- Read :- 1. Application dt. 26/01/2005 from M/s. Tilaknagar Industries Ltd. holder of Registration Certificate No. 400020/S/688 under the B.S.T Act,1959 and No. 400020/C/619 under the Central Sales Tax Act, 1956.
 - 2. This office letter dt. 18/09/2007 calling the applicant for hearing on dt. 03/10/2007.
- 3. This office letter dt. 15/10/2007 calling details from the applicant. Heard: Shri R. Y. Sawant [STP] attended the hearing on dt. 03/10/2007.

PROCEEDINGS

(Under section 56 of the Maharashtra Value Added Tax Act, 2002)

No.DDQ-11-2005/Adm-2/81/B-4

Mumbai, dt. 30.11.2007

An application is received from M/s. Tilaknagar Industries Ltd., of Industrial Assurance Building, 3rd Flr., Churchgate, Mumbai requesting determination of the rate of tax applicable to the sale of the product "Maharashtra Organic Fertilizer (manure)" evidenced by the bill no. 9 dt. 0 7/09/2005.

02. FACTS OF THE CASE

The applicant is a registered dealer under the Maharashtra Value Added Tax Act, 2002 for the place of business situated at Mumbai. The applicant is a manufacturer of liquor having Factory and Works at Tilaknagar, C.R. Rly. Station, Belapur, Dist. Ahmednagar, Maharashtra.

The applicant manufactures "Organic Fertilizer" at Tilaknagar, in addition to Liquor. "Organic Fertilizer" is manufactured by using the raw material such as waste known as spent wash (Effluent). The effluent contains organic matter which goes for composting. The byproduct of sugar mills and distillery i.e. pressmud and spentwash is used as raw materials in addition to municipal solid waste, fly ash and sludge. All this goes into composting. The product is sold as "Maharashtra Organic Fertilizer (manure)". In the bill, the applicant has collected VAT tax @ NIL on the sale of the product.

The pamphlet describing the product is in Marathi. The important features of the product as mentioned thereon are as follows:-

- It is an entirely natural fertilizer/manure of the highest quality.
- It improves the physical condition of the soil by replenishing and increasing its humus status.
- It is an essential micronutrient required for crops.
- Its use helps in improving the physical and biological properties of the soil.
- It is useful for all types of crops.
- The micro-organisms contained in the product function in all types of weather

conditions.

- It transforms unfertile lands into fertile ones.
- It protects crops from fungus.
- It increases the germination capacity of the seeds.
- It can be adapted for use upto 5 to 9 PH & can also be put to use in alkaline soils.
- It provides vitamins, enzymes, hormones, proteins, amino acids, etc.

A note on the following is submitted alongwith the application:-

1. COMPOSTING PROCESS 2. RAW MATERIAL 3. SPENT WASH

COMPOSTING PROCESS

Tilaknagar Industries Ltd. has a molasses based distillation plant to produce alcohol, after fermentation of molasses. After distillation, the alcohol is separated. The balance waste is known as spent wash (Effluent). This effluent is fed to Bio-digester and it generates bio-gas. Effluent after bio-digester goes to composting. Effluent contains organic matter.

Composting is the process of converting organic matter into manure. The byproducts of sugar mill and distillery comprising of press-mud and spent wash, which have individually the following characteristics, are used as raw materials for composting.

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Pressmud - N - 1.15% to 3.0%, P - 0.60% to 3.50% and K - 0.3% to 180% Spentwash - N (1200-2500 mg/L.), P (300-2000 mg/L.), K (8000-220000 mg/L.)
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A filling material yard is prepared to store filling material i.e. Pressmud (Sugar factory waste) municipal solid waste, fly ash and sludge from Bio-gas digester. A five acre compost yard is also prepared to process and handling compost material i.e. mixture of 62% - Municipal solid waste, 28% - Pressmud, 7% - fly-ash and 3% - sludge and micro-biological de-composting culture. This combination mixture is put in one wind row and spraying of effluent is done in 1 : 3.5 ratio i.e. 3.5 M 3 effluent is spread on 1 MT OF mixture and this mixture is mixed/aerated by THM-1000 homogenising machine.

The composting is done by making rows of the filling material in compost yard and bio-methanated spent wash is sprayed ion these rows with the help of auto spraying machine. Simultaneously, the process of mixing of filling material with sprayed spent wash is done with the help of Homogenizing machine attached with the auto spray machine. These machines in turn are attached to 75 HP tractors with creepers gears for movement over the row. This mixing is done for aeration purpose and hence this is aerobic treatment. As the composting is done on the surface of the

land, each row is called wind row.

This process of spraying spent wash is done on regular basis for about 40-45 days. After completing this process of 40-45 days, 10-15 days period is given for maturation of compost. This is one cycle of 60 days. After maturation, sieving of compost is done to obtain fine particles. After 15 days maturation period, organic compost is ready for sale. The final product is packed in bags (50kgs each bag). The ready component can also be sold in loose quantity on weight basis in tractor trolleys.

This process is directed by MPCB/CPCB to achieve Zero discharge of distillery effluent.

RAW MATERIAL

A] Filling Material :- The following three items comprise the term 'filling material' :-

1. Press mud: (Sugar Factory Waste) 28%

2. Municipal Solid Waste: 62%

3. Sludge and Fly Ash: 10%

B] Bio-Methanated spent wash: The ratio of filling material to spent wash is 1: 3.5 i.e. 3.5m 3 (3500 litres) of spent wash is sprayed on 1 MT of filling material.

SPENT WASH

The dealer has a molasses based Distillation unit to produce alcohol. The dealer uses molasses for producing alcohol. The molasses are fermented and distilled to get rectified spirit in the primary distillation plant. During the process of distillation, alcohol is separated by passing steam. The left over liquid is called spent wash.

This spent wash is a highly toxic acid and equally pollutant. It cannot be spread on land or left in water as it is because of its toxic nature. The dealer having a distillation unit has to satisfy the Pollution Control Authority (CPCB and MPCB) about the disposal of this substance. Therefore, the dealer treats the spent wash in DIGESTER to obtain Bio-gas. This process is done in the absence of air but in the presence of bacteria, degradation of organic matter takes place and Methane gas is produced which is used in the boiler as a fuel. In this process the pollutants are reduced but not to zero.

Since the pollutants are to be reduced to zero as per the requirement of the Pollution Control Board, it is further treated for composting. In composting process, pollutants are reduced to zero. Thus, two purposes are served by doing composting i.e.

- 1) complying with the requirement of the Pollution Control Board; and
- 2) production of manure by using spent wash.

The applicant is of the opinion that, being 'manure' the product would be covered by the schedule entry 37 of Schedule A of the Maharashtra Value Added Tax Act, 2002 and not by schedule entry 34 of Schedule C of the said Act.

03. CONTENTION & HEARING

In support of his claim that the product is covered by the schedule entry A-37 of the Maharashtra Value Added Tax Act, 2002, the applicant has argued as follows:-

- The impugned product is an 'Organic Manure' prepared by composting the various vegetable and other natural wastes together with the effluent discharged from the applicant's Distillery unit.
- The schedule entry 34 of Schedule C covers all variety of chemical fertilizers and not manures.
- The fertilizer products that are subject to levy of Central Excise Duty have been classified under CETSH 3102.00 to 3105.00 which cover only mineral or chemical fertilizers.
- The impugned product is similar to animal or vegetable fertilizers and hence, could only fall under CETSH 3101.00 that attracts 'Nil' rate of Central Excise Duty. And hence, the product is not being cleared under a Central Excise Invoice.
- The impugned product is sold to the farmers generally in loose condition. Sometimes, it is also being sold in 50 Kg and 2 Kg packing.
- The farmers are using this product in their fields as a natural manure to improve the fertility of the soil.
- It is also known as natural manure in commercial parlance, and perceived as such by the sellers and users.

The case was taken up for hearing on dt. 03/10/2007. Shri R. Y. Sawant [STP] attended the hearing. It was contended that, the applicant is basically a manufacturer of liquor. The molasses are fermented to obtain as follows:-

8% - alcohol - rectified spirit

92% - waste - spent wash

The spent wash so obtained is not used as it is. Methane gas is prepared from the same and the same is used in a boiler as a fuel. It is highly toxic and equally pollutant. The raw materials used in the manufacture i.e filling materials are pressmud, solid waste and sludge. The information as submitted alongwith the application for determination as regards the manufacturing process, raw materials, etc. was reiterated during hearing and hence, the same is not reproduced again.

In short, it was contended that, the product put up for determination is organic manure covered by the schedule entry A -37.

04. OBSERVATIONS

I have scrutinized the facts of the case. The product involved herein is "Maharashtra Organic Fertilizer (manure)". The applicant contends that his product is "Organic manure" covered by the schedule entry A-37 which pertains to Organic manure and not by the schedule entry C-34 which pertains to Fertilizers. Hence, let me reproduce the aforementioned schedule entries:-

A-37	Organic manure excluding oil cakes and de-oiled cakes.	1.5.2005				
		to till date				
C-34	Fertilizers including biofertilisers, insecticides, pesticides, fungicides, weedicides, rodenticides, herbicides, antispouring					
	products, plant growth promoters or regulators, but not including disinfectants.					
C-34	Fertilizers including biofertilisers, insecticides, pesticides, fungicides, weedicides, rodenticides, herbicides, antispouring products, plant growth promoters or regulators, micronutrients but not including disinfectants.					

It can be seen from the above that, if the product is organic manure, it would attract tax @ 0% whereas if it is a fertilizer, then the tax rate thereon would be 4%. The applicant has contended that the product is 'manure' covered by schedule entry A-37. The impugned product is supplied to plants for supply of nutrients which is the function of all- fertilizers, manures , biofertilisers. The apparent similarity in the function of the products ,the fact that they belong to a common category and also that under the VAT Act, 'manures' are tax-free while 'biofertilisers' and 'fertilisers' are taxable @ 4%, it becomes essential that the probable inclusion of the product in all the categories be considered.

Hence, the issue pertains to:

- The exact classification of the product i.e whether a 'fertilizer' or a 'manure'.
- Whether the product is manure covered by the entry A-37.
- If the product is held as organic manure covered by A-37 then, it further needs to be seen whether it is an oil cake or de-oiled cake as the said entry excludes oil cakes and de-oiled cakes.
- Whether the product is a 'fertilizer' covered by the entry C-34.
- If the product is held as a 'fertilizer' covered by C-34 then, it needs to be seen
 - a) whether it is a biofertiliser.
 - b) whether it is a insecticide, pesticide, fungicide, weedicide, rodenticide, herbicide, antispouring product.

- c) whether it is a plant growth promoter or regulator or a micronutrient.
- d) More importantly, whether it is a disinfectant as disinfectants are specifically excluded from the entry C-34.

This is necessary as the entry includes the types at **a** to **c** and excludes **d**. The applicant has not made any claim as regards the product being an insecticide, pesticide, fungicide, weedicide, rodenticide, herbicide or an antispouring product. The product is not advertised as an insecticide, pesticide, fungicide, etc. From the information of the product, as submitted by the applicant, it does not appear that the product is a disinfectant. Hence, the product needs to be tested on the following counts:-

- organic manure
- fertilizer
- oil cake
- de-oiled cake
- biofertilizer
- plant growth promoters or regulators
- micronutrients

The words 'fertilizer' and 'manure' are very often used synonymously. The definition of manure has not been given in the Act. The Webster's Dictionary explains manure as "any natural or artificial substance for fertilizing the soil especially dung or refuse". It is also described as 'excrement, especially of animals or other refuse' used as fertilizers. Other meaning that has been given is 'artificial substance for fertilizing the soil'. The dictionary meaning places emphasis on the natural process which evolves a product useful for fertilizing of the soils. I have already reproduced hereinearlier the manufacturing process, raw materials and uses of the product. I proceed to understand the meanings of the terms on the basis of which the tax rate would be determined. To appreciate the same, I have referred to many educational sites on the Internet for the characteristics of Manure or fertilizer and bio-fertilizer. Let me first see the characteristics of each of categories as follows:

Manure

- Manure: Manure is organic matter i.e. obtained from plant or vegetables.
- It may be green manure or animal manure. Compost is also manure but the main differentiating element is that it is decomposed remnants of organic materials.
- Most animal manure is obtained from animal excrement.

• The word 'organic' generally means that the nutrients contained in the product are derived solely from the remains or a bio product of a organism like cotton seeds, meal, plant meal manure and sewage are example of organic fertilizer.

Inorganic fertilizer:

- Inorganic fertilizer are chemicals.
- They have the advantage of smaller bulk.
- Inorganic manure are grouped into Nitrogeneous fertilizer, phosphatic fertilizer, potassic fertilizer and their mixtures. They are also contain high concentration of actual nutrient but are produced synthetically from chemicals.

Bio-fertilizer:

- Bio-fertilizers refer to microbial culture which are added to the soil.
- The common bio-fertilizers are Azotobactor, Rhizobium .Phosphate Solubilising Bacteria etc.
- They are bacterial culture which do the work of nitrogen fixation in the soil.
- They do not contain NPK. They also have the advantage of smaller bulk as compared to manure.

WHETHER FERTILIZER:

Organic manure is characterized by the use of organic material. In the present case, the ingredients used in the manufacture of the product are municipal solid waste, press mud, fly ash, sludge and micro-biological decomposing culture. They are all obtained from plants: press mud is the by-product obtained when sugar cane is produced from sugar and Municipal solid waste, fly ash and sludge are also obtained from organic materials. The percentage of the raw material used in the product is 62% municipal waste, 28% press mud, 7% fly ash, 3% sludge and micro biological decomposing culture. From the process of manufacturing it is seen that press mud, municipal solid waste and sludge all are mixed and then sprayed on by spent wash for about 40 to 45 days. Thus, spent wash is not used in the ingredient of the product but it is spread on the mixture of press mud solid waste and sludge. The spent wash is also a by-product of the sugar industry and it highly toxic. However, the spent wash is not used as it is. It is treated in a digester to obtain bio-gas. Thus, it is subject to the process of bio-methanation.

Now, that the ingredients are ascertained ,it needs to be seen whether the product fulfills the criteria of organic manure or a fertilizer. Fertilizers are obtained from synthetic chemicals. They fall in the category of NPK (Nitrogen, Phosphorus, Potassium). Fertilizer are basically inorganic material. The present product is not a fertilizer because it is not obtained from chemical or inorganic material. Fertilizer as defined under the The Fertilizer (Control) Order , 1985 included fertilizers that are specified in the Schedule A. Schedule A specifies Straight Nitrogenous fertilizers, Urea, Straight Phosphatic fertilizers, Straight Potassic fertilizers and their mixtures as fertilizers. The product contains too low a NPK content and the ingredients which are used to manufacture the product are also not chemicals but plant waste. Therefore, we can safely rule out the classification of the product in the schedule entry for 'fertilizers'.

WHETHER BIO-FERTILIZER:

Bio-Fertilizers are Azotobactor, Rhizobium which are bacterial culture which are applied to the roots of plants as they help in nitrogen fixation. As seen earlier, a minor ingredient which goes into the making of the product is a micro biological decomposing culture. The applicant was contacted telephonically as well as a written communication was sent to him asking for details as follows:-

- Details pertaining to micro-biological de-composting culture used in composting process.
- Microbial Analysis Report.

The applicant in his communication dt. 18/10/2007 informed as follows:-

- a. Micro-biological de-composting culture consists of Rhizobiam, Nitrogen fixing bacteria, Azetobacter, Trichoderma, Mycillium, etc. the proportion of these organisms was not given as it is a Trade secret.
- b. The culture used being not analysed, the applicant expressed his inability to submit the Microbial Analysis Report.
- c. The applicant further informed that, it is not essential to add the culture as natural decomposition takes place with the organism present in effluent / spent wash and in the atmosphere. The culture is added only to expedite the process.
- d. It was once again submitted that, their compost is a 'soil improver'.

It can be seen that, two out of the ingredients used in the culture are Rhizobiam and Azetobacter. The question that arises before us is whether the presence of a biofertilizer like Azotobactor and Rhizobium would make the product a 'bio-fertilizer'. It is known that Azotobactor and Rhizobium are major bio-fertilizers. Bio-fertilizer are also different from organic manure and for the purpose of the VAT Act as they are

classified in the schedule entry C-34 and taxable @ 4%. Like organic manure, biofertilizer are also obtained from organic matter. They are not synthetically produced like fertilizer. But there are also some major difference between biofertilizer and manure with respect to the manufacturing process as also the method of application. Azotobactor and Rhizobium are grown on culture i.e a mother culture is prepared which is the pure growth of any organism on a small scale. The mother culture is prepared, sterilised, mixed thoroughly and then multiplied by two ways i.e. fermenting and shaking. After the mother culture is prepared it is transferred to flask and then carrier is added to it for the purpose of supporting the growth of the culture. The carriers may be lignite, compost, or organic manure or peat. The present product is not biofertilizer because the biofertilizer like Azotobactor and Rhizobium are used in the bio-fertilizers as a prime culture but in the present product they are used as catalysts for facilitating the composition of the organic manure. In a pure biofertilizer the mother culture is the basic product which contains multiple micro organisms and the carrier is only an incidental product which helps to multiply the growth of the culture. In the present product ,the proportion of the culture is very small i.e. less than 3% and the process of preparation is also different. Bio-fertilizers are applied by a) Seed inoculation b) Seedling inoculation c) Self inoculation d) Soil application.

Such are not the circumstances of the present case. With reference to the above the product would not be bio-fertilizer covered by schedule entry C-34.

WHETHER PRODUCT IS OIL CAKE OR DE-OILED CAKE

The product, with respect to the above deliberations is nor 'fertilizer' or 'bio-fertilizers'. The applicant has made a plea that the product is 'manure'. The schedule entry for 'manure' excludes products which are oiled cakes and de-oiled cakes. The matter needs to be examined from this angle. Oil cake/de-oiled cake is the solid residue that is left after certain oily seeds, such as cottonseed and linseed, have been pressed free of their oil. The present product is manure made from organic materials and is not obtained from oil. And hence, exclusion to oil cakes and de-oiled cakes appearing in the schedule entry A-37 would not be applicable to the impugned product.

WHETHER PLANT GROWTH PROMOTERS OR REGULATORS

Plant growth promoters or regulators do not take part in building cells but

promote growth of plants. They modify or control one or more specific physiological processes within a plant. Additionally, plant regulators are characterized by their low rates of application. Such are not the circumstances of the present case. In the present case, the product improves the physical condition of the soil and increases the germination capacity of the seeds. It is essentially manure and not a plant growth promoter.

WHETHER MICRONUTRIENTS

A manure supplies practically all the elements of fertility which crops require though not in adequate proportions. There are about eight nutrients essential to plant growth and health that are only needed in very small quantities. The impugned product is a manure from naturally organic raw materials.

Apart from the above, there is a determination order no. DDQ-11-2002/Adm-5/46/B- 3 dt. 27-08-2004 in the case of M/s. Resource EET (India) Private Limited wherein the product "Organico" was held to be manure covered by the then entry A-32 of the Bombay Sales Tax Act,1959 for "manures excluding Oil Cakes". The product involved therein was 'Organic Compost and Substrates' manufactured from agricultural, vegetable and fruit waste. The constituents of the product were Banana stem, peanut shell, mahua waste, press mud, alluvial soil and vegetable and fruit waste. In the deliberation on the question, the then Commissioner of Sales Tax had extensively dealt with the issue of 'fertilizer' and 'manure'.

As under the present Maharashtra Value Added Tax Act, 2002, there were two different schedule entries under the Bombay Sales Tax Act,1959 for manure (A-32) and fertilizer including bone-meal and bio-fertilizers (C-I-4). There was also a separate schedule entry (C-II-85) for "insecticides, pesticides, fungicides, weedicides, rodenticides, herbicides, antispouring products and plant growth promoter or regulator or similar products other than mosquito repellants". The then Commissioner of Sales Tax had also dealt with the issue of coverage of the then product under the category of Bio-fertilizers and Plant Growth Promoter or Regulator in terms of then schedule entries C-I-4 and C-II-85 respectively. He had observed therein that, these two categories have been considered by the Commissioner in the Determination Order dated 31.12.1998 in the case of M/s. BAIF Laboratories [See (1999) 19 MTJ 88]. Bio-fertilizers are formed as "microbial inoculants' constituted by free living or latent cells

of the strains of micro-organisms capable of fixing atmospheric nitrogen, mobilising insoluble phosphorous for increased productivity of crops. They work in the root zone of a plant." The portion relating to Plant Growth Promoter Regulator and Promoters as considered by the Commissioner in the Determination Order dated 31/12/1998 and relevant for consideration could be reproduced as follows:

"It is evident from the literature and also from the arguments propounded by the Practitioner that the impugned products are 'culture media' which assist the plants in absorbing the Nitrogen in the Air. They are not directly absorbed by the plants simply because they are 'themselves' not fertilisers but are only catalysts which help in nitrogen fixation. Fertilisers are nutrients, which get used in the process of absorption by plants. They are essential in building block of cells. The 'Plant Growth Regulators' are like Enzymes or Harmones which do not take part in building cells but promote growth of plants. The impugned products are also not nutrients but mere vehicles employed to expedite the absorption of the real nutrients. In technical jargon these 'culture media' i.e. the 'bacteria' or 'fungi' convert the fertilisers called nitrate into soluble nitrate."

Thus, Plant Growth Promoters are like Enzymes or Hormones which do not take part in building cells but promote growth of plants.

06. In view of the deliberations in the preceding paras, I have no hesitation to hold that, the product put up for determination is an organic manure made from organic raw materials. This would in effect mean that the product would be placed in the schedule entry A-37 of the Maharashtra Value Added Tax Act,2002, thereby attracting tax @ Nil %.

I, therefore pass an order as follows:-

ORDER

(Under section 56 of the Maharashtra Value Added Tax Act, 2002)

No.DDQ-11-2005/Adm-2/81/B-4

Mumbai, dt. 30.11.2007

The question posed for determination in respect of the rate of tax applicable to the sale of the product "Maharashtra Organic Fertilizer (manure)" evidenced by the bill no. 9 dt. 0.7/09/2005 is answered as follows:-

Product			Bill no. & date	Schedule entry	Rate of tax
Maharashtra	Organic	Fertilizer	Bill no. 9	A-37	Nil

(manure) dt. 0 7/09/2005	
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(SANJAY BHATIA) Commissioner of Sales Tax, Maharashtra State, Mumbai.