

Read :- 1. Application dt. 28/10/2004 from M/s. The Brihan Maharashtra Sugar Syndicate Ltd.

Heard :- Shri P.C. Joshi, Advocate, Shri S.D.Shah, Advocate, Shri Lale (Technician) and Shri Mangde (Sr. Executive) attended the hearing.

PROCEEDINGS

(Under section 52 of the Bombay Sales Tax Act, 1959)

No.DDQ-11-2004/Adm-5/70/B- 3

Mumbai, dt. 31/03/2008

An application is received from M/s. The Brihan Maharashtra Sugar Syndicate Ltd. [BMSSL] requesting determination of the rate of tax applicable to the product "Vasundhara - Organic Manure" sold under invoice no. Manure/2004-05/1 dt. 15/06/2004.

02. FACTS OF THE CASE

The applicant is a registered dealer under the Bombay Sales Tax Act, 1959 under the R.C No.411030/S/1649 for the place of business situated at Pune. He is also having an additional place of business at Shreepur, Taluka Malshiras in Solapur District for which a separate registration number No. 413112/S/00061 was obtained. The applicant is a manufacturer of potable liquor for which he has a distillery at Shreepur, District Solapur. The applicant started manufacturing compost manure since April 2004 with a view to help the agriculturists in improving the production capacity of soil.

The applicant informs that organic manures are produced by utilization of decomposing organic waste material from sugar factory in the form of decomposing Press Mud- a type of solid waste from sugar factory and Spent Wash - liquid effluent from distilleries. The compost manure is sieved into uniform texture which is then weighed and packed up in polythene bags, so as to make it ready for sale in the market. Such compost manure is sold under the name 'Vasundhara'. The applicant's representative in his letter dt. 26/04/2006 has informed that, the Trade name 'Vasundhara' having been already registered by some other person, the applicant has adopted the Trade name 'Vasudha'.

The applicant further informs that the process of obtaining composting manure from the waste material collected from their distillery and other sugar factory is under the strict control of the Maharashtra Pollution Control Board. The applicant has to comply with the conditions laid down by the said Board under the Environment (Protection) Act, 1986 and the rules framed thereunder.

The pamphlet of the product as submitted by the applicant is in Marathi. The product is described as an organic fertilizer manufactured by the aerobic method. The benefits of using the product as mentioned thereon are as follows :-

- It increases the water retention capacity of the land.
- It increases the availability of the nutrients present in the soil to the crops. Also, it gradually increases the availability of the NPK content and other constituents.
- It enhances the aeration of the land, thereby leading to growth of the roots.
- It enhances the growth of crops and the quality of the crops also improves.
- It enhances the texture and fertility of the land.
- It reduces the erosion of the land.

The applicant has submitted a note on **COMPOST MANURE PRODUCTION PROJECT** as follows :-

PREFACE

At least sixteen plant-food elements are necessary for the growth of plant species. These elements are termed as plant nutrients. Majority of these nutrients are taken up from the soil. Although soil is an important source of all the essential plants nutrients, if soil, due to over exploitation, is unable to supply the nutrients to crops, these are supplied from external sources, i.e. through application of substances containing these nutrients in available form.

The principal methods of supplementing plant nutrients and improving the production capacity of soils are,

- 1) to restore or increase the amount of deficient nutrients by application of **fertilizers**;
- 2) to add **organic manures** to the soil, so that it may furnish a more or less continuous supply of nutrients to the crops.

Fertilizers

Chemical fertilizers are applied mainly to increase the supply of one or more of the essential plant nutrients. These are the blends of inorganic materials of concentrated nature, which contain plant nutrients in the form of readily available chemical compounds. Examples of fertilizers are Urea (used to supply Nitrogen), Di-ammonium Phosphate (used to supply Nitrogen and Phosphorous), Single Super Phosphate (used to supply Phosphorous) etc.

Organic Manures

These are relatively bulky materials, which are added mainly to improve the physical conditions of soil, to replenish and keep up its productivity, to maintain the optimal conditions for the activities of soil microbes and make good or small part of the plant nutrients. Organic manures are produced by decomposing organic waste material with the help of selected species of microorganisms under aerobic conditions. These are various types of organic manures; prominent amongst them are farm yard manure (produced by decomposing agricultural residues), cow dung manure (produced by decomposing cow

dung) and municipal compost (produced by decomposing domestic waste material such as house hold garbage, kitchen waste etc.)

Distillery compost manure also comes under the same category of organic manures which is produced by decomposing press mud cake, a type of solid waste from sugar factory and spent wash, liquid effluent from the distilleries.

COMPOSTING PROCESS

Composting is a traditional biological stabilization process for disposal of organic waste materials. The composting process involves the degradation of complex organic material present in solid as well as liquid wastes with the help of micro-organisms to produce a stabilized end product. Composting is normally carried out under aerobic conditions. Microbial cultures are used to accelerate the composting process. Composting effectively converts the waste organic matter into a useful material that can be used as a soil conditioner, as mulch and also as a source of essential plant nutrients. Generally, aerobic composting takes 45 to 60 days to produce fully stabilized compost.

PROCEDURE ADOPTED FOR THE PRODUCTION OF ORGANIC COMPOST MANURE 'VASUNDHARA' AT BMSSL

BMSS has adopted composting as a zero pollution method of effluent disposal. The process is carried out on composting yard developed on around 10 acres of land. The entire process is carried out as per Central Pollution Control Board's guidelines.

Spent wash, the liquid distillery effluent, is disposed off through composting process. Before composting, the spent is treated in anaerobic reactors as a primary treatment and then sent for composting system.

The composting system utilizes press mud, a type of solid waste from sugar factory and spent wash from the distillery, which are normally disposed off in unscientific ways, to produce high quality organic manure, which improves the quality of soil and subsequently improves crop yields. The aerotiller or composting machine is designed to effectively help various operations during composting process. The composting cycle adopted is of 45 days.

Various procedures involved in the composting process are as under :-

1) Windrows Formation

The press mud from the sugar factories is brought in the tractor or truck and is unloaded manually on the composting yard in a straight line. By using composting machine, this heap is then converted into a windrow of specific width and height.

2) Spent Wash Spraying

The spent wash after primary treatment, i.e. bio-methanation, is stored in a spent wash storage tank. It is then pumped and carried to the composting yard by rigid P.V.C. pipes. This pipeline is placed below the ground level and is routed in such a manner that it can cover the entire area. The pipeline is provided with outlets at suitable locations. A manually operated on/off valve and a flexible hose are provided at each outlet to spray the spent wash manually over the entire length of a windrow. Out of the 45 days composting cycle adopted, spent wash spraying is done for 35 days so as to achieve press mud - spent wash consumption ratio of 1: 3. Remaining 10 days are meant for maturation of the compost.

3) Inoculation of Bacterial Culture

To enhance the composting process, bacterial culture containing carefully selected strains of microorganisms are spread over the windrows in the specified proportions. The windrow is again treated with composting machine to achieve complete mixing of the culture in the windrow and also to provide the aeration required for aerobic composting process.

4) Mixing of the Windrows

After the formation of windrows as well as after each spent wash spraying, the press mud windrows are treated by composting machine. The machine creates a uniform and homogenous mass by breaking the lumps of solids. In the second stage, the machine helps this mass to absorb the spent wash uniformly. The rotary attachment of the composting machine provides the required power for handling the mass for the above process, and also aerates the mass for faster composting actions.

The Composting Machine

The composting machine has a rigid and robust construction suitable for handling composting activities in the agricultural environment. The machine is provided with 60 HP main drive. The ground clearance is provided to handle the windrows of 1,400 mm width and 800 mm height. The composting machine can normally handle about 500 to 600 tons of composting materials per hour. The operator's cabin is designed for comfortable and safe operations of the machine. All machine controls are easily accessible to the operator. The overall dimensions of the machine are maintained for stable operation of the machine. The turning radius or the space required for turning the machine being small, the machine helps in utilizing the maximum area of the field for the composting purpose.

The general specifications of the machine are as follows :

Engine power : 60 HP	Fuel used : Diesel	Wheel diameter : 2,000 mm
Ground clearance : 1000 mm	Overall width : 2,700mm	Overall height : 3,000 mm
Windrow size : 1,400 mm width, 800 mm height		

BAGGING OF COMPOST MANURE

Ready compost manure is sieved to attain uniform texture. The sieved compost is then weighed, filled in 50 kg polythene bags and sold in the market under the brand name 'Vasundhara'.

03. CONTENTION

It is the contention of the applicant that the product 'Vasundhara' - Organic Manure does not attract sales tax being covered by entry 32 of Schedule A which incidentally covers 'Manures excluding oil cakes'. The applicant submits that in the past, the Press Mud obtained as waste product from sugar factory has been held to be covered by entry 34 of Schedule A, by a determination order dt. 27/5/1980 u/s 52 of the B.S.T Act, 1959 in the case of M/s. Walchandnagar Industries Ltd. It is informed that spent wash sludge being waste product from their own distillery has been held to be covered by entry-31 of Schedule A by an order u/s 52 of the B.S.T Act, 1959 dt. 12/2/1988 in their own case. A

note on the difference between organic manure and chemical fertilizer is submitted as follows :-

Difference between Organic Manure and Chemical Fertilizer

1. The applicant manufactures organic manure sold under the Trade Name 'VASUNDHARA' at their distillery plant. The composition of this manure is based on the solid waste (Press Mud) from sugar factory and liquid waste (Spent wash) from distillery. These ingredients are added in the desired ratio for getting expected results out of this manure. No external chemicals are used for enrichment of this manure and as such, it is pure organic manure composed with natural substances. Thus, it totally differs from chemical fertilizers.
2. Fertilizer is basically a tonic to the plant whereas organic manure is purely a soil reconditioner.
3. Heavy doses of chemical fertilizers spoil the soil texture because of chemical composition of the fertilizers, however, organic manure improves the soil texture.
4. Heavy dosing of chemicals results in solidification of land thereby not allowing the roots to go deep enough. Organic manure helps to make the soil spongy thereby ensuing better soil aeration and allows the roots to spread all over freely. Thus, organic manure creates better conditions for the plant to absorb more and more nutritional contents in the soil.
5. Chemical fertilizer in other words is a tonic for the plants whereas organic manure helps the plants to absorb available tonic in the soil to the maximum extent. Thus, 'Vasundhara' is an instrument for the plants to make their way easier for absorbing more and more nutrients in the soil.
6. Chemical fertilizer contains around 45% of Nitrogen, whereas manure contains only 1.5% to 2% Nitrogen.

In view of the above, the applicant contends that, 'Vasundhara' is a natural source of soil re-conditioner and should be dealt with under the category of manure and not fertilizer. The applicant has submitted product appreciation letters given to him by M/s. Shobha Farm, M/s. Krishna Agro, M/s. Suman Orgo Chem Pvt. Ltd. and other individuals who have benefited by the use of the product.

Further, the applicant also submitted an extra note on the difference between organic manures and chemical fertilizers as follows :-

Sr.No.	Organic Manures	Chemical or Inorganic Fertilizers
1	These are bulky materials, usually of biological origin	Chemical fertilizers concentrated materials manufactured from nonliving inorganic chemicals.
2	Organic matter and humus are the two important things that organic manures add to the soil.	Chemical fertilizers add only specific plant nutrient to the soil. They do not contain organic matter or humus.

3	Organic manures improve the physical condition of the soil, thus play a vital role in soil amendment.	Chemical fertilizers are added mainly to increase the supply of essential nutrients like nitrogen, phosphorous and potash for plant. They do have any role in soil amendment.
4	Due to presence of organic matter, organic manures encourage activities of beneficial soil microbes in the soil.	No role in promoting soil microbes. On the other hand, they repel beneficial creatures like earthworm from the field.
5	Organic manures improve soil structure and texture, thereby improving the soil aeration and increasing the ability of the soil to hold both water and nutrients.	Stronger chemicals present in chemical fertilizers ruin soil structure by dissolving the bonding materials (formed by microbes) that hold soil particles together, and can turn topsoil into the cement like crust, which is routinely observed in the potted plants.
6	Organic manures are considered as slow-release materials and hence when applied to soil, they provide long-term nutrition to plants	Nutrients from the chemical fertilizers are released readily in the soil and hence are more prone to leaching.
7	The plant-food elements contained in manures must be broken down by soil microorganisms into simpler, inorganic molecules before the plants can use them.	The nutrients in chemical fertilizers are already in inorganic form, hence they can be immediately used by the plants.
8	Organic manure has a much lower concentration of essential plant nutrients requiring transport and application of tonnes of material.	Chemical fertilizer has higher concentrations of single or multi-nutrients that are immediately available and are easily supplied to the plant exactly when needed.
9	The amount of nutrients and the exact type of elements available from a given amount of organic manure is dependent on many factors like the age of the manure, its origin and weather conditions, such as temperature and rainfall. It is therefore a less exact way of providing for a plant's nutritional needs.	With chemical fertilizers, the type and amount of any given element in the fertilizer formulation are known.
10	Besides essential plant nutrients, organic manures also contain micronutrients, hormones and some beneficial micro-organisms.	Chemical fertilizers provide only specific number of plant nutrients.
11	Examples of organic manure are farmyard manure, cowdung manure, city compost, distillery compost (like Vasudha) etc.	Examples of chemical fertilizers are Urea, Dia-ammonium Phosphate, Single Super Phosphate, Muriate of Potash etc.

The applicant has submitted a copy of the Certificate issued by the Department of Agriculture under the Fertilizer (Control) Order, 1985. In the said license, the applicant has identified a few shortcomings which he has brought to notice in his submission dt. 27/01/2008 and which are quoted as follows :-

1. "In May 2006, we learnt through a newspaper article about the amendment in the Fertilizer Control Order 1985 (FCO) through which organic measures are covered under the FCO norms. Accordingly, we obtained a copy of the Fertilizer (Control) Amendment Order 2006 from Commissionerate of Agriculture, Pune. After going through this document, we learnt that FCO has covered two types of materials. They are 1) Bio-fertilizers and 2) Organic Fertilizers. Under the heading Organic Fertilizers, three types have been recognized. They are City Compost, Vermicompost and Press mud.
2. As per the practices in vogue, materials used for improving the soil characteristics are called manures rather than fertilizers. In the dictionaries, many times the words manures and fertilizers are used as synonyms. However in scientific literature their definition differs. The definitions of Manures and Fertilizers as given in the 'Handbook of Agriculture', a compendium of authentic information on various aspects of agricultural science, published by Indian Council of Agricultural Research, New Delhi, are as follows :-
Manures : These are relatively bulky materials such as animal or green manures, which are added mainly to improve the physical condition of the soil, to replenish and keep up its humus status, to maintain the optimum conditions for the activities of soil micro-organisms, and make good a small part of the plant nutrients removed by crops or otherwise lost through leaching and soil erosion.
Fertilizers : Fertilizers are inorganic materials of a concentrated nature, they are applied mainly to increase the supply of one or more of the essential nutrients, e.g. nitrogen, phosphorous and potash.
3. However, FCO has used the word 'Organic Fertilizer' rather than 'Organic Manures. Further, ours is distillery compost (also referred to as 'Bio-compost', as microbial decomposition is involved in its manufacturing process), which is not identified by FCO for licensing purpose. FCO has identified only Press mud. Actually, press mud and distillery compost have vast differences in their characteristics. Basically, in distillery compost the very nature of press mud and spent wash completely changes after 60 days' aerobic decomposition process, making the product totally different from their parent materials. Naturally the quality parameters defined for press mud differ from that of distillery compost. We had brought this to the notice of the Registering Authority and Director of Agriculture (I & OC) vide our letter No. DIST/COMP/5744/1490 dated 22nd August 2006 (copy submitted). However, as FCO has not mentioned Distillery compost, Officers from that department expressed their inability to comment. Further, they recommended us to pursue the matter at the Central Government level. As obtaining the license was very important at that time to continue the production activities, we have included our product (Vasudha Organic Manure) in to the nearest available category as per the G.R. ie. Press mud category. While filling the application form also, we have been advised to clearly mention 'Organic Fertilizer - Press mud' instead of our regular word 'Vasudha Organic

Manure' to avoid delays in the procedures. Accordingly, we received the manufacturing as well as selling license for 'Organic Fertilizer-Pressmud (copy submitted).

4. We again reiterate that the product we manufacture is purely organic manure, produced by the decomposition of natural products. We have not added any inorganic chemicals or additives in it. Just going by the license document, one shall not confuse the same with the chemical fertilizers.
5. We are glad to inform you that the All India Distiller's Association has taken up the issue of including Distillery Bio-compost as a separate category under the FCO. They are collecting the information from all the member distilleries regarding the subject based on which they will be making a representation at the Department of Agriculture, Government of India. A copy of the letter received from AIDA (Ref. No. C/2007/23 dated March 12, 2007) is submitted for information."

In his submission dt. 01/02/2008, the applicant has informed as follows :-

1. Sugar factory press mud and distillery spent wash are the major raw materials of Vasudha organic manure. The original source of both of them is sugarcane juice, where press mud is the residue separated after filtration of sugarcane juice and spent wash is generated from the molasses after its fermentation and distillation. Hence all the plant nutrients present in the Vasudha organic manure are originated from sugar cane plant only.
2. In the sugar manufacturing process, chemicals like lime, sulfur and phosphoric acid are added but their quantity used is very less, around 0.1% lime, 0.05% sulfur and 0.02% phosphoric acid, all figures with reference to the quantity of the sugar cane crushed. Moreover, they are added only to aid the process of sugar manufacturing. They have no role to play in the enhancement of plant nutritional characteristics of press mud.
3. A copy of the pesticide analysis report was also submitted by the applicant. The applicant submits that manures do contain traces of elements like cadmium, chromium etc., which are again originated from the use of chemical fertilizers in the sugarcane fields. They are used as binding or stabilizing agents in chemical fertilizers. Hence, Fertilizer (Control) Amendment Order 2006 also accepted their presence in the organic manures (organic fertilizers, as they have mentioned) in the proportion specified in Schedule - IV : Part A : Specifications of Organic fertilizers. However, presence of pesticide residues is not desirable in the organic manures as per international standards. As given in the report, Vasudha organic manure is totally free from pesticide residues.

04. HEARING

Shri P.C. Joshi, Advocate, Shri S.D.Shah, Advocate, Shri Lale (Technician) and Shri Mangde (Sr. Executive) attended the hearing. The points as stated in the application for determination were re-iterated. They submitted a certificate from the Institute for Marketecology Control Order which has stated that the product 'Vasudha Organic manure' is approved for use in organic agriculture according to Regulation (EEC) 2092/91.

05. OBSERVATIONS

I have gone through all the facts of the case. The issue pertains to the classification of the product 'Vasudha Organic manure'.

It is contended that the product is a manure and not a fertilizer. Hence, let me reproduce herein the relevant schedule entries :-

A-32	Manures excluding oil-cakes	01.10.1995 to 31.03.2005
C-I-4	Fertilizers excluding anhydrous ammonia	01.10.1995 to 31.03.2005
	Fertilizers including bone meal	01.01.2000 to 30.04.2001
	Fertilizers including bone meal and bio-fertilisers	01.05.2001 to 31.03.2005
C-II-85	Insecticides, pesticides, fungicides, weedicides, rodenticides, herbicides, antispouring products and plant growth promoter or regulators and similar products other than mosquito repellants and disinfectants.	01.10.1995 to 31.03.2005

The schedule entry for 'manure' excludes oil-cakes. Oil 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 made of **spent wash** and **press mud** and thus, is not obtained from oilseeds. And hence, exclusion to oil cakes as appearing in the schedule entry A-32 would not be applicable to the impugned product. Further, the product is also not anhydrous ammonia or a bone meal. 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 also not a mosquito repellent or a disinfectant.

The applicant has contended that the product is manure covered by the entry A-32 and not a fertilizer covered by the entry C-I-4. The words '**fertilizer**' and '**manure**' are very often used synonymously. Hence, it needs to be seen whether the product is a '**manure**' or a '**fertilizer**'. The differentiation between '**manure**' or a '**fertilizer**' appears significant not only from the view of exact classification of the product as also from the tax implications arising therefrom. Further, it also needs to be seen whether the product could be termed as a bio-fertiliser or a plant growth promoter or regulator or a similar product. Hence, now the question to be decided is *whether the product in question can be said to be a 'manure' or a 'fertilizer' or a bio-fertiliser or a 'plant growth promoter or regulator'*? 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. We may look at the meanings of the following terms :-

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.

Fertilizer

- In common parlance, the fertilizers are sometimes called 'chemical', 'artificial' or 'inorganic' manures.
- Fertilizers are inorganic materials of a concentrated nature.
- They are applied mainly to increase the supply of one or more of the essential nutrients, e.g. nitrogen, phosphorus and potash. Fertilizers contain these elements in the form of soluble or readily available chemical compounds. This distinction is, however, not very rigid.
- Inorganic fertilizers are chemicals.
- They have the advantage of smaller bulk.
- Inorganic manures are grouped into Nitrogenous 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 is added to the soil.
- Common bio-fertilizers are Azotobacter, Rhizobium, Phosphate Solubilising Bacteria etc.
- They are bacterial cultures 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.

From the above, it is seen that organic manure is characterized by the use of organic material. I have already reproduced hereinafter the manufacturing process, raw materials and features of the product. The ingredients used in the manufacture of the product are Press Mud- a type of solid waste from sugar factory and Spent Wash - liquid effluent from distilleries. However at one stage of the process, there is use of some **bacterial culture** to enhance the composting process. No information in respect of the

same was seen in the records submitted by the applicant. Hence, the applicant was asked to furnish information as follows :

1. Details of selected species of decomposing microbial cultures.
2. Microbial Analysis Report of the appropriate laboratory/organization.

In response, the applicant has informed that the decomposing culture contains the following microbial species - *Acetobactor*, *Trichoderma viride*, *Aspergillus niger*, *Pacilomyces*, *Aspergillus awamori* and *Aspergillus terreus*. As regards Microbial Analysis Report, the applicant has informed that organic manures are mainly used as soil conditioners, to improve texture as well as structure of the soil. Hence, for organic manures pH, organic carbon and C/N ratio are considered as important aspects of its quality, which are analyzed regularly. The applicant has submitted a report dt. 23/06/2006 from M/s. Analab in respect of the present product. The applicant has in his letter dt. 25/10/2007 has submitted the following information :-

Product	Packaging Size	Ingredients Used In The Production Process		
		Name Of The Ingredient	In Kilogram	In Percentage
Vasudha Organic manure (Old name : Vasundhara)	50 kg PP bags	Press Mud Cake	1000 kg.	90.87%
		Spent Wash (Actually used in liquid form)	100 kg. (in terms of dry weight)	9.09%
		De-composing microbial culture	0.5 kg.	0.04%

The NPK content of the product as informed by the applicant is as follows :-

Product	Packaging Size	Average NPK content
Vasudha Organic manure (Old name : Vasundhara)	50 kg PP bags	1) N in % : 1.5 to 2.5 2) P in % : 1.5 to 2.0 3) K in % : 3 to 4

The basic issue is determining the nature of the product on the basis of its ingredients. In short, it needs to be seen whether the product 'Vasudha Organic manure' fulfills the criteria of manure or a fertilizer. Fertilizers are obtained from synthetic chemicals. They fall in the category of NPK (Nitrogen, Phosphorus, Potassium). Fertilizers are basically inorganic material. Manure is characterized by the use of organic material. As mentioned earlier, pressmud and spent wash are the ingredients of the product. In a determination order u/s 52 of the Bombay Sales Tax Act, 1959 in the case of M/s. Walchandnagar Industries Ltd. [No.-1180/Adm-5/10/B-19 dt. 27/5/1980], it has been held that "press mud" is covered by the then schedule entry A 34 - "Manure including oil

cakes". Press mud is a type of solid waste from the sugar factory. Thus, it is already decided that "press mud" is a manure. Now, let me look at the other ingredient i.e spent wash. But before that, let me reproduce the following extract submitted by the applicant about the manufacturing process of sugar from the book "Industrial Effluents (Origin, Characteristics, Effects, Analysis & Treatment)" by Shri. N. Manivasakam, Water Analyst, Principal Public Health Laboratory, Coimbatore :-

"In the sugar mill, the cane (sugarcane) is chopped and shredded (after washing, if necessary). The juice is then squeezed by passing it through crushers containing a series of roller mills. The cane is then wetted with water and the remaining juice is also extracted. This operation is termed as maceration. About 93% juice is extracted in all these operations. The fibrous residue leftover is called as bagasse (which will be of about 30% of sugarcane crushed) is used as a boiler fuel and for manufacture of paper and boards.

The extracted juice is screened to remove floating impurities and milk of lime is added to increase the pH to 7.6 to 7.8 thereby preventing the inversion and to aid clarification by coagulating the colloidal impurities along with the addition of bentonite or some other coagulant aid (phosphoric acid is also added sometimes to aid clarification. In this case excess lime is added). The mixture is heated (to about 102°C) using high pressure steam and allowed to settle. The clarified and bleached juice is sent for evaporation (Bleaching is effected by treatment with sulfurdioxide). The residue is sent to filter press or rotary drum vacuum filters and the juice in it is reclaimed. The mud from the filter press known as pressmud or limemud (which will be about 1 to 4% of the weight of the sugarcane charged) is used as a manure.*

The clarified juice contains about 85% water. It is evaporated to approximately 40% water in multiple effect evaporators to a thick pale yellow juice. This syrup is then fed into a single effect evaporator where the sugar is crystallized. The later operation is termed as 'pan boiling'. (Sugar-crystal nuclei are added at this stage to improve crystallization). Now the syrup contains only 10% water. The mixture of syrup and crystals known as massecuite is passed into a crystallizer (centrifugal baskets) which separates the crystallized sugar from the mother liquor. The spent mother liquor drains away separately as molasses. The volume of molasses depends on the quantity (and to certain extent quality also) of sugarcane crushed. About 4 to 5% of sugarcane charged is transformed as molasses. The sugar from the centrifugal basket is dried in a drier, graded and bagged."

*[*Carbondioxide is also passed instead of sulfurdioxide which to certain extent aids in colour removal and controlling the pH. The quantity of limemud would be then 7% of the cane crushed.]*

On reading the above passage, it can be seen that in the sugar manufacturing process, chemicals like lime, sulfur and phosphoric acid are used. Manures are essentially of plant or animal origin and contain no trace of chemicals. Pressmud generated during the above process cannot be said to be entirely void of these chemicals. The other ingredient, spentwash, is generated from the molasses after its fermentation and distillation. Spentwash is basically a chemical. Spentwash is toxic and is treated in anaerobic reactors as a primary treatment and then sent for composting system.

Spentwash is not used as it is in the manufacturing of the product. There involves use of chemicals during the treatment. This shows that the process involved in obtaining sugar from sugarcane entails addition of chemicals which make the spent wash toxic. The schedule entry under consideration in the present proceedings is for “manure”. Manures ordinarily mean the following :-

कंपोस्ट, लेंडी खत, कोंबडी खत, शेणखत, सोनखत, भूईमूग पेंड, सरकी पेंड, एरंडी पेंड, लिंबोळी पेंड, करंज पेंड, करडई पेंड, हाडचुरा, मासळी खत, इत्यादी.

A quick glance at the above names shows that manures are of plant or animal origin. *More essentially, the above types are available in nature in the unprocessed form.* These are the items which are usually understood when we use the word “manure”. A combination of any of the above would also be termed as ‘manure’. In the present case, there are two ingredients, one of which has been held to be a manure of plant origin. But the same does not hold good for the other ingredient i.e spent wash. Further, it is seen that the product is also classified under the Fertilizer (Control) Order as an “Organic Fertilizer”. The Fertilizer (Control) Order, as the name suggests, deals with fertilizers. Fertilizers and manures differ in terms of their nutrient composition. A particular product to qualify as a “fertilizer” should contain the ingredients especially the NPK content within the range specified therein. The present product having the ingredients within the specified range has qualified for being classified as a ‘fertilizer’, more importantly an ‘organic fertilizer’. Therefore, we can say that the product does not qualify to be classified in the schedule entry for ‘manures’. The applicant has submitted a certificate from the Institute for Marketecology Control Order which has stated that the product ‘Vasudha Organic manure’ is approved for use in organic agriculture according to Regulation (EEC) 2092/91. Now, the schedule entry applicable to a product is to be determined in accordance with the schedules appended to the Bombay Sales Tax Act, 1959. There are separate entries for manure and fertilizer. Further, there is no ambiguity in understanding the meaning and scope of these entries. Hence, the reliance of the applicant on a certification by an International Organization is uncalled for.

Having seen as above that the product is not a manure but a fertiliser, I move on to ascertain the coverage of the product in the category of bio-fertilizers. The process of manufacturing the above product involves the use of decomposing microbial culture. The applicant has informed that the following microbial culture are used :- Acetobactor,

Trichoderma viride, *Aspergillus niger*, *Pacilomyces*, *Aspergillus awamori* and *Aspergillus terreus*. Now *Acetobactor* used in the culture is a bio-fertilizer. Hence, the question which surfaces is whether the presence of *Acetobactor* would make the product a 'bio-fertilizer'. It is known that *Azotobactor* and *Rhizobium* are major bio-fertilizers. Bio-fertilizers are different from organic manure and from 01.05.2001 to 31.03.2005, they are included in the entry for fertilizers. Like manure, biofertilizers are also obtained from organic matter. They are not synthetically produced like fertilizer. But there are also some major differences between biofertilizers 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 biofertilizers like *Azotobactor* and *Rhizobium* are used in the bio-fertilizers as a prime culture but in the present product *Acetobactor* is used as a catalyst for facilitating the decomposition 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. 0.04% and the process of preparation is also different. Further, 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. Hence, the product would not be a bio-fertilizer covered by the schedule entry C-I-4.

I now move on to ascertain the coverage of the product in the category of plant growth promoters or regulators. The then Commissioner of Sales Tax in the case of **M/s. Resource EET (India) Private Limited (cited supra)** 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 [19 MTJ 88]. The portion relating to Plant Growth Promoter and Regulators

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as considered by the Commissioner in the Determination Order dated 31/12/1998 and relevant for consideration could be reproduced as follows :

"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 Hormones 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."

The observations in yet another case namely M/s. Farm Organics India Pvt. Ltd. [DDQ No.1196/Adm-5/271/B-13, Mumbai, dt.17/4/1998] could also be reproduced for a better understanding of the issue :-

"Here the main distinguishing factor between a plain 'fertiliser' and a 'plant growth regulator' comes in view. Fertilisers provide essential nutrients required to build the plant cells and get consumed in the process of plant growth. As against this plant growth regulators do not primarily supply the nutrients, but act as a catalyst for conversion of various elements present in the atmosphere and soil into fertilizers and other micro nutrients and their fixation in the soil."

Thus, Plant Growth Promoters are like Enzymes or Hormones which 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. The present product is a fertilizer and not a plant growth promoter.

06. CONCLUSION

The deliberations in the preceeding paras could be summed-up to mean that, the impugned product is a fertilizer covered by the schedule entry C-I-4 of the Bombay Sales Tax Act,1959. I, therefore pass an order as follows :-

ORDER

(Under section 52 of the Bombay Sales Tax Act, 1959)

No.DDQ-11-2004/Adm-5/70/B-3

Mumbai, dt. 31.3.2008

It is hereby ordered that the product "Vasudha - Organic Manure" (Old name : Vasundhara - Organic manure) sold under invoice no. Manure/2004-05/1 dt. 15/06/2004 is covered by the schedule entry C-I-4 of the Bombay Sales Tax Act,1959.

(SANJAY BHATIA)
Commissioner of Sales Tax,
Maharashtra State, Mumbai.