#### BEFORE THE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE, CHENNAI.

# APPLICATION NO. 273 OF 2014 (SZ)

#### **IN THE MATTER OF:**

M/s. Tamil Nadu HDPE Knitted Fabrics Manufacturers Association Rep. by its President C. Sureshkumar 19 & 20, Athur SIDCO Industrial Estate Vennaimalai Post, Karur – 639 006.

Applicant

Versus

- The Secretary, Central Insecticides Board and Registration Committee, Ministry of Agriculture, NH 4, CGO Complex, Faridabad – 121 001.
- The Deputy Director, Plant Protection Department of Agriculture, Ezhilagam, Chepauk, Chennai – 600 005.
- The Principal Secretary to Government- cum -Agricultural Production Commissioner Fort St. George, Chennai – 600 009.
- The Member Secretary Tamil Nadu Pollution Control Board 76, Mount Salai, Guindy, Chennai – 600 032
- 5. M/s. Shobikaa Impex Private Ltd., Rep. by its Director, Mr. M. Sivasamy Reg. Office: 34, Sannathi Street, Vennaimalai Post, Karur – 639 006.
- M/s. V.K.A Polymers Private Ltd., Rep. by its Director, Mr. A. Karuppannan Reg. Office: 3-A, Covai Road, Sengunthapuram, Karur – 639 002.

.. Respondents

(The 5<sup>th</sup> and 6<sup>th</sup> Respondents have been impleaded *vide* orders of the Tribunal dated 05.03.2015 in M.A. Nos. 1 and 2 of 2015(SZ).

**Counsel appearing for the Applicant:** M/s C. Prasanna Venkatesh, Jayanthi Venkatesh and S. Purushothaman

**Counsel appearing for the Respondents:** Smt. C. Sangamithrai for Respondent No.1; M/s. M.K.Subramaniam for Respondent Nos. 2 and 3; Smt. H. Yasmeen Ali for Respondent No.4; M/s. Rajmakesh for Respondent No.5 and M/s. Guruprasad for Respondent No.6.

### ORDER

#### PRESENT:

- 1. Hon'ble Justice M. Chockalingam Judicial Member
- 2. Hon'ble Shri P.S.Rao Expert Member

### Dated, 15<sup>th</sup> December, 2015.

1. Whether the judgment is allowed to be published on internet.Yes / No2. Whether the judgment is to be published in the All India NGT Reporter.Yes / No

This application is filed by the Tamil Nadu High-Density PolyEthylene (HDPE) Knitted Fabrics Manufacturers Association alleging that certain industries are involved in the illegal sale of hazardous waste materials to the public by misusing the export quota, with a prayer to issue direction to the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> respondents to revoke their licenses.

2) Brief facts of the case as could be discerned from the application is that, the applicant is a registered organization under the Societies Registration Act, 1860 whose members mostly operate in and around Karur District and working for the welfare of the knitted fabrics manufacturers as well as its employees by striving to maintain transparency in their operations concerning the production of knitted products by means of stringently following the regulations stipulated by the Government Departments. 3) The applicant states that, against the guidelines and rules issued by the  $1^{st}$ ,  $2^{nd}$  and the  $4^{th}$  respondents', several units illegally mushroomed in their area and started manufacturing Long Lasting Insecticide Impregnated Mosquito Net (LLIN) products using the insecticide alpha-cypermethrin, which is a highly toxic and hazardous material, under the guise of export which again is a prohibited activity as per the norms of the  $1^{st}$  respondent. They have been illegally selling the net fabrics under the guise of waste thereby not only causing loss to the exchequer but also posing health hazards to the public at large as the products are sold suppressing the fact that it contains alpha-cypermethrin.

4) The applicant states that several other violations are taking place in their District and the same has been reported to the 1<sup>st</sup> respondent who is the licensing and registration authority *vide* a representation dated 10.07.2014, listing out the illegal activities. A copy of the same was served to the 2<sup>nd</sup> respondent through the 3<sup>rd</sup> respondent and also to the 4<sup>th</sup> respondent. No proper action whatsoever has been initiated by any of the respondents to curb the illegal activities reported to them even after submitting reminders and making requests in person. The applicant alleges that, there is complicity on the part of respondents as they deceitfully stated that those units have applied for license and even masked the material which has been declared as hazardous by the 1<sup>st</sup> respondent, as a safe material and that the payment of sales tax being made is an evidence for the illegal sale of hazardous materials. The applicant contends that the 1<sup>st</sup>, 2<sup>nd</sup> and 4<sup>th</sup> respondents ought to have immediately taken action on the representations and should have cancelled all the licenses issued and halted the operations of the units.

5) The 1<sup>st</sup> respondent in its reply dated 28.04.2015 stated that, it being the Registration Committee (RC) constituted under Section 5 of the Insecticides Act, 1968, grants registration to regulate the import, manufacture, sale, transport,

distribution and use of insecticides including the insecticide in question and denied all the allegations made against it. It is further stated in the reply that the respondent firms namely, *M/s. V.K.A. Polymers Pvt. Ltd.*, Karur and *M/s. Shobhikaa Impex Pvt. Ltd.*, Karur have not applied for the issuance of certificate of registration of LLIN for indigenous manufacture.

6) The  $2^{nd}$  respondent in its reply stated that, the 5<sup>th</sup> and 6<sup>th</sup> respondents are manufacturing mosquito nets incorporated with alpha-cypermethrin and use HDPE as raw material for making the net filaments. The 5<sup>th</sup> respondent has obtained manufacturing license no.473 of 2014 and 447 of 2010 and the 6<sup>th</sup> respondent has obtained manufacturing license no.467 of 2012. Based on the complaint made by the applicant alleging violations against the 5<sup>th</sup> and 6<sup>th</sup> respondents, the 2<sup>nd</sup> respondent has taken appropriate action against the 5<sup>th</sup> and 6<sup>th</sup> respondents by issuing show cause notices. On appeal preferred by the 5<sup>th</sup> and 6<sup>th</sup> respondents stipulated in the show cause notice.

7) According to the 4<sup>th</sup> respondent, Tamil Nadu Pollution Control Board (Board) complaints were received from *M/s. Bala Fabrics*, a mosquito net manufacturing unit in Karur and also from the applicant's unit against two leading export industries i.e. the 5<sup>th</sup> and 6<sup>th</sup> respondents that, these industries are selling net fabrics and also solid wastes (plastic lumps, filaments and net fabrics) to outsiders which are then transformed into vessels for domestic use causing health hazard. The unit of *M/s. VKA Polymers (P) Ltd.*, Balarajapuram Village, Krishnarayapuram Taluk, Karur District has applied for Consent to Establish (CTE) under the Water (Prevention and Control of Pollution) Act, 1974 (Water Act) and the Air (Prevention and Control of Pollution) Act, 1981 (Air Act) *vide* its

application dated 17.02.2006 for manufacturing LLIN containing alphacypermethrin 0.6 to 1.0% w/w (Weight/Weight). Subsequently, the unit was informed vide Lr. No. T9/TNPCB/F.6831/RS/KR/06 dated 18.04.2006 to get the opinion of the Central Institute for Plastics Engineering and Technology (CIPET) by conducting Leaching/ Migration Test on the product based on the Committee meeting held for plastics on 10.04.2006. Accordingly, the unit submitted its product samples to CIPET and obtained the results for Overall Migration, Abnormal Toxicity and Base Polymer Identification Test vide CIPET Ref. No. DD/CHN/PTC/07-06 dated 21.07.2006 wherein the difference between overall migration in Mosquito Net (with and without the insecticide alpha-cypermethrin) was found to be 0.096% w/w which is under the range of registered value (0.6% w/w) by the Central Insecticides Board and Registration Committee (CIB&RC), Ministry of Agriculture, Government of India. The CIPET has certified that based on the above test results and the recommendation of World Health Organization (WHO) for the use of alpha- cypermethrin, it is safe to manufacture and use mosquito nets as a commodity item. Accordingly, CTE was issued to the unit vide Board Proceedings No.T9/TNPCB/F6831/KR/RS/W&A/2006 dated 21.09.2006 citing the Committee meeting for Plastics Item No.2-1 dated 18.09.2006 and Consent Operate (CTO) was issued vide Proc. to No.T9/TNPCB/F.6831/KR/RS/W&A/06 dated 02.05.2007 for manufacturing impregnated LLIN containing alpha-cypermethrin (0.6 to 1.0% w/w), with one of the conditions that the unit shall ensure that the solid waste such as waste HDPE yarn is collected then and there and sold for further beneficiary use so as to avoid accumulation of the same.

8) Subsequently, the Board has issued CTE to the 6<sup>th</sup> respondent, M/s. Shobhikaa Impex Pvt. Ltd., Athur Village, Karur Taluk & District vide Board Proc.No.T9/TNPCB/F.No.2875/KAR/RS/W&A/2010 dated 15.03.2011 for manufacturing LLIN containing alpha-cypermethrin and CTO was also issued *vide* Proc.No.T9/TNPCB/F.No.2875/KAR/RS/W&A/2011 dated 22.12.2011 incorporating the conditions regarding waste disposal as in the case of the 5<sup>th</sup> respondent.

9) The 4<sup>th</sup> respondent further stated in the reply that, wastes were tested on 08.09.2014 in the Ministry of Environment, Forests and Climate Change (MoEF&CC) approved laboratory (*SGS India Private Ltd.*, Chennai) and a test (Toxicity Characteristics Leaching Procedure-TCLP) was conducted to find out the concentration of the pesticide alpha-cypermethrin in the leaching of the above plastic waste. The test results showed that the concentration is very low (0.026 mg/kg) when compared to the concentration level mentioned (50 mg/kg) in the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 ('Hazardous Wastes Rules, 2008'). Accordingly, the Board declared *vide* its Memo No. T9/TNPCB/F.32023/KAR/2014, dated 23.12.2014, that the plastic waste generated by the 5<sup>th</sup> and 6<sup>th</sup> respondent units is not hazardous as per the Hazardous Waste Rules, 2008. The Board has also mentioned in the consent order issued to the units that:

"The unit shall ensure that the solid wastes such as waste HDPE yarn is collected then and there and sold for further beneficiary use so as to avoid the accumulation of the same".

Finally, it was stated in the reply of the Board that manufacturing of mosquito nets impregnated with the pesticide alpha-cypermethrin is approved by WHO and exported to various countries and the waste generated from the LLIN units is not hazardous and there is no pollution involved. 10) The 5<sup>th</sup> and 6<sup>th</sup> respondents got themselves impleaded in the application and filed replies stating that they are 100% export oriented units manufacturing and exporting WHO approved LLIN Mosquito Net incorporated with alphacypermethrin under the brand name 'Duranet' and 'MAGNet' respectively. Duranet and MAGNet ® LLIN are strategic products for prevention of malaria and exported to several countries all over the world fetching foreign exchange to the tune of Rs.300 Crores per year directly and indirectly providing employment to about 5,000 workers. The mosquito nets are recognized across the world and are well known for their quality, safety and efficacy. Duranet and MAGNet ® LLIN is procured by reputed NGOs such as the Global Fund, UNICEF, USAID, UNOPS, ICRC, and UNHRC under the World Bank Projects.

11) The 5<sup>th</sup> and 6<sup>th</sup> respondents further contended that they have obtained the requisite approval from the Central Insecticides Board of India and got registration from the Registration Committee vide Registration No.CIR (E) 4935/2011 (318) and Registration No.CIR (E) 4688/2011 (314) respectively for producing LLIN containing alpha-cypermethrin 0.55% w/w and also obtained approval vide Ref. No.CIR (E) 4687/2011 (314) for manufacture and export of alpha-cypermethrin 15% GR. They contend that there is no water or air pollution due to LLIN manufacturing as alpha-cypermethrin is one of the five chemicals approved by WHO to be used in LLINs because they are not toxic to humans (mammalian toxicity is negligible). The mosquito net containing 0.55% alpha-cypermethrin (the whole net weighing 600 g contains just 3.3 g of alpha-cypermethrin) is not toxic to humans. At no point of time, the respondents have sold the finished product in the local market. Furthermore, the waste generated during the course of LLIN manufacturing is unusable and therefore, the final product sold to the end users and the wastes generated in the process have same composition. As per the directions of the Board that, "the unit shall dispose non-hazardous solid wastes then and there without accumulating inside the premises", the respondent companies are disposing the non-hazardous wastes in a proper manner.

12) Finally, the 5<sup>th</sup> and 6<sup>th</sup> respondents stated that the representation submitted by the applicant making wild allegations is based upon trade rivalry. The applicant has tried to defame the respondent companies by circulating pamphlets to public stating wrong information about the LLIN and the respondents had approached civil court by way of filing defamation suit and a complaint also has been filed against the applicant before the Judicial Magistrate Court at Karur in CMP No.8147/2014 and 8148/2014.

## **DISCUSSION & CONCLUSION:**

13) The 1<sup>st</sup> respondent constituted under Section 5 of the Insecticides Act, 1968, is the competent authority to grant the registration for regulating the import, manufacture, sale, transport, distribution and use of insecticides including alphacypermethrin. It is a statutory body entrusted with the function of satisfying itself with the safety and efficacy of the insecticides before granting registration under Rule 44 of the Insecticides Rules, 1971. It is the duty of the manufacturers, formulators of insecticides and operators to dispose packages or surplus materials and washings in a safe manner so as to prevent pollution.

14) The concentration of the insecticide in the finished mosquito nets will be 0.55% w/w as per the standards prescribed by WHO and these LLIN mosquito nets are exported to different countries. During the process of manufacturing of LLIN involving the HDPE granules, alpha-cypermethrin is added with colouring pigment and subsequently after the manufacturing of net fabric, stitching is done for making the mosquito nets and in the process certain amount of solid waste (about 2.5%) is generated from the extruder machine which in turn is recycled. Certain amount of fabric waste is also generated. The 5<sup>th</sup> respondent obtained CTE from the Board during the year, 2006 followed by CTO in the year, 2007 for LLIN containing alpha-cypermethrin (0.6% to 1% w/w). Subsequently, consent was issued to the 6<sup>th</sup> respondent also, in the year, 2011 and both the above units were directed to follow the conditions prescribed in the consent order and ensure that the solid waste such as HDPE yarn is sold for further beneficiaries for use, so as to avoid the accumulation of the same. When the above wastes were tested during September, 2014 in the MoEF&CC approved laboratory (*SGS India Private Ltd.*, Chennai) the TCLP indicated that the concentration of alphacypermethrin is very low (0.026 mg/kg) when compared to the concentration level mentioned (50 mg/kg) in the Hazardous Wastes Rules, 2008. Therefore, the Board has declared that the plastic waste generated by the units of the 5<sup>th</sup> and 6<sup>th</sup> respondents is not hazardous and no pollution is involved.

15) The 5<sup>th</sup> and 6<sup>th</sup> respondents are 100% Export Oriented Units manufacturing WHO approved LLIN incorporated with alpha-cypermethrin and exporting to several countries in the world. They obtained the requisite approval from the CIB&RC and got registration from the Registration Committee of India for producing LLIN containing alpha-cypermethrin with 0.55% w/w as required under the Insecticides Act, 1968. It is their case that no irregularities have been done and no finished product is being sold in the local market. Unlike other chemical units, the waste generated while manufacturing the LLIN is not an effluent or sludge containing heavy metals or poisonous chemicals. Hence, the sale of the waste is in no way falling in the norms fixed by the 1<sup>st</sup> respondent and also the 4<sup>th</sup> respondent permitted to dispose the non-hazardous solid waste in a proper manner. No water pollution or air pollution is being caused by the units and such low concentration of 0.55% of alpha-cypermethrin is not toxic to human beings.

16) In the rejoinder filed against the replies of the respondents 1, 2, 4, 5 and 6, the applicant states that the 5<sup>th</sup> and 6<sup>th</sup> respondents have been selling alphacypermethrin laden material in the domestic market contrary to law. Having not received the permission for indigenous manufacture and sale, the respondent units shall not be permitted to sell LLIN products in the domestic market even in the form of waste, since the same is toxic and causes serious pollution. The applicant contends that the contention of the 5<sup>th</sup> and 6<sup>th</sup> respondents that the concentration of the alpha-cypermethrin is less than 0.55% w/w is false and in fact, the insecticide content is higher. The applicant further argues that the Board has wrongly permitted the 6<sup>th</sup> and 7<sup>th</sup> respondents to flout the law and allowed to sell the material in the local market, which is illegal. Information obtained by the applicant under the Right to Information Act, 2005 indicates that on 09.10.2014, the Directorate of Plant Protection, Quarantine and Storage, Secretariat of CIBRC, Faridabad, furnished a reply. Under item no.5 of the reply, it is stated that

"Alpha-cypermethrin is an insecticide. Any waste material containing alpha-cypermethrin is a hazardous waste. Disposal of hazardous wastes should be done as per the provisions of the Environment (Protection) Act, 1986 and Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and amendments there under".

17) The applicant has also filed a copy of the test report of the alphacypermethrin incorporated wastage samples taken on 12.12.2014 and referred to Govt. of India, Ministry of Agriculture, Department of Agriculture and Cooperation, Directorate of Plant Protection, Quarantine & Storage, Regional Pesticides Testing Laboratory, Chandigarh by the Assistant Director of Agriculture, Karur District. In the report dated 26.03.2015, it has been stated that there is an active ingredient content ranging from 0.096% to 2.23% in different samples of alpha-cypermethrin 15% GR. 18) Thereafter, the 5<sup>th</sup> respondent filed a copy of the letter dated 07.10.2015 issued by the Directorate of Plant Protection, Quarantine and Storage, Secretariat of CIB&RC, Ministry of Agriculture, Govt. of India, Faridabad, wherein an endorsement of additional 19 factory addresses in respect of Registration Certificate No.CIR(E)-4935/2011(318) – LLIN containing alpha-cypermethrin – 5 has been communicated with a direction that all the conditions mentioned in the Certificate of Registration issued for export purpose only, should be complied with in totality. It is one of the conditions mentioned in the letter on granting of endorsement of additional factory addresses. It was stated that the Director of Agriculture, Tamil Nadu, shall ensure proper disposal of waste material and unused material as per guidelines of the Central Pollution Control Board and the Tamil Nadu State Pollution Control Board under relevant environment laws in each units separately ensuring that no finished/unfinished product or part thereof should be sold or otherwise outside the manufacturing unit in each unit separately.

19) If the concentration of alpha-cypermethrin is more than 50 mg/kg, then it is toxic and irregular but in the case of 5<sup>th</sup> and 6<sup>th</sup> respondents units, the concentration is just 0.026 mg/kg and it does not qualify to be defined as hazardous material and for determining the concentration of the hazardous constituents in the waste, TCLP as per ASTM-D5223-92 has been adopted. Alpha-cypermethrin comes under Class-A 17, Schedule-II of the Hazardous Wastes Rules, 2008, wherein the concentration limit prescribed is 50 mg/kg and therefore, Hazardous Wastes Rules, 2008 are not applicable as concentration is very low i.e., below 50 mg/kg. Under Rule 3 (1) of the aforesaid rules, hazardous waste has been defined and includes the wastes having constituents specified in Schedule-II, if the concentration is equal to or low more than the limit indicated in the Schedule. Moreover, the Board in their memo dated 23.12.2014 has categorically stated as follows: "In this regard, the Chairman, Tamil Nadu Pollution Control Board has instructed to examine the complaint through  $3^{rd}$  party expert (may be CIPET) and obtain opinion to take further action against the said units. In this connection, reference (2) cited was addressed to DEE, Karur and requested to take necessary action to examine the complaint with  $3^{rd}$  party expert (CIPET) and to furnish the report of the same with remarks and recommendation to the Board.

In this regard, DEE, Karur vide reference (3) cited has requested the CIPET to furnish its interpretation on the test report furnished by the M/s. SGS India Pvt. Ltd., Chennai dated: 16.09.2014 regarding the concentration of alpha-cypermethrin in the plastic waste so as to enable the Tamil Nadu Pollution Control Board to decide whether to accommodate the plastic waste containing alpha-cypermethrin in any of the following waste i) A-16 (Halogenated compounds of aromatic rings), ii) A-17 (Halogenated aromatic compound) and iii) A-19 Organo Chloride Pesticide listed in the class A of Schedule-II of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended.

Subsequently, DEE, Karur *vide* reference (4) cited has reported the following that:

1. The Tamil Nadu HDPE net fabric Association has informed that the CIPET is not the authority to declare that the plastic waste generated is a hazardous one.

2. Submitted the specific interpretation that:

a. Whether the insecticide cypermethrin may be listed under the following list of wastes as per class A of Schedule-II of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended i) A-16 (Halogenated compounds of aromatic rings), ii) A-17 (Halogenated aromatic compound) and iii) A-19 Organo Chloride Pesticide.

b. If the plastic waste is interpreted with the one of the above said wastes listed in the class A of Schedule of Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended, the concentration level of the insecticide (0.026 mg/kg) is much lower in the plastic waste, than the concentration mentioned for the list of waste mentioned in the class A of Schedule II of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended (i.e.) 50 mg/kg.

3. Further, the M/s. SGS India Pvt. Ltd., Chennai has furnished the test result dated: 20.11.2014 for the plastic waste sample reveals that the concentration of alpha-cypermethrin is 0.026 mg/kg which is very low as compared to said concentration level (50 mg/kg) for the list of waste mentioned in the class A of Schedule-II of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended. 4. Moreover, CIPET in its letter dated: 21.07.2006 to V.K.A Polymers (P) Limited has stated that WHO has recommended the use of alpha-cypermethrin is safe to manufacture and use mosquito net as a commodity item and also recommended that the tested value of the difference between overall migration of mosquito net (with and without insecticide alpha-cypermethrin is 0.096 % w/w which is under range of registered value (0.6% w/w) by Central Insecticides Board and Registration Committee, Ministry of Agriculture, Govt. of India.

5. Finally, DEE, Karur requested the Tamil Nadu Pollution Control Board to conclude and inform whether the above plastic waste impregnated with insecticide is hazardous or not, so as to take necessary further action against the complaints.

In view of the above, Tamil Nadu Pollution Control Board has examined and decided that the plastic waste generated from the following units is **not hazardous** as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 as amended.

*i) M/s. VKA Polymers (P) Ltd., S.F. No.169/1 & 170/1, Balarajapuram Village, Krishnarayapuram Taluk, Karur Taluk, Karur District.* 

*ii) M/s. Shobikaa Impex Private Limited, Plot No.29, Athur SIDCO Industrial estate, Karur.* 

With subject to the following condition to the unit that

"The unit shall ensure that the solid wastes such as waste HDPE yarn is collected then and there and sold for further beneficiary use so as to avoid the accumulation of the same".

Hence, DEE, Karur is instructed to take necessary further action on the complaints pertaining to the said units".

20) The 5<sup>th</sup> and 6<sup>th</sup> respondents submitted that the consent issued by the Board to sell the waste for further beneficiary uses is in line with the generally followed procedure all over the world with respect to solid plastic wastes. The best possible solution with the technology available today is to keep the plastics in use via recycling so that the plastic waste does not pollute the environment. Moreover, every recycling stage thermally degrades the plastic and the insecticide consequently reduces the life of the plastic because degraded plastics decompose faster than virgin plastics.

21) The counsel for the 5<sup>th</sup> and 6<sup>th</sup> respondents argued that as per Rule 4 (2) of the Hazardous Wastes Rules, 2008, the hazardous waste generated in the establishment of an occupier shall be sent or sold to a recycler or re-processor or re-user registered or authorized under the Hazardous Wastes Rules, 2008 or shall be disposed of in an authorized disposal facility. Therefore, there is no bar for those units who have been granted endorsement of additional factory addresses by the CIB&RC to send the waste to the authorized unit under Rule 4 (2) as stated above and it does not amount to selling the material in the local market. Only the authorized mother unit under Rule 4 (2) authorized for recycling is selling the yarn waste and unfinished material strictly as per rules and there is no violation of the permission granted by the CIB&RC and no finished and unfinished product or part thereof is sold or otherwise outside the manufacturing unit.

22) Before giving CTE to the unit for commercial production, the Board got the migration test done for the LLIN incorporated with alpha-cypermethrin. The test was conducted at CIPET, a premier institute for polymer and plastic technology in India. Based on the test results of the migration of insecticide (0.096% w/w which is far below the concentration of registered value of insecticide concentration 0.6% w/w) the Board gave CTE to the unit. The Board also mentioned in the certificate that the solid waste be sold for further beneficiary purposes in order to avoid accumulation of the same.

23) In order to ascertain the nature of the solid waste generated while manufacturing LLIN incorporated with alpha-cypermethrin, the Board collected solid waste samples (*which includes trimming waste, yarn and lumps*) from the manufacturers' units on 08.09.2014. To find out the concentration of alpha-cypermethrin in the leaching of the plastic waste, the samples were tested using

TCLP in accordance with the Hazardous Wastes Rules, 2008 which states that TCLP as per ASTM-D5233-92 should be adopted.

24) Alpha-cypermethrin is a highly active synthetic pyrethroid insecticide. It is generally harmless to human beings in low doses and comes under Class A, Schedule II of Hazardous Wastes Rules, 2008 for which the concentration limit is 50 mg/kg. The TCLP test results showed that the concentration of alphacypermethrin in the waste is 0.026 mg/kg which is far below the concentration limit of 50 mg/kg. TCLP is designed to understand the behaviour of a solid waste in the environmental conditions because the test stimulates potential disposal scenario. The test determines the concentration of the alpha-cypermethrin that would come into the environment from the disposed LLIN waste. Based on the results, the Board issued certificates to both the companies to sell the solid waste to avoid accumulation of the same. In the CIB&RC letter dated 07.10.2015 on Endorsement of additional factory addresses, it is mentioned as follows:

"Further ensuring that no finished/unfinished product or part of should be sold or otherwise outside the manufacturing unit in each unit separately".

25) The semi-finished goods (fabrics) are brought to the mother unit (main manufacturing unit for which license is issued) cut into sizes and stitched in the form of finished nets. The job-work/additional units have no sewing machines to finish the fabrics into nets. The finished goods are packed only in the main unit and dispatched directly to the port for export. Hence, it is clear that the finished/unfinished goods are not sold from any additional unit other than the main units of the manufacturers.

26) The applicant has not produced any evidence of misuse of the permission granted to the  $5^{th}$  and  $6^{th}$  respondents or for that matter against any

other particular LLIN manufacturing unit to prove that they are selling the products in the domestic market and causing pollution and health hazard to the public. Therefore, based on the aforesaid record placed before us and having heard the parties at length, we agree with the contentions put forward by the 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> respondents. Since, the test results show that the alpha-cypermethrin is in such low concentration far below the registered value and the waste material is sent only to the authorized mother unit for reuse or recycling as approved by the Board after the test results, we see no merits in the averments made by the applicant that the respondent companies are allegedly involved in the illegal sale of hazardous waste materials and misusing the export quota thereby causing pollution and damaging the health of the people.

27) Accordingly, the application stands dismissed as it is devoid of merits both on facts and in law. However, there is no order as to costs.

(Justice M. Chockalingam) Judicial Member

> (Shri. P. S. Rao) Expert Member

**Chennai.** 15<sup>th</sup> December, 2015.