

Read : Application dt.27.01.2014 (received on dt.01.02.2014) by Bhawalkar Vermitech Pvt. Ltd.
Heard :Dr. Uday Bhawalkar, Director, Shri J. B. Joshi, STP, Shri Deepak Gosavi, Accountant.

PROCEEDINGS

(under section-56(1)(e) and section-56(2) of the Maharashtra Value Added Tax Act, 2002)

No.DDQ-11/2014/Adm-6/2/B-4

Mumbai, dt. 21/11/2014

The applicant, Bhawalkar Vermitech Pvt. Ltd., situated at A1, Padma Park, Behind Padmavati Temple, Pune-411 009, prays for determination of the rate of tax on 'BioSanitizer Eco-chips' sold through invoice no.701 dt.28.09.2013.

02. FACTS & CONTENTION

The applicant informs that the BioSanitizer Eco-chips are sold in the form of solid chips (3-4 mm size, about 1-2 mm thick). It is the claim of the applicant that the impugned product is a 'seed'. The applicant has submitted an extract of the paper presented at the UNICEF-supported SACOSAN III, the Third South Asian Conference on Sanitation, November 18-21, 2008 Delhi to show that performance of BioSanitizer is like that of seeds only. The application gives information about the product thus :

"Seeds produce plants that have positive impact on the environment, in the sense that plants convert inorganic pollution, carbon dioxide and heat into organic molecules and oxygen.

- *Just like farmers buy new seeds and can grow plants year after year, these seeds(BioSanitizer) are purchased by farmers and also by urban people and industries, to tackle inorganic pollution, greenhouse gases and heat and the product works year after year. It is not consumable like most of the products in the market.*
- *This product received Bry-Air award for innovation because it could tackle salts, greenhouse gases and heat in the cooling towers.*
- *DST(Dept of Science & Technology), which is the apex technical body of our country, produced a 20 min video film on this product and screened it on DD National couple of times. This shows how Indian government has supported this technology.*

International agencies such as UNICEF, UNEP, USEPA and World Bank are supporting this technology. We should feel proud that such a promising technology "

Certain paper slides giving information about the product are reproduced verbatim thus

*"Growing Invisible Plants Using BioSanitizer Ecochips
Limitations of present seeds*

- *Need space, knowledge, human time, interest and finance (for fertilisers, pesticides, irrigation, etc.). Hence plants are not grown in cities though pollution (food for plants) is there.*
- *Farmers sow monoculture crops that are against laws of Nature. They create pollution of groundwater and surface water bodies.*

Need for New Seeds

- *New seeds should grow without human inputs of time, interest, knowledge and money.*
- *Should occupy no space because space is short in cities.*
- *BioSanitizer Ecochips are such seeds of invisible plants that grow on their own.*
- *They grow using only pollution and create ambiance that helps growth of normal plants.*

BioSanitizer Ecochips

- *100 mg of BioSanitizer Ecochips=1 acre of natural forest, in terms of action on pollution*
- *Converts pollution into organic molecules and oxygen, using no human inputs.*
- *1,000 times faster than current seeds.*
- *Can grow in harsh conditions of industrial pollution, too.*
- *Farmers, urbanites and industries can use them, to tackle pollution.*

BioSanitizer Ecochips

- *Soil BioTechnology(SBT) was developed by Dr Bhawalkar at IIT Bombay, in 1992. Received 2 Indian and 2 US patents.*

- Demonstrated Zero Discharge Pollution Control on several large scale projects.
- Converted this SBT into compact ecochips in the past 17 years, like the computer industry.
- 1 acre of SBT= 100 mg of BioSanitizer Ecochips
- BioSanitizer Mechanism*
- Harmful salts, GHGs and heat are used as raw materials, to produce useful organics and active oxygen.
- Active oxygen cracks toxic organics, produce useful organics.
- One gets crisp forest air and healing water coming through forest stream, rich in minerals helping growth of real visible plants.

Applications

- Borewell water treatment
- Use of brackish and saltwater for agriculture and industries.
- Greywater/wastewater treatment, automatic
- Garbage stabilization, automatic
- Air quality enhancement, automatic
- Remediation of odour-pathogens-pests
- Auto-growth of useful plants, reduction of weeds

Appreciated and encouraged by

- IIT Bombay, Kanpur, Delhi, Roorki, Guwahati
- CPCB, MoEF, DST
- Regional Pollution Control Boards
- UNICEF, UNEP, World Bank, USEPA
- Received Bry-Air Award instituted by HVAC(Heating, Ventilation and Air Conditioning) industry, for 'Best product Design'."

Prior to taking up the case for hearing, when the applicant was queried as to whether the impugned product can be used for sowing as a natural seed, it was informed thus -

- "Bio Sanitizer Eco-chips are seeds of forest. When used (sown or kept) in any polluted medium, it grows invisible forest. This seed was available naturally when rivers were clean and flowing round the year. We have to supply now the Bio Sanitizer Eco-chips to clean the rivers, ponds, lakes, wells, borewells. Etc. and then use this water to clean soil, food and air. This helps clean human body and mind and builds culture, reducing the crime. Pet animals also get benefits but pests and pathogens get reduced automatically.
- Bio Sanitizer Eco-chips grow invisible forest (mixed biodiversity of plants) without any human inputs such as fertilizers, tillage, pest control and irrigation and speed can be 100 times faster than natural visible forest.
- Mixed forest actually produces water in quantity more than what they need. Natural biodiversity-rich forests are thus, net producers of water and this fact used to keep our rivers flowing round the year.
- Man-made forests, plantations or agriculture on the other hand, are net consumers of water. This is why agricultural water demand is so high puts heavy demand on our water reserves.
- We can generate water in the soil by using these Bio Sanitizer Eco-chips, by sowing them in all polluted soils, also polluted waters, air and gases.
- Seed is device to grow plants. Bio Sanitizer belongs to the category "seeds of all types". They are man-made but the natural seeds were working in the past. We have only repaired them because they became slow in the recent past. Hence they can be classed as natural seeds that have been discovered by Dr. Uday Bhawalkar.....
- Plants carry several functions such as reduction of salts (pollution) and warmth from soil, water and air and produced organic molecules and oxygen. Bio Sanitizer acts as seed of invisible plants that also carry out these functions but without human efforts and high speed. Ancient India agriculture also needed less human efforts and cost. Hence, it created Indian culture where farming was pleasure and produced rewards. Bio Sanitizer Eco-chips technology has potential to make farming more lucrative by reducing the input cost and producing better quality produce at higher profit. This can restore ancient Indian glory."

03. HEARING

The case was taken up for hearing on dt.03.09.2014 when Dr. Uday Bhawalkar (Director), Sh. J. B. Joshi(STP) & Sh. Deepak Gosavi (Accountant) attended the hearing. The information about the product is given thus :

- The product is in the form of a chip. It is manufactured thus : Mixed plant enzymes are extracted, combined and fixed on support material such as activated carbon chips. Because of mixed plant enzymes, the above chip

- which is called as 'Bio sanitizer eco chip, acts as seeds of forest.
- Use - The above chips are placed in polluted liquids, gases or air. (Liquids → water, milk, edible oil, petrol, diesel, etc.), (Gases → LPG), (Air → open polluted air)
- Working mechanism
 1. Invisible plants start growing in any polluted medium (the product to be used effectively has to be used in polluted medium).
 2. These plants convert pollution into resources convert pollution into resources like the plants do in nature.
 3. Though the plants are invisible, their action of depleting, their action of depleting salts, carbon dioxide, heat and producing organic molecules which can be food, fuel/medicines/oxygen.
 4. The plant action is measurable by instruments & scientific papers are provided. e.g whether the salts, carbon dioxide, heat has been reduced.
 5. The chips are insoluble and the action is sustainable. It's a one-time purchase and gives effect till eternity.
- Presently the product is purchased by
 1. Farmer → to clean well, borewell
 2. Urbanites → to clean borewells
 3. Industries → to clean borewells

It is claimed that once the water is cleaned using this chip, the same remains clean forever inspite of contamination.
- The product doesn't get dissolved or spoilt & its properties remain the same. Hence, it is claimed as a seed. Conventional activated carbon gets saturated, contaminated & has to be thrown because it doesn't have the seed action of the impugned product.

In view of the above & the submission given alongwith the application, it is claimed that the product is covered by the schedule entry A-41 which is for "seeds of all types". Since it was seen that the impugned product is used to reduce pollution or has a cleaning effect, it was enquired as to whether the applicant has claim as regards any other schedule entry. It was submitted that the impugned product cannot be covered by the schedule entry C-34 which is for "Fertilizers including biofertilisers, insecticides, pesticides, fungicides, weedicides, rodenticides, herbicides, antispouring products, plant growth promoters or regulators and micronutrients but not including disinfectants.". The reason cited is as the above products of entry C-34 have a short life and are to be purchased repeatedly whereas the impugned product has a long life because of production of organic molecules that has organic fertilizer & pest control effect. The applicant submitted that if the contention of the impugned product being a 'seed' is not acceptable, the order be given prospective effect & the past liability be protected.

During hearing, the applicant was asked regarding the composition of the impugned product so as to be able to classify the product under the MVAT Act,2002. The replies of the applicant, to the extent related to the question, as reproduced from the e-mails of various dates, were thus -



- 'What is Seed? Seed is a dormant program that gets activated when placed in the correct conditions of pollution. Plants emerge out of seeds and play their role of converting pollution into prosperity(food, fuel, herbs and industrial raw materials) and clean ambiance(water and air). Each seed can germinate and grow only in specific band of pollution. Modern agriculture uses urea to first create pollution and then use water to adjust the pollution band specific to the commercial plants. This is the source of pollution because 70% of urea gets wasted in surface and groundwater. Urban centers are able to get relatively clean water from dams that are ecologically and economically costly. But farmers are forced to use polluted water and there are no simple, cost-effective methods available for treating the polluted river and groundwater.'
- *BioSanitizer Ecochips:* These provide invisible plant biodiversity and farmers can shift to old method of agriculture that was low-input sustainable agriculture that produced prosperity without irrigation.
- *Using BioSanitizer Ecochips:* These can remain dormant (like seeds) during storage and transport to the user. Specific seeds grow in specific conditions and medium (soil, water or air), but BioSanitizer Ecochip can work in any polluted medium (soil, water, other liquids, gases and air). Like seeds become plants that produce many seeds which ensures continuity of plants, BioSanitizer Ecochips also provide continuity because invisible plants grow in polluted media till the pollution lasts. Fortunately pollution supply is abundant today because of urbanites and industries. Best benefits come by using BioSanitizer Ecochips in fluids (liquids, gases or air) where pollution

can diffuse in faster and resources can also scatter faster. Hence BioSanitizer Ecochips are placed in wells/borewells or any other source of water(water tank) and the corrected water is then used for cleaning the soil, garbage, solid fuels, etc. This works only because BioSanitizer Ecochips are able to grow in polluted fluids. This is also a proof of the claim that BioSanitizer Ecochips act as seed.

- Not just clean but everlasting cleanliness is created by BioSanitizer Ecochips. Old Ganga water did have a unique property of remaining clean in spite of bathing of people who crowd to wash their sins(means pollution) into Holy Ganga. BioSanitizer Ecochips produce clean Ecowater that resists recontamination from chemicals or pathogens. Ecowater also shows no signals of pollution such as scale, corrosion, aquatic weeds, biofouling and breeding of pathogens/pests. We thus need no toxic chemicals to kill the pests that are actually the sanitary inspectors of nature. We thus can create holy Ganga water in all the rivers and other water bodies. Cleaning of Ganga cannot be achieved unless this Ganga-Jal principle is understood. Most of the imported technologies do no cleaning, but only shut-up the signals of pollution. This is why malaria/dengue mosquitoes breed in clean tapwater and rainwater that has silent pollution(of nitrates) but appear to be clean only because there are no signals that can appeal to human eyes, nose or tongue.
- How BioSanitizer Ecochips were created? BioSanitizer reaction is a healing reaction that worked in India for 10,000 years and created prosperity and rich culture(except the past 1,000 years when this reaction got spoiled gradually). BioSanitizer reaction, thus is a discovery(not an invention). Discovery also implies that the reaction has been tested for 10,000 years and there are no side-effects, only builds prosperity and rich culture. Compact form of BioSanitizer Ecochips is an invention because this compact form is created by Dr Uday Bhawalkar after his education(BTech and PhD from IIT Bombay, Dept of Chemical Engineering), learning from Nature for 36 years and tour to 12 countries to learn and spread this new advanced knowledge. Now we can export the compact invisible forest all over the world, get back all the dollars we sent abroad in the past, reduce unnecessary imports and become prosperous again. It is also our duty to spread this knowledge and tool(BioSanitizer Ecochips) all over the world to clean their environment and minds that create terrorism, crime and burning problems of modern civilization.
- Protection of IP: This technology is a creation of IIT Bombay in the sense that though it was conceived and practiced since 1981 by Uday Bhawalkar on his farm, it developed and matured by developing its theory during his association with IIT Bombay for his PhD(1986-1997) program. His PhD thesis gives the theory of BioSanitizer though the term BioSanitizer was coined by Dr Uday Bhawalkar much later, in the year 2000 when he was invited by UNICEF to USA and gave a seminar at the R&D center of US-EPA, the highest technical body that works to protect pollution in urban centers, industries and agriculture. IIT Bombay has created 2 Indian and 2 US patents where Uday Bhawalkar is one author(other are his Professor and a junior colleague who got second PhD in this technology of Soil Biotechnology, or SBT). Again the term BioSanitizer does not appear in the patent documents, but the concept is there. The technology was bulky then and what is compact(100 mg) today, was quite bulky(1 ton) then. Again patent document is always drafted not to teach the technology, but to protect the technology against unauthorized imitation that also can create hazards because of lack of understanding.....
- Applications of Biosanitizer Ecochips: Include sustainable cleaning of soil, garbage, water, food, edible oil, milk, juices/beverages, herbs, timber, firewood, coal, petrol, diesel, LPG, CNG and all sort of natural and industrial pollution, converting pollution into resources. When all these are cleaned, human body and mind also gets cleaned and all vices(bad habits) get cured and man becomes healthy, creative, prosperous and happy. Modern Weapons of Mass Destruction(WMD) create severe pollution(nuclear, chemical or biological) that can be nullified by using BioSanitizer at all possible places of pollution and keeping the city prepared for disasters(natural or man-made) . We can also stop all our imports of crude oil by converting salts, greenhouse gases and heat into fuel. There is no shortage of salts, greenhouse gases and heat. All these applications have been demonstrated on large scale and the country is planning to declare the technology on a wider scale at the right time. May be the right time has come and MahaVat can contribute by appreciating the technology created in this soil.....
- What is a composition of BioSanitizer?
There is no man-invented formula that produces BioSanitizer. It is not just a physical mixture whose formula can be given.



BioSanitizer reaction worked in Indian water bodies(rivers, lakes and also groundwater) for the past 10,000 years, but got spoiled during the past 1,000 years. It got developed eco-logically but got spoiled because of nitrate-pollution of rain, that is in turn, due to increase in the GreenHouseGases(GHGs) in the air due to burning of polluted fossil fuels. Use of urea in modern agriculture also spoiled the BioSanitizer reaction further. Rivers originate from forests. Rain brings signatures of diverse plant enzymes into the river. Forest has no specific formula but the plants grow eco-logically in a need-based manner. Each river has specific band of plant enzymes and this band gives specific culture to the places along the river. Places that are near the origin of any river, for example, Pune-Nashik- Wai, have unspoiled quality of BioSanitizer and this is why such places become center of learning and teaching.

When 2 or more rivers unite, we get broadband BioSanitizer effect. I learnt all this only by learning from Indian tradition of flocking at confluence of 2 or more rivers/seas.

Ganga had holy effect, but not Yamuna and other rivers. Ganga has many tributaries that originate from Himalaya and give holy properties due to broadband effect. Yamuna has no such tributaries.

Eco-Logic that was behind this natural BioSanitizer, was conceived by Dr Uday Bhawalkar in his PhD thesis that

was submitted to Dept of Chemical Engg of IIT Bombay in 1997. This PhD was based on 24 years of research done by Uday Bhawalkar 'in collaboration with nature' that has evolutionary experience of 460 Crore years. This PhD also produced 2 Indian and 2 US patents. Though the term BioSanitizer does not appear in the PhD thesis and the patents, the concept of biological sanitation is there throughout. The term BioSanitizer was coined later in the year 2004.

- **Why Indian agriculture was productive for 10,000 years and why farming is no more productive and profitable today?**

Indian prosperity and culture developed due to healthy nature and agriculture, rich in BioSanitizer reaction. Even while BioSanitizer reaction started getting spoiled during the past 1,000 years, farmers started mixed farming and tide over lack of BioSanitizer.

Mixed farming involves sowing a seed mixture in each plot. Seed mix got developed by intuition and trial and error. This farming allowed higher biodiversity and this reduced use of external inputs such as cultivation, fertilizers, pesticides, human/animal labour and irrigation. This made farming profitable and also produced high quality food that built rich culture.

Modern farming that developed in the West, used machines to harvest the crop and this required sowing of monoculture crops. It developed dependence on external inputs and reduced profit.

- **What is the remedy for this AIDS(AID Syndrome) in Indian agriculture?**

Use of BioSanitizer can provide invisible plant biodiversity. Then farmers can continue to grow monoculture commercial crops and also reduce the input cost and get higher profit. This will give purchasing power to vast Indian population and create demand for industrial goods. Maharashtra State can thus get more revenue by promoting BioSanitizer by declaring it as a 'seed of forest'.

- **How can one understand and appreciate the seed action of BioSanitizer?**

Seed is a natural program that starts growth and multiplication action when kept in proper environment(pollution that can be regulated by soil, temperature or irrigation). Each seed needs distinct band of pollution. This is why a mixture of seeds can be grown more easily than single seeds.

BioSanitizer has broadband(diverse seed action) capability and works in diverse bands of pollution of soil, water, air or any other medium.

One can measure the seed-action of Biosanitizer by its function, that is by observing reduction in three forms of pollution(salts, GHGs and warmth) and production of organic molecules and oxygen. This has been done and presented in a UNICEF-invited paper, that is available at the website as a 'Lead Paper'. Please also see the 'Lead Poster' and 'Lead Article'.

BioSanitizer can be used to control industrial pollution, urban pollution and also pollution in modern agriculture. This method also increases profit because BioSanitizer converts 'pollution into resources', unlike other methods that only separate/concentrate the pollution and throw it away. It comes back later in the form of toxic rain or toxic surface and groundwater.

- **What is the best application of BioSanitizer?**

Global warming, climate change are being talked for many years but no remedy is there. This is why US is not ready to accept reduction in GHGs saying this will harm their economy further.

But use of BioSanitizer actually increases profit. It also gives remedy to salt problem that is there but not well discussed. BioSanitizer can use waste flyash or abundant seawater and produce biofuel, making India rich by saving import of oil worth 2 lakh crore each year. 1 \$ can soon become equal to 1 Rs!

- **Safety Certification of BioSanitizer** - BioSanitizer is not consumed. So food and drug considerations do not apply to BioSanitizer. It is a water purifying machine that purifies water but does not throw away the pollution (like filters). Instead of shifting the pollution, pollution is utilized as free raw materials and converted into resources, like green plants. It tackles all sort of pollution that has no remedy, otherwise. So discussing its safety is absurd.

And if the law is really worried about toxicity, it should ban all other water purification methods because they do not clean water. They only shut up the pollution signals by making water more toxic, by adding alum and chlorine, for example. Nature gives no signals at very pure and also at highly polluted conditions. BioSanitizer cleans water ecologically and the pollution signals stop. Other methods increase toxicity to stop the signals. Malaria or Dengue mosquitoes breed in such dangerously 'clean' water, such as rainwater or tap water. Best test for truly clean water is that it resists scaling, corrosion and breeding of pathogens/pests.

- **BioSanitizer Ecochips are 'Seed of invisible plants' from following considerations:**

- Diverse forms of pollution get converted into measurable resources at high speed, without human help.
- Improved ambiance triggers growth of new plants on barren wasteland and also crops of farmers, also without human help. And signals of pollution, such as odour, pathogens, pests and human crime get controlled automatically through root cause correction. Man becomes sensible and creative.
- This was the basis of rich Indian culture and prosperity till the year 1400. This prosperity reaction got spoiled later in a gradual manner.
- Now the improved prosperity reaction will sustain if BioSanitizer Seeds are deployed to tackle modern high strength pollution that otherwise has a potential of destroying human race totally.

- While announcing that the category 'Seeds of all types' to this product, just saying 'BioSanitizer' will not be proper. Instead terms 'BioSanitizer Ecochips' or 'BioSanitizer Seed' may be used. Reason is though I was first in the world to coin and use the term 'Biosanitizer', other people have started using the term 'Biosanitizer' for consumable chemicals that help in chemical cleaning. Toxic products such as phenyl or sodium hypochlorite or

other chlorine products are also being termed as 'Biosanitizer'. There are also bacterial products used in sanitation. These are consumed and do short term sanitation and do not produce resources. These do not act as seed and do no long term plant activity. They do chemical cleaning (poison the bugs and germs that are income tax officers of Nature). BioSanitizer Ecochips, on the other hand, act as seed of diverse mixed plants. This is based on fact that:

- 'Only plants help in true cleaning or sanitation'. They convert pollution into resources.
- No chemicals or filters do cleaning. They only shift pollution or increase pollution to kill pathogens/pests.
- I suppose the question whether BioSanitizer Ecochip is a novel seed can be decided by verifying whether it acts as a seed. Its formula and production process should not be considered. Also I have stated in my reply (Note 2) that there is no man - invented formula that produces BioSanitizer. This technology also purifies mind and does not permit me to give you some false formula that will not work. But spurious products may come and spoil the market.

1. Seed is alive and produces one plant that grows and produces multiple seeds. Plants convert 3 forms of pollution into 2 resources. This is shown by BioSanitizer Ecochip. It starts growth of invisible plants in any polluted medium and produces same resources, like plants. The cleaned medium also has seed properties and can be used elsewhere. In fact, farmers, urbanites and industries are using the second generation seeds (the cleaned medium) to clean other media.

2. Seeds can be kept dormant until used in the soil. BioSanitizer Ecochip also has this feature. Cleaned medium also can be stored and used anytime later.

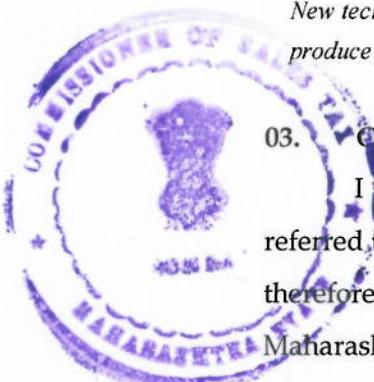
3. 'Seeds of all type' includes modified seeds such as GMO seeds or terminator seeds that have to be purchased by farmers each year. This gives extra profit to foreign seed companies, but puts extra burden on farmers. Traditional seeds can be nurtured by farmers for thousands of years. In fact, they can get improved each year when a farmer selects healthy seeds, preserves them for next year's seed and sells balance for consumption. BioSanitizer Ecochip also improves its performance as seed with time, like traditional seeds.

BioSanitizer composition cannot be stated because it gets upgraded each week in my lab. The improvements are not done by me (man) but by natural wisdom decided by Eco-Logic. Raw materials that go in, without any formula, are diverse waste plant materials that are available in my home and garden. I also use Pune city tap water that supplies various plant enzymes coming from upstream communities and forests. Earlier plant enzymes also multiply using the pollution. BUT ACTUAL FORMULA IS DECIDED BY ECO-LOGIC AND NOT BY ME. Actual quantities of each plant enzymes are often in minute quantities and cannot be measured by conventional methods, like Homeopathic products. Also earlier enzymes continue to multiply and assimilate new plant enzymes automatically in the proper composition, so as to increase efficacy and speed.

More important than the formula is the theory behind it (supported by Eco-Logic developed by Dr Uday Bhawalkar and discussed in the PhD thesis). This ensures quality, consistency and improvements in the technology.

New technology can be appreciated by new theory and norms of old technologies (such as using a fixed formula to produce anything) cannot be applied to new technology."

03. OBSERVATIONS



I have gone through the facts of the case. The product put up for determination is referred to as 'BioSanitizer Eco-chip'. It is the claim of the applicant that the same is a 'seed' and therefore falls in the schedule entry A-41 for "seeds of all types" as appearing in the Maharashtra Value Added Tax Act,2002 (MVAT Act,2002). The said entry reads thus : "Seeds of all types excluding seeds to which any other entry of schedule 'C' applies.". Since the product is in the form of a chip, I have, first, to ascertain whether the impugned product could be referred to as a 'seed'. For deciding the same, I would refer to the nature of the impugned product as understood from the exhaustive submission tendered in this regard -

- The product is in the form of a solid chip.
- Though the composition of the product is not specifically given, it has been informed that the 'BioSanitizer Eco-chip' consists of extracts of mixed plant enzymes fixed on a support material, the activated carbon chip.
- The chip can be placed in polluted liquids, gases or air.
- The product works year after year. It is not consumable.

- The product is purchased by farmers, urbanites and industries to clean wells, borewells, to tackle inorganic pollution, greenhouse gases and heat.
- Applications
 - a. Borewell water treatment
 - b. Use of brackish and saltwater for agriculture and industries.
 - c. Greywater/wastewater treatment, automatic
 - d. Garbage stabilization, automatic
 - e. Air quality enhancement, automatic
 - f. Remediation of odour-pathogens-pests
 - g. Auto-growth of useful plants, reduction of weeds

An overview of the above information makes me observe that the impugned product appears to be a product used to deal with and/or avoid pollution and hence, is manifestly used by the customers to treat pollution. The applicant states that -

“....Like seeds become plants that produce many seeds which ensures continuity of plants, BioSanitizer Ecochips also provide continuity because invisible plants grow in polluted media till the pollution lasts. Best benefits come by using BioSanitizer Ecochips in fluids(liquids, gases or air) where pollution can diffuse in faster and resources can also scatter faster. Hence BioSanitizer Ecochips are placed in wells/borewells or any other source of water(water tank) and the corrected water is then used for cleaning the soil, garbage, solid fuels, etc. This works only because BioSanitizer Ecochips are able to grow in polluted fluids. This is also a proof of the claim that BioSanitizer Ecochips act as seed.”

I would certainly be referring to the meaning of a 'seed' but, for the present, I have to observe that the above information about the impugned product being used to tackle problems related to pollution does not seem to fit in with the general understanding of a seed that we are familiar with. It is tried to emphasize that while in the process of cleaning the polluted medium, invisible plants are created. The issue at hand does not call upon me to enter into any exercise of ascertaining the correctness of any of the claims made in respect of the impugned product. The basic quality of a 'seed' is germination and reproduction. When sown, it ceases to remain the seed as such and grows, rather outgrows into a flower, fruit, plant, tree, etc. Whereas the impugned product remains as it is for years. It is further informed that the impugned product grows invisible forests when kept in any polluted medium. There is no reproduction from the chip as it remains the same but the applicant tries to convey that the effect of implanting the chip in a polluted medium results in growing of invisible forests. It is also informed that the impugned product is used -

- for cleaning of soil, garbage, water, food, edible oil, milk, juices/beverages, herbs, timber, firewood, coal, petrol, diesel, LPG, CNG and all sort of natural and industrial pollution, converting pollution into resources.
- is a water purifying machine that purifies water but does not throw away the pollution (like filters). Instead of shifting the pollution, pollution is utilized as free raw materials and converted into resources, like green plants. It tackles all sort of pollution that has no remedy, otherwise.

The product characteristics could be understood if we look at some of the points from the extracts of the paper submitted by the applicant :

“Nature knows better how to keep the water sources clean and nourishing. Our traditions, also could maintain their water sources for the past 10,000 years. Water quality problems and water scarcity-both are due to pollution of air, caused by increase in the use of fossil fuels. This produces rain with nitrates and acidity. This pollutes the surface water bodies and also the groundwater. Agrochemicals also leach into the ground and surface water and add to the pollution.

Bhawalkar Ecological Research Institute (BERI), Pune has been researching all these aspects over the past 36 years and has developed an 'Eco-Logic' of waste prevention and in fact, of converting waste into resources using the BIOSANITIZER Ecotechnology.

.....
BIOSANITIZER Ecotechnology has been developed over a period of 36 years, to arrive at an eco-friendly solution to this challenge. It applies to all sorts of waste, chemical/biological, organic/inorganic or solid/liquid/gaseous wastes, too. This approach involves tackling the root cause that produces the waste, in the first place.

.....
BIOSANITIZER Mechanism:

BIOSANITIZER Ecotechnology involves using the BIOSANITIZER bio-catalyst granules in fluids (liquids and gases) and using the remediated fluid as a resource for healing the ecosystem.

BIOSANITIZER granules convert polluted water into clean water, which also becomes a resource for eco-logical restoration of wells, borewells, water storage, tanks, ponds and lakes. This action can be summarized as follows:

- Pollution problems arise due to nitrates. Hence nitrate management is crucial. Low-nitrate system develops self-healing ability. Inorganic as well as toxic organic pollutants get converted into resources, in low-nitrate systems.
- Conventional denitrification technique consumes organic food and oxygen, to produce CO₂ and waste heat. Nature prefers another reaction, i.e., combining nitrates, CO₂ and waste heat to produce organics and oxygen. Green plants and also the BIOSANITIZER use this reaction. It is a resource-generating mechanism, while conventional denitrification is a wasteful reaction. Hence there are alarms associated with the conventional denitrification process.
- BIOSANITIZER is a natural catalyst; 100 mg of this product has the capacity of 1 acre of rich natural forest, in terms of its nitrate utilization, CO₂ trapping and oxygen production ability.
- By adding BIOSANITIZER in a stream or a reservoir of polluted water, we get not only clean water, but the treated water has a potential to clean the whole ecosystem, without producing any other waste stream and without producing greenhouse gases. In fact, the treated water starts absorbing the CO₂ and NO_x from the air, thus helping ease the pollution that has increased by about 25% after we started using the fossil fuels.
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The product description as above and its uses conform to one being used to alleviate the effects of pollution. It is basically presented as being used because of its cleaning properties. All the above uses don't conform to the 'seed' as is commonly known. My concern is restricted to ascertaining whether the BioSanitizer Eco-chip could be called a 'seed' and I would restrict my observations thereto. We have seen above as to what is understood by the impugned product. Let me now refer to the meaning attributed to a 'seed' thus -



In terms of plant biology, a seed as generally understood is the *unit of reproduction of a flowering plant, capable of developing into another such plant*. As per the Concise Encyclopedia on [merriam-webster.com](http://www.merriam-webster.com),

'seed' is the reproductive structure in plants that consists of a plant embryo, usually accompanied by a supply of food (endosperm, which is produced during fertilization) and enclosed in a protective coat. In typical flowering plants, seed production follows pollination and fertilization. As seeds mature, the ovary that enclosed the ovules develops into a fruit containing the seeds. Most seeds are small, weighing less than a gram; the smallest contain no food reserve. At the opposite extreme, the seed of the double coconut palm may weigh up to about 60 lb (27 kg). Seeds are highly adapted to transportation by animals, wind, and water. When circumstances are favorable, water and oxygen penetrate the seed coat, and the new plant begins to grow. The longevity of seeds varies widely: some remain viable for only about a week; others have been known to germinate after hundreds or even thousands of years.

The Wikipedia explains the seed thus :

"A seed is an embryonic plant enclosed in a protective outer covering called the seed coat, usually with some stored food. It is a characteristic of spermatophytes (gymnosperm and angiosperm plants) and the product of the ripened ovule which occurs after fertilization and some growth within the mother plant. The formation of the seed completes the process of reproduction in seed plants (started with the development of flowers and pollination), with the embryo developed from the zygote and the seed coat from the integuments of the ovule. Seeds have been an important development in the reproduction and spread of gymnosperm and angiosperm plants, relative to more primitive plants such as ferns, mosses and liverworts, which do not have seeds and use other means to propagate themselves. This can be seen by the success of seed plants (both gymnosperms and angiosperms) in dominating biological niches on land, from forests to grasslands both in hot and cold climates.

The term "seed" also has a general meaning that antedates the above—anything that can be sown, e.g. "seed" potatoes, "seeds" of corn or sunflower "seeds". In the case of sunflower and corn "seeds", what is sown is the seed enclosed in a shell or husk, whereas the potato is a tuber.

Many structures commonly referred to as "seeds" are actually dry fruits. Plants producing berries are called baccate. Sunflower seeds are sometimes sold commercially while still enclosed within the hard wall of the fruit, which must be split open to reach the seed. Different groups of plants have other modifications, the so-called stone fruits (such as the peach) have a hardened fruit layer (the endocarp) fused to and surrounding the actual seed. Nuts are the one-seeded, hard-shelled fruit of some plants with an indehiscent seed, such as an acorn or hazelnut."

Since the MVAT Act,2002 does not have a definition of 'seed', it would be useful to refer to the definition of 'seed' as per the other enactments concerned with regulating the production, distribution and sale of seeds :

Seeds Act,1966

*"seed" means any of the following classes of seeds used for sowing or planting—
(i) seeds of food crops including edible oil seeds and seeds of fruits and vegetables;*

(ii) cotton seeds;

(iii) seeds of cattle fodder;

and includes seedlings, and tubers, bulbs, rhizomes, roots, cuttings, all types of grafts and other vegetatively propagated material, of food crops or cattle fodder;

Seed Bill, 2004

"seed" means any type of living embryo or propagule capable of regeneration and giving rise to a plant of agriculture which is true to such type;

There are provisions under the Seed Act,1966 whereby the Central Government specifies the minimum limits of germination and purity with respect to any seed of any notified kind or variety. There is also a seed certification agency. Further, there is also a provision such that no person shall carry on the business of selling or supplying any seed of any notified kind or variety unless such seed is identifiable as to its kind or variety, conforms to the specified minimum limits of germination and purity and complies with such other requirements as may be prescribed. Apart from the provisions and responsibilities cast by the statute, what should be seen is that the definitions refer to the seed as one which is used for sowing or planting so as to multiply species of its kind. In so reproducing, it doesn't remain the seed which was planted or sown but gets transformed into the next process of the reproduction cycle. I need to mention herein that even by Trade Circular No.12T of 2005 dt.07.06.2005, it was clarified to the Trade that all types of sowing seeds are covered by the scope of the impugned entry. The present product with its composition of plant enzymes on an activated carbon chip doesn't fulfill any of the parameters of a 'seed' as is normally understood. Activated carbon, also called activated charcoal, activated coal, or carbo activatus, is a form of carbon processed to have small, low-volume pores that increase the surface area available for adsorption or chemical reactions. Activated carbon is used in gas purification, decaffeination, gold purification, metal extraction, water purification, medicine, sewage treatment, air filters in gas masks and respirators, filters in compressed air and many other applications. From the extracts of the paper submitted by the applicant, it can be seen that the present product finds application in *purification of water, sewage treatment, Garbage Composting Units, Biomedical or hospital waste, Rainwater Harvesting and Flood Control*. An idea of the product could be had from an useful reproduction of the '*Concluding remarks*' of the said paper :

"Drinking water needs to have high standards of quality. The availability to all is also important. BIOSANITIZER Ecotechnology can help us achieve both the objectives.

BIOSANITIZER-treatment should be the first action because it converts all the pollutants into resources; the useful
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components are also conserved. There is no production of a reject stream during the water treatment if BIOSANITIZER is used.

Recovery of dilute streams provides the drinking water of right quality. This can be through use of artificial membranes or simply, by using the plant root membranes (phytoremediation). Choice is ours, but the natural root membranes need no repairs, maintenance and replacement hassles and also trap the greenhouse gases, to produce food-fuel-fiber-fertilizer, etc. for us..."

It can be seen that the applicant seeks to address pollution by using the plant enzymes.

Phytoremediation is the treatment of environmental problems (bioremediation) through the use of plants that mitigate the environmental problem without the need to excavate the contaminant material and dispose of it elsewhere. It consists of mitigating pollutant concentrations in contaminated soils, water, or air, with plants able to contain, degrade, or eliminate metals, pesticides, solvents, explosives, crude oil and its derivatives, and various other contaminants from the media that contain them. Phytoremediation refers to the natural ability of certain plants called hyperaccumulators (a plant capable of growing in soils with very high concentrations of metals, absorbing these metals through their roots, and concentrating extremely high levels of metals in their tissues) to bioaccumulate, degrade, or render harmless contaminants in soils, water, or air. A range of processes mediated by plants or algae are useful in treating environmental problems:

- *Phytoextraction — uptake and concentration of substances from the environment into the plant biomass.*
- *Phytostabilization — reducing the mobility of substances in the environment, for example, by limiting the leaching of substances from the soil.*
- *Phytotransformation — chemical modification of environmental substances as a direct result of plant metabolism, often resulting in their inactivation, degradation (phytodegradation), or immobilization (phytostabilization).*
- *Phytostimulation — enhancement of soil microbial activity for the degradation of contaminants, typically by organisms that associate with roots. This process is also known as rhizosphere degradation. Phytostimulation can also involve aquatic plants supporting active populations of microbial degraders, as in the stimulation of atrazine degradation by hornwort.*
- *Phyvolatilization — removal of substances from soil or water with release into the air; sometimes as a result of phytotransformation to more volatile and/or less polluting substances.*
- *Rhizofiltration — filtering water through a mass of roots to remove toxic substances or excess nutrients. The pollutants remain absorbed in or adsorbed to the roots.*

Breeding programs and genetic engineering are powerful methods for enhancing natural phytoremediation capabilities, or for introducing new capabilities into plants. Genes for phytoremediation may originate from a micro-organism or may be transferred from one plant to another variety better adapted to the environmental conditions at the cleanup site.

[Source : Wikipedia]

The above application of plants to combat pollution cannot be equated with the 'seed action' of germination and reproduction. In view thereof and despite the extensive submission and arguments intended to draw a parallel between the impugned product and a 'seed', I am constrained to observe that the impugned product is not a 'seed' as understood for the purposes of the schedule entry A-41 of the MVAT Act,2002. There is no other specific schedule entry under which the impugned product could be said to be covered. For reasons therefore, the product 'BioSanitizer Ecochip' finds placed in the residuary schedule entry E-1 of the MVAT Act,2002, thereby taxable @12.5%.

05. PROSPECTIVE EFFECT

The applicant has prayed for prospective effect to the determination order. We have

seen above that the impugned product 'BioSanitizer Ecochip' is not a 'seed' as generally understood. Both the 'seed' as well as the 'BioSanitizer Ecochip' are distinct products. Therefore, to classify the 'BioSanitizer Ecochip' as a 'seed' is an attempt to forcibly correlate the two things. The applicant should have realized that attempts to stretch for any similarities would not succeed. There was no ambiguity or any scope for confusion or any interpretation issues. Further, there wasn't any statutory misguidance. In view thereof, the applicant has not made out a case for favourable consideration of the request for prospective effect. In view thereof, I am not inclined to accept the request for prospective effect.

06. In view of the deliberations held hereinabove, I pass an order thus -

ORDER

(under section-56(1)(e) and section-56(2) of the Maharashtra Value Added Tax Act, 2002)

No.DDQ-11/2014/Adm-6/2/B- 4

Mumbai, dt. 21/11/14



The product 'BioSanitizer Eco-chips' sold through invoice no.701 dt.28.09.2013 is not a 'seed' as understood for the purposes of the schedule entry A-41 of the Maharashtra Value Added Tax Act, 2002.

The rate of tax thereon is 12.5%, being covered by the residuary schedule entry E-1 of the Maharashtra Value Added Tax Act, 2002.

c. *For reasons as discussed in the body of the order, the request for prospective effect is rejected.*

21/11/14
(DR. NITIN KAREER)

COMMISSIONER OF SALES TAX,
MAHARASHTRA STATE, MUMBAI