waste from sewer lines, open drains grease traps, septic tanks, lakes etc.

GE Air Force Palam Delhi Cantt-10

(Rohit Jalwi)
Lt Col
Garrison Engineer

Mycom./D(jal)/ aug-16/R.K.Yadav

कार्यालय अधिशासी अभियन्ता(जल), नगर निगम, गाजियाबाद

पत्रांक: 337 /जलकल-व्यवस्था/2016-17 दिनांक- 29.9.16

प्रमाण पत्र

प्रमाणित किया जाता है कि मैसर्स ई ग्रीन डवलपर्स एंड परमोटर्स प्राईवेट लिमिटेड के द्वारा राजेन्द्र नगर सेक्टर - 05 के भवन संख्या-11/171 के पास काफी समय से मैनहोल सिल्टेड था, जिसका प्रवाह बन्द था। उक्त फर्म को इस मैनहोल का निरीक्षण कराया गया। फर्म द्वारा आश्वसत करने के उपरान्त डिमोस्ट्रेशन के तौर पर फर्म द्वारा अपने मैटिरियल ईको सैन जी के द्वारा उक्त मैनहोल में डालकर 18 घंटे उपरान्त जब परीक्षण किया गया तो पाया कि मैनहोल में प्रवाह चालू हो चुका था एवं किसी भी प्रकार की दुर्गन्ध नहीं थी।

29/09/16

अधिशासी अभियन्ता(जल)
नगर निगम गाजियाबाद

CERTIFICATES

अजय तिवारी
अधीक्षण अभियंता

Ajay
Superintending E

SE(T)/QC/Gen/AIR/115 Dated:- 03.10.2016

TO WHOM IT MAY CONCERN

This is to certify that M/s E-Green Developers & Promoters Pvt. Ltd. has given a Presentation & Demonstration of EcoSan G & EcoShine G at our office CCW, AIR, Soochna Bhawan, New Delhi.

We found that EcoSan G is very effective in Grease Traps, Sewer Lines, Declogging them and converts all organic solids into liquid, no bad odour is there after EcoSan G treatment.

EcoShine G is very good in removal of Hydrocarbons, i.e. any kind of crude oil and grease.

I hereby approve the above products for the Civil work under the aegis of Civil Construction Wing, All India Radio for Doordarshan & All India Radio's various undertakings of Ministry of Information & Broadcasting, Public Sector Banks and Deposit works of all Ministries of Government of India.

I wish them Success.

(Ajay Tiwari)
Superintending Engineer (Trg.) QC

(AJAY TIWARI)
Superintending Engineer (Trg.)
CCW : All India Radio
1st Floor Soochna Bhawan
New Delhi-110003

प्रसार भारती | PRASAR BHARATI
भारतीय लोक सेवा प्रसारक | India's Public Service Broadcaster

All India Radio

Civil Construction Wing, All India Radio, 1st Floor, Soochna Bhavan, C.G.O. Complex, Lodhi Road, New Delhi-110 003
Ph.: 011-2436 3606, 2436 2851, Fax : 011- 2436 4368
E-mail:- airtraining50@gmail.com, website : www.ccwairprasarbharati.nic.in

Doordarshan

Military Engineer Service
GE (AF) Palam
Delhi Cantt-10

2000/ MEN /E2

18 Oct 2016

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GE Air Force Palam Delhi Cantt-10

(Rohit Jalwi)
Lt Col
Garrison Engineer

CERTIFICATES

कार्यालय नगर पालिका पुष्कर, जिला अजमेर

सदर बाजार, बद्री घाट के पास

E-Mail :- np.pushkar.nagarpalika@gmail.com PH :- 0145-2773025

क्रमांकः न.पा.पु./सामान्य/19/2758 दिनांक : 20/12/2019

श्रीमान मुख्य अभियंता
स्वायत्त शासन विभाग,
राज. जयपुर

विषय :- बायो एन्जाइम क्लीनिंग सोल्यूशन का प्रदर्शन करवाये जाने बाबत।

प्रसंग :- श्रीमान के कार्यालय का पत्रांकः F. 55 ( )Engg./CE/DLB/SBM/19/91177 दिनांक 04.10.2019 के क्रम में।

महोदय,

उपरोक्त विषयान्तर्गत प्रासंगिक पत्र के संदर्भ में निवेदन है कि पालिका द्वारा खरेखडी रोड स्थित कचरा संग्रहण केन्द्र पर दिनांक 13.11.2019 को उपलब्ध लिगेसी वेस्ट की मात्रा एवं दुर्गन्ध को 10 टन कचरे पर 10 किलोग्राम कम करने हेतु बायो एन्जाइम क्लीनिंग सोल्यूशन (डायजेस्टर) का छिडकाव किया गया था। जिसके उपरान्त दिनांक 09.12.2019 को निरीक्षण के दौरान पाया कि लिगेसी वेस्ट की मात्रा पूर्व उपलब्ध मात्रा से 25.00 प्रतिशत कम हुई है एवं दुर्गन्ध की मात्रा में कमी आई है।

अतः श्रीमान के समक्ष अग्रिम आदेशार्थ रिपोर्ट प्रेषित है।

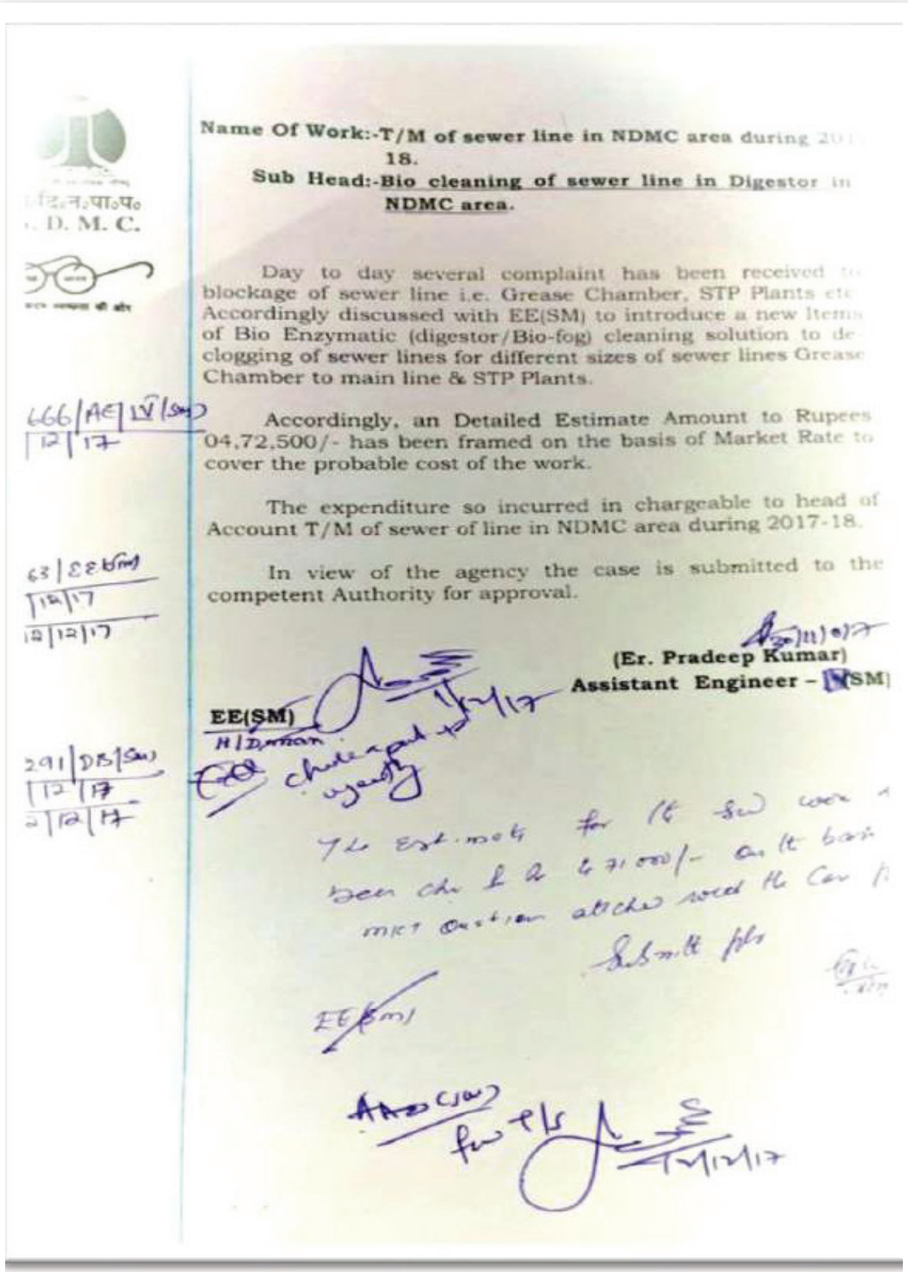
sd/-
अधिशाषी अधिकारी
नगर पालिका पुष्कर
दिनांक : 20/12/2019

क्रमांकः न.पा.पु./सामान्य/19/ 8759-60
प्रतिलिपि :- सूचनार्थ
1. मैसर्स वियोम इंजिनियरिंग प्रताप नगर जयपुर।
2. सुरक्षित पत्रावली।

अधिशाषी अधिकारी
नगर पालिका पुष्कर

E.O. Sr(Gen)Amr

Scanned with CamScanner



Name Of Work:-T/M of sewer line in NDMC area during 201 18.
Sub Head:-Bio cleaning of sewer line in Digestor in NDMC area.

Day to day several complaint has been received to blockage of sewer line i.e. Grease Chamber, STP Plants etc Accordingly discussed with EE(SM) to introduce a new Items of Bio Enzymatic (digestor/Bio-fog) cleaning solution to de clogging of sewer lines for different sizes of sewer lines Grease Chamber to main line & STP Plants.

Accordingly, an Detailed Estimate Amount to Rupees 04,72,500/- has been framed on the basis of Market Rate to cover the probable cost of the work.

The expenditure so incurred in chargeable to head of Account T/M of sewer of line in NDMC area during 2017-18.

In view of the agency the case is submitted to the competent Authority for approval.

(Er. Pradeep Kumar)
Assistant Engineer - (SM)

EE(SM)