

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Application No.17 of 2012 (SZ)

(W.P.No.14257 of 2010 on the file of Madurai Bench of Madras High Court)

Application No.15 of 2013 (SZ)

(W.P.No.5962 of 2012 on the file of Madurai Bench of Madras High Court)

In the matter of

Vivasayam Mattrum Sutrusoozhal
Pathukappu Sangam
Rep. by its Secretary K. Nalluthevar
Eluvanampatti, Nilakottai Taluk
Dindigul District

.. Applicant
in both

Vs.

The State of Tamil Nadu
Rep. by its Secretary
Department of Environment & Forest
Chennai

.. R1 in both

The District Collector
Dindigul District

.. R2 in Apln.17/2012
.. R3 in Apln.15/2013

Tamil Nadu Pollution Control Board
Guindy, Chennai

.. R3 in Apln.17/2012
.. R4 in Apln.15/2013

Saravana Fine Yarns
Rep. by its Manger
Pithalaipatti, Dindigul

.. R5 in both

Eluvanampatti Panchayat
Rep. by its Manager

.. R4 in Apln.17/2012

The Loss of Ecology Authority
Chennai

.. R2 in Apln.15/2013

The District Superintending Engineer
Dindigul Division, Tamilnadu Electricity
Board, Dindigul

.. R6 in Apln.17/2012

Counsel appearing for the applicant

Mr. T. Arul

Counsel appearing for the respondents

For respondent No.1 & 2
In Appln.No.17/2012 ..
For respondent No.1 & 3 .. M/s. M.K. Subramanian
In Appln.No.15/2013 P. Velmani

For respondent Nos.3
In Apln No.17/2012
For respondent No. 4
In Apln No.15/2013 .. Mrs. Rita Chandrasekar

For R5 in both applns .. M/s. D. Selvakumari, T. Dharani
Mr.D.R. Arun Kumar

For R4 in
Apln.No.17 of 2012 .. M/s. M. Nambirajan Rajeswaran

For R2 in Apln.15/2013 .. Mr. N. Sankaravadivelu

For R6 in Apln.17/2012 .. Mr. P. Gnanasekaran

ORDER

Present

Hon'ble Shri Justice Dr. P. Jyothimani, Judicial Member

Hon'ble Shri P.S.Rao, Expert Member

Delivered by Justice Dr.P. Jyothimani (Judicial Member)

6th July, 2017

Whether judgment is allowed to be published on the Internet .. Yes/No

Whether judgment is to be published in the All India NGT Reporter .. Yes/No

The applicant Vivasayam Matrum Sutrusoozhal Pathukappu Sangam has filed a Public Interest Litigation in W.P.No.14257 of 2010 in the Madurai Bench of the Madras High Court, praying for a direction against the 3rd and 4th respondents not to grant permission to the 5th respondent to continue with the operation of its establishment and also to direct the 5th respondent to pay cost for the reclamation of land to the

farmers of Eluvanampatti, Veriyappan Nayakanpatti, Kadamanoor, Aaraychi, Utchapatti, Viralipatti, Kottapatti, Perumalkovilpatti and Kodangi Nagar Villages of Dindigul and Theni Districts. By an order dated 4.12.2012 the Hon'ble High Court has transferred the writ petition to this Tribunal and numbered as Application No.17 of 2012.

2. The applicant which is a Registered Society consisting farmers of Eluvanampatti Panchayat, Kottarpatti and Kodangi Nagar Villages. Eluvanampatti Panchayat is situated at the foothills of Kodaikanal Ghats and the Villages are surrounded by four hillocks and it is stated that the rain water from Seelaikaradu flows through Odai (stream) and joins Vaigai River at Pannaipatti Village. The Tamil Nadu Water Supply and Drainage Board (TWAD Board) has constructed a Check Dam in the Odai near Aaraychi Village for the benefit of the farmers.

3. It is the case of the applicant - Society that Eluvanampatti Panchayat depends upon agriculture for which the ground water is the main source and most of the farmers have well in their lands and many of them are small farmers and agricultural coolies. In 2003, the 5th respondent established a dyeing unit which is a highly pollutant industry, discharging industrial hazardous sewage. The 5th respondent has made an application to the 3rd respondent – Tamil Nadu Pollution Control Board (Board) seeking for 'Consent to Establish' showing a discharge of 315 Kg of ETP sludge.

4. The Board has originally refused to give 'consent to establish' against which the 5th respondent preferred an appeal before the Appellate Authority constituted under the Water (Prevention and Control of Pollution) Act, 1974 (Water Act) and Air (Prevention and Control of Pollution) Act,

1981(Air Act). The 3rd respondent – Board has taken a stand before the Appellate Authority that the 5th respondent is a ‘red’ category industry, proposing to establish outside the industrial area and it is likely to contaminate the land, groundwater and wells and even by adoption to Reverse Osmosis Process (ROP), pollution is likely to perpetuate. However, subsequently the Board has given ‘consent to establish’ to the 5th respondent which was expanded from the initial capacity, by establishing three more units.

5. It is the case of the applicant – Society that after the establishment of the 5th respondent industry, agricultural operations in the area has come to a halt and all the lands in the above said Villages were damaged due to the discharge of trade effluents from the 5th respondent factory which has resulted in reduction of yield from the land since water in the land has become contaminated and salinated. That apart, the villagers are also affected with skin allergy by consuming the contaminated water. There are nearly 80 wells which have become contaminated. The villagers have to carry drinking water from Manjalaru River which is 2 to 3 KM away from the villages. It is the further case of the applicant that the 5th respondent is storing sludge in the open land and dumped the same by digging huge pits around the factory, affecting the water table. The villagers have also lost their goats and cows due to the consumption of contaminated water and the growth of the crops has become shunted.

6. The villagers have made representations and after prolonged struggle the Board officials have visited the site of the 5th respondent and collected water samples from four wells in the 4th respondent - Panchayat which has proved that the water has been polluted. Even thereafter the 3rd

respondent has not taken any action against the 5th respondent and the representation made to the District Collector, Dindigul, the 2nd respondent dated 12.7.2010, was forwarded to the Board for which the Board has replied on 16.7.2010 stating that based on the analysis report, the Board has recommended action against the 5th respondent, however, without disclosing any action.

7. Under the Right to Information Act, the villagers are able to get information from the 3rd and 4th respondents which reveal that the licence granted by the 4th respondent- Panchayat to the 5th respondent has expired on 26.2.2011. That apart, the 'consent' given by the Board for two units expired on 30.9.2010 and therefore the units are being run without 'consent'. It is the case of the applicant – Society that more than 10,000 villagers are affected by the functioning of the 5th respondent industry. On the basis of the precautionary principle and protection of environment and ecology in respect of 9 villages, the High Court should interfere by imposing an order of restraint. With the above averments, the applicant has originally filed the writ petition before the Hon'ble High Court.

8. The District Superintending Engineer, Dindigul Division, Tamil Nadu Electricity Board, Dindigul was impleaded as 6th respondent by an order dated 19.4.2011 passed by the Hon'ble High Court in M.P.(MD) No.1/2011. Further, on an application filed by the applicant in the High Court in M.P.(MD).No.3 of 2011 to effect closure of the 5th respondent industry forthwith, came to be dismissed as withdrawn on 20.9.2013.

9. The 2nd respondent – District Collector, Dindigul in his reply filed on 4.4.2013 which came to be adopted by the 1st respondent – Government of Tamil Nadu, has stated that on receipt of the representation from the

applicant and others, the Loss of Ecology Authority inspected the affected villages and passed an Award granting compensation to the victims.

10. As against the said Award, the applicant has filed W.P.(MD).No.9929 of 2011 on the file of the Madurai Bench of the Madras High Court. The High Court has directed the District Collector to submit a report after inspection of the 5th respondent premises and accordingly the 5th respondent industry was inspected on 25.3.2012 and report was submitted before the Madurai Bench of the Madras High Court. It is stated in the said report submitted to the High Court that there is no discharge of effluents into the land and the effluents generated by the 5th respondent are recycled and reused and that the 5th respondent industry is using water from the borewell situated within its premises for its industrial purposes. It is further stated by the District Collector that permission to continue operation of the 5th respondent is to be given by the Board. However, no effluent is discharged into the land and water is recycled and reused. There is no bar for the 5th respondent industry to run. It is also stated that the damage caused due to the seepage of effluents during the past was inspected by the competent authority viz., Loss of Ecology Authority and orders have been passed. The District Collector has further stated that action is taken to disburse compensation to the victims and the 5th respondent is now treating the effluents with proper Reverse Osmosis and Multiple Evaporator System.

11. The 3rd respondent – Board in its original counter affidavit filed in the writ petition before the High Court dated 31.12.2010, while extracting the provisions of the Water Act which enables the Board to specify the effluent standards and parameters regarding industries, has given certain

details about the activities carried on by the 5th respondent which is stated to be Mercerizing and Bleaching Division (a unit of Sri Saravana Spinning Mills Ltd) in R.S.No.946/1A etc., of Viralipatti Village, Nilakottai Taluk, Dindigul District (classified as Orange Category). Consent was given to manufacture Grey Mercerized Yarn of 39 T/M, Scoured (Semi Bleached) Mercerized Yarn of 52 T/M full bleached mercerized yarn of 26 T/M, trade effluent generation quantity of 270 KLD. Further, Physio-Chemical Treatment system with Multiple Effect Evaporator (MEE) was to be followed. Trade effluent after treatment has been utilized for land of project proponent for raising plantations. The caustic effluent after recovery through MEE system has been reused. However, it is stated that the said unit is not in operation for the past one year.

12. In respect of M/s. SSM Fine Yarns – Yarn Dyeing Division, stated to be classified as Ultra Red Category, it is stated by the Board that the application filed in the name of M/s. Saravana Fine Yarn (A unit of Sri Saravana Spinning Mills Ltd.,) on 1.4.2002 for 'Consent' was rejected by the Board on 1.7.2002 and subsequently based on the order of the Appellate Authority dated 6.2.2004 'consent to establish' and 'consent to operate' were issued to manufacture dyed yarn of 78 T/M and to generate trade effluent quantity of 378 KLD. However, subsequently the unit has filed an application for name change and also change of production capacity without altering consented trade effluent quantity and 'consent' was given on 5.9.2006 in the name of M/s. SSM Fine Yarn (Yarn Dyeing Division) to manufacture dyed yarn 240 T/M with the same consented trade effluent quantity – 378 KLD. M/s. SSM Fine Yarns – Yarn Dyeing Division, classified as Ultra Red Category was given 'consent to establish' by the Board on 12.12.2005 and subsequently 'consent to operate' was

issued on 29.11.2006 to manufacture dyed knitted fabric of 554 T/M and to generate trade effluent quantity of 1000 KLD.

13. It is further stated that the application filed in the name of M/s. Saravana Fine Yarn on 1.4.2002 under Water Act and Air Act was rejected for the reason that the location is a non traditional place for such activity. However, based on the order of the Appellate Authority dated 6.2.2004 'consent to establish' was issued subject to conditions inter alia to install reverse osmosis system with suitable evaporation methods for the disposal of rejects and to achieve 'zero' discharge of effluents. The trade effluent generated from yarn dyeing division and fabric dyeing division are being treated in the combined effluent treatment plant.

14. The reply has also given the details of components of Zero Level Discharge (ZLD) in the Annexure I to the reply which is as follows:

S. No	Name of the Unit	Size	No s.
1	Collection cum Equalization tank	16m x 13.5 m x 3.5 m 3.5m each	02
2	Lime Mixing Tank	1.05 m x 1.05 m x 1.2 m	01
3	Mixing Channel	14m x 0.6 m x 0.6 m each	06
4	Primary Settling tank I	14m dia.m + 0.5 m depth	01
5	Primary Setting tank II	14m dia.m + 0.5 m depth	01
6	Aeration Tank	22 m x 17 m x 4 m + 0.3 m	01
7	Secondary Clarifier I	14m dia: 2.5 m + 0.3 m depth	01
8	Secondary Clarifier II	14m dia: 2.5 m + 0.3 m depth	01
9	Sand Filter	2.2m dia: 2 m height	02
10	Carbon cum sand filter	2.2m dia: 2 m height	01
11	Frame and Filter press (1000 L/hr)	800m x 800 mm : 47 plates	01
12	Reagent Tank	100 L capacity	01
13	Treated Effluent collection tank	9.5 m x 8 m x 4 m +0.3 m	01
14	RO -1 reject tanks	9.5 m x 8 m x 4 m +0.3 m	02
15	UF Product Tank	8m x 6m x 4 m +0.3 m	01
16	RO – 2 reject tanks	8m x 6m x 4 m +0.3 m 8m x 4.75 m x 4m + 0.3 m	01 01
17	RO Product Water tank	8m x 4.75 m x 4m + 0.3 m 15m x 21 m x 3.6m + 0.3 m	01 01
18	Nano – filtration brine tanks	8m x 4.75 m x 4m + 0.3 m 3m x 3.3 m x 3.6 m + 0.3 m 3 m x 4.5 m x 3.6 m.+0.3 m	01 01 01
19	Nano – filtration reject tanks	8m x 4.75 m x 4m +0.3 m	01
20	U1 backwash water tank	4m x 4.75 m x 4m +0.3m	01

21	Wash water clarifier	10 m dia: 2.54 m +0.3 m depth	01
22	Ultra – filter	24 modules with 1 membrane each	02
23	RO Stage -1	60m ³ /hr capacity. 12 modules with 6 membrane each	02
24	RO Stage -2	25 m ³ /hr capacity. 4 modules with 5 Membrane each	02
25	RO Stage -3	25 m ³ /hr capacity. 4 modules with 6 Membrane each	02
26	Nano – Filter	0.2 m dia : 4 m Long (3 modules with 6 membrane each)	02
27	Triple effect evaporator	3750 kg/hr capacity	01
28	Evaporator concentrate tank	9.3 m x 6.2 m x 2m +0.3 m	01
29	Solar Evaporation pan	7200 m ²	01
30	Forced Cooling evaporators	--	07

It is further stated that periodical inspection by the Field Engineer reveals that the said system is working well and being monitored.

15. It is stated that a complaint was received from the public of Pithalaipatti Village, Dindigul District regarding unauthorised dumping of sludge along the road side. On investigation it was found that the trade effluent was brought from the unit of SSM Fine Yarns, Eluvanampatti, Nilakottai, Dindigul District by vehicle and dumped along the Dindigul - Theni road side. The sludge was directed to be taken to the unit premises where the unit has provided a Secure Landfill Facility (SLF) as per the guidelines of the Central Pollution Control Board and that was also on the condition incorporated by the Board in the 'consent to establish' order. It is stated that presently the Effluent Treatment Plant sludge was found to be disposed into the SLF as per the Central Pollution Control Board guidelines. It is also stated that the 5th respondent unit has been advised to enter into an agreement with the service provider for transportation of their Hazardous Solid Waste to the Transport, Storage and Disposal Facility (TSDF) at Gummidipoondi or explore the possibility of disposing the same in cement kilns of nearby cement industry with prior permission from the

Board following the procedures as per the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.

16. There was a further complaint by a land owner regarding the disposal of effluent into the nearby land and an inspection was carried out and it was informed that the excess sludge from secondary clarifier was unknowingly discharged and it was stopped immediately. The unit was strictly instructed to operate to maintain ZLD effectively and not to discharge trade effluents either itself or through its sister concern without treatment.

17. It is further stated that there was public complaint against the 5th respondent unit regarding contamination of ground water due to its activities. It was in those circumstances the unit was inspected and water samples were taken from the nearby wells and analysed. The analysis has shown the following particulars:

S. NO	Name of the Well (Identification Name)	TDS in mg/lit (Base line data and sample collected during 2010)	Remarks
1.	A	1046 – 1038	Northern side of SEP (Solar Evaporation Pan)
2.	B	1312 – 1040	Far away from SEP area
3.	C	608 – 2798	Close vicinity to SEP
4.	D	612-2464	Close vicinity to SEP
5.	E	732 – 1472	Away from SEP
6.	F	560 – 674	Far away from SEP area
7.	G	No Data Given	
8.	H	No Data Given	
9.	I	580 – 1840	Close vicinity to SEP
10.	J	580 – 4556	Close vicinity to SEP
11.	K	- 5278	Close vicinity to SEP
12.	L	- 1868	1 Km beyond the well 'N'
13.	M	- 7152	Close vicinity to SEP
14.	N	- 8184	Close vicinity to SEP

18. As per the analysis report, it is seen that the wells in closer geographical vicinity to the SEP are seen contaminated i.e., enhancement

in TDS values which are upto 8184 mg/lit. It was reported by the Engineer of the Board that this might be due to the leakage in the SEP in the recent past since the unit has been maintaining ZLD which has been closely monitored. It is also stated that the unit has provided 1500 mm thick polythene sheet cover in the SEP to ensure impermeability. The Board has taken the action, requesting the Loss of Ecology Authority to conduct an extensive study on these locations to assess damages caused to the agricultural lands and groundwater surrounding the premises of the 5th respondent – Saravana Fine Yarn. As per the letter of the Board dated 3.12.2010 to provide impermeability of the SEP as the TDS in the nearby wells were ranging 1840 – 8184 mg/lit and that was directed to be done through the reputed engineering colleges. In respect of the prayer of the applicant for reclamation of land, on receipt of the study and report i.e., the Award of the Loss of Ecology Authority, necessary compliance will be made and further action also will be taken under Section 33-A of the Water Act.

19. In a subsequent reply affidavit dated 19.9.2013, the 3rd respondent – Board has furnished the report of analysis of water samples collected from 13 wells surrounding the unit of M/s. SSM Fine Yarns Ltd., in the form of statement which are as follows:

Statement – 1

Statement of Surrounding Well Water Roa of SSM Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dindigul District.

Parameter	Unit	Nagammal Kovil Well							
		<i>Oct'12</i>	<i>Nov'12</i>	<i>Dec'12</i>	<i>Jan'13</i>	<i>Feb'13</i>	<i>Mar'13</i>	<i>May'13</i>	<i>Jun'13</i>
<i>pH</i>	-	7.49	7.91	6.52	6.54	6.69	6.88	6.72	7.42

Total Dissolved Solids	Mg/l	2126	2484	2424	2346	2288	2060	2864	2980
Chlorides as Cl	Mg/l	640	815	715	699	560	515	760	860
Sulphate as SO ₄	Mg/l	96	114	-	-	125	53	154	133
Total Hardness	Mg/l	930	1380	1080	1250	1016	1350	1220	168
Sodium Absorption Ratio	Mg/l	2.48	-	6.70	-	-	-	-	-
Percent Sodium	%	29	-	50	71	-	-	-	-

Statement -2

Statement of Surrounding Well Water Roa of SSM Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dingigul District.

S.No	Parameter	Unit	Veeran Well				
			Apr'11	Jan'13	Feb'13	May'13	Jun'13
1.	pH	-	7.35	6.90	6.92	7.06	7.90
2.	Total Dissolved Solids	Mg/l	1654	698	698	704	684
3.	Chlorides as Cl	Mg/l	415	104	80	70	140
4.	Sulphate as SO ₄	Mg/l	61	-	19	06	18
5.	Total Hardness	Mg/l	820	310	500	230	120
6.	Sodium Absorption Ratio	Mg/l	2.86	-	-	-	-
7.	Percent Sodium	%	25	94	-	-	-

Statement -3

Statement of Surrounding Well Water Roa of SSM Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dingigul District.

S.No	Parameter	Unit	Kandhan well		
			April'11	Nov'12	Mar'13
1.	Ph	-	7.46	7.99	7.20
2.	Total Dissolved Solids	Mg/l	1746	688	682
3.	Chlorides as Cl	Mg/l	445	105	80
4.	Sulphate as SO ₄	Mg/l	73	02	03
5.	Total Hardness	Mg/l	612	400	428
6.	Sodium Absorption Ratio	Mg/l	5.96	-	-
7.	Percent Sodium	%	50	-	-

Statement -4

Statement of Surrounding Well Water Roa of SSM Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dingigul District.

S. No	Parameter	Unit	Mookan well		Kottarpatti Bore well		Amsamanidevar well		
			Apr'11	Nov'12	Nov'12	Apr'13	Mar'12	Oct'12	Apr'13
1.	pH	-	7.72	7.74	7.62	7.21	7.87	7.65	7.11
2.	Total Dissolved Solids	Mg/l	1008	1260	4484	2964	7498	8068	12660
3.	Chlorides as Cl	Mg/l	230	320	1580	850	3459	3929	4449
4.	Sulphate as SO ₄	Mg/l	59	90	88	36	125	163	231
5.	Total Hardness	Mg/l	436	430	1750	1215	5380	2740	6630
6.	Sodium Absorption Ratio	Mg/l	5.96	3.39	2.42	1.43	-	2.32	0.913
7.	Percent Sodium	%	52	44	21	16.39	-	18	5.33

Statement -5

Statement of Surrounding Well Water Roa of SSM Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dingigul District.

Parameter	Unit	Poonu-samy well	Muthuramalingam well			Songu well		M. Murugan Well	
		Apr'13	Mar'12	Oct'12	Apr'13	Oct'12	Apr'13	Oct'12	Apr'13
pH	-	7.51	7.54	7.51	7.30	7.48	6.98	7.61	7.25
Total Dissolved Solids	Mg/l	14316	7972	9268	14196	5292	4956	2610	3298
Chlorides as Cl	Mg/l	5088	3709	4469	4898	2059	1780	785	1020
Sulphate as SO ₄	Mg/l	122	335	345	529	125	105	83	93
Total Hardness	Mg/l	6800	5900	2960	6860	1970	2620	720	1300
Sodium Absorption Ratio	Mg/l	1.05	-	3.11	1.17	3.52	1.82	4.51	1.43
Percent Sodium	%	06	-	22	5.86	27	15	45	16.40

Statement -6

Statement Of Surrounding Well Water Roa Of Ssm Fine Yarns, Eluvanampatti, Nilakkottai Taluk, Dingigul District.

S.No.	Parameter	Unit	Palaniammal well	Palanisamy Chettiyar well	Alagarsamy well
1.	pH	-	7.52	7.57	8.07
2.	Total Dissolved Solids	Mg/l	3684	4218	2088
3.	Chlorides as Cl	Mg/l	1150	1330	500
4.	Sulphate as SO ₄	Mg/l	126	121	127
5.	Total Hardness	Mg/l	1120	1470	450
6.	Sodium Absorption Ratio	Mg/l	4.79	5.82	7.0
7.	Percent Sodium	%	41	45	61

20. That apart, it is stated that the unit has installed Elevated Solar Evaporation Pan during May, 2012 and the same was in operation.

However, in so far as it relates to the report of the Madurai Kamaraj University, as requested by the applicant, the same is stated to be not available with the District Environmental Engineer, TNPC Board, Dindigul. The said particulars were furnished by the Board based on the prayer made by the applicant to direct the Board to furnish the said particulars.

21. The Board has also filed another reply during August, 2013 stating that the 5th respondent unit is located in Eluvanampatti Village, Nilakottai Taluk, Dindigul District and established three divisions viz., (1) Bleaching & Mercerizing Division (2) Yard Dyeing Division (3) Fabric Dyeing Division in the same location and it has provided full fledged ZLD system and the records maintained by the units reveal that the unit is continuously achieving 'zero' discharge of effluents. The 5th respondent unit was given 'authorisation' by the TNPC Board on 7.3.2011 to transport the ETP sludge to M/s. Ultra Tech Cement, Ariyalur for co-processing and the said 'authorisation' expired on 26.7.2012 and the unit has applied for renewal of 'authorisation' and the same is yet to be issued, as the cement industry has to obtain permission from the Central Pollution Control Board.

22. It is stated that frequent complaints are received against the 5th respondent industry which was also echoed in the monthly Agricultural Grievance Day meeting of the District Collector. Based on the same, water samples were taken from the nearby wells and sent for analysis and it was learned that the wells located in the downstream side of the units have higher TDS, alkalinity and hardness. This might be due to the leakage in the SEP in the recent past and accordingly the Board has issued direction to the 5th respondent on 3.12.2010 to prove the impermeability of the Solar Evaporation Pan through a study taken by a reputed institution. It is also stated that in the mean time the unit has provided 1000 micron

thickness virgin grade geo membrane HDPE sheet cover in the SEP to prevent seepage.

23. The Board also in its letter dated 3.12.2010 requested the Loss of Ecology (Prevention and Payments of Compensation) Authority to conduct an extensive study on the location to assess the damage caused to the agricultural lands and ground water surrounding the industrial premises due to the bleaching, mercerising and dyeing activities carried on by SSM Fine Yarns and its two sister units at R.S.No.952 etc of Viralipatti Village, Eluvanampatti, Nilakottai Taluk, Dindigul District.

24. The Loss of Ecology (Prevention and Payments of Compensation) Authority has conducted a study and passed an Award, directing the unit to pay an amount of Rs.15,45,524/- as compensation. Accordingly, the amount of Rs.14,69,719 and Rs.1,75,805 has been paid by the unit to the District Collector of Theni and Dindigul Districts respectively.

25. It is stated by the Board that the stability and impermeability of all the ETP tanks and secured landfill systems was studied by Anna University, Chennai which has furnished certificate stating that all ETP tanks, Scientific Secured Land Fill Facility and Elevated Evaporation Pan are stable, safe and impermeable. The samples collected from the wells located in the vicinity of the unit on 18.4.2013 reveals that the level of TDS becomes high compared with the samples collected during 2012, except the drinking water well at Kottarpatti. The water level in the wells was very low due to summer season.

26. It is also stated that as per the direction of this Tribunal, the status of the unit was given by the Board which are as follows:

“(1)The unit was under operation and the ETP, ZLD system were also under operation.

(2) The unit has installed 23 Nos of EMFM at various locations of ETP and ZLD system. It has connected all the 23 EMFMs to the CARE AIR Centre of the Board.

(3) The unit was previously instructed to install separate EMFM to assess the make up water used for the different purpose so as to ascertain the zero discharge achieved by the unit consistently. In this regard, the unit has provided EMFMs to ascertain the quantity of fresh water used for process and boiler.

(4) The sludge collected from the ETP has been disposed in the captive secured landfill system provided temporarily and from there it was sent to M/s. Ultratech Cement, Ariyalur for co processing. However, the ETP sludge has not been transported to M/s. Ultratech Cement, Ariyalur for more than 6 months.

(5) The unit has provided six numbers of Piezometer wells in the vicinity of Secured land fill and no water was noticed in the same during the time of inspection.

(6) The unit has removed the unused tanks in the vicinity of ETP.

(7) The natural evaporator installed inside the elevated solar evaporation pan has been commissioned. The reject from the MEE is collected in a separate collection tank near the natural evaporator and it becomes the feed for natural evaporator. It has provided separate EMFMs to ascertain the quantity of MEE reject and feed to the Natural Evaporator.

(8) Some of the effluent carrying pipelines are still in the underground. In this regard it was reported by the unit that they have been laid at the initial stage of establishing the unit. However, they have assured not to lay any new pipes in the underground in future.

(9) The report of analysis of the well water samples collected in the vicinity of the unit reveals that the level of TDS found to be very high.

(10) The unit has conducted the structural stability and impermeability study of all their ETP tanks and secured and fill systems engaging Anna University Chennai and furnished the certificate obtained from them stating that all the ETP tank, Scientific Secured Land fill facility and Elevated Evaporation pan are stable, safe and impermeable.

(11) The AAQ/Emission survey conducted in the vicinity of the unit on 11.12.2012 reveals that the unit has achieved the standards prescribed by the Board.”

27. It was based on the recommendations of the District Environmental Engineer, TNPC Board, Dindigul, the Board has given renewal of 'consent' on 26.7.2013 both under Water Act and Air Act to the

units of (1)Yarn Dyeing Division and (2) Fabric Dyeing Division with the validity upto 31.12.2013 subject to the following conditions:

“1. The combined ETP provided along with ZLD system shall be operated efficiently and continuously so as to ensure the zero discharge.

2. The unit shall operate and maintain the APC measures provided to the boilers efficiently and continuously so as to achieve the AAQ/Emission standards prescribed by the Board.

3. The unit shall dispose the Hazardous sludge generated from the combined ETP scientifically after obtaining authorization of the Board under Hazardous Waste (MH & TM) Rules, 2008.

4. The unit shall monitor the quality of ground water in the vicinity of the industry through the Piezometric wells provided within the premises.

5. The unit shall obey the outcome of the orders that will be passed by the Hon'ble National Green Tribunal, Chennai in respect of the Application Nos.17 of 2012 and 15 of 2013 and any other order that will be passed by any other court.”

6. The unit shall comply with the condition prescribed in the NOC given for the operation of Twin Tower Natural Evaporator vide Board's letter dated 04.01.2013.”

28. It is further stated that the District Environmental Engineer of the Board, Dindigul has issued renewal of 'consent' to the bleaching division with an amendment by deleting 'Mercerizing' production and retaining the bleaching products with validity upto 31.12.2013 subject to various conditions. It is also stated by the Board that the applicant has filed W.P.No.5962 of 2012 on the file of Madurai Bench of the Madras High Court, challenging the Award passed by the Loss of Ecology Authority dated 15.11.2011 and also to assess the damages to all the affected farmers of Eluvanampatti and other Villages. It is also stated that the applicant has filed another writ petition W.P.(MD).No.9929 of 2011 on the file of the Madurai Bench of the Madras High Court against the unit of Saravana Fine Yarns regarding the drawal of ground water for the industrial use.

29. The 4th respondent – Eluvanampatti Panchayat in its reply dated 2.12.2012 has stated that while it is true that the entire villagers of

Eluvanampatti Panchayat are depending on agriculture and people are mostly farmers and agricultural labourers, said that the Panchayat consists of Eluvanampatti, Veriappanaikanpatti, Kadamanur, Perianaickanur and Utchapatti with a total population of 6,000 residents. These villages are in close proximity of Manjalaru River on the Northern side and Vaigai River on the Southern side and many complaints were received from public relating to the problem of irrigation, drinking water and pollution caused by the hazardous waste generated by the 5th respondent unit. The villagers have also reported the casualties of cattles due to the contamination of drinking water.

30. The Panchayat has passed a resolution on 30.4.2012 and 29.6.2012 to take appropriate action against the 5th respondent to protect water, soil and environment. It is also stated that the Loss of Ecology Authority recommended compensation to the farmers against the 5th respondent. It is stated that for the industrial purpose, the 5th respondent is utilising Manjalaru River by forming a separate channel outside the factory limit. Therefore, the land and ground water sources are affected in the 4th respondent – Village. It is further stated that a Scheme has been evolved for remediation of the affected land and ground water and no highly polluting industry shall be allowed in close proximity to the water source. The 4th respondent is not aware of any inspection carried out regarding pollution in the village. The Loss of Ecology Authority has not assessed properly the individual/families affected by pollution and identify and pay adequate compensation to all concerned. It must also be ensured that safe drinking water is provided to all villagers in the 4th respondent Panchayat and the 5th respondent must be directed to take steps to dispose of the hazardous waste outside the 4th respondent Village.

31. The 5th respondent in the reply dated 11.1.2011 filed before the High Court, while denying the averments made by the applicant in the affidavit filed in support of the application, has submitted that the application is not maintainable in law. It is stated that the 5th respondent company has decided to establish a yarn and fabric processing unit and accordingly purchased huge barren lands of about 300 acres at Eluvanampatti Village in Nilakottai Taluk in phases from the year 2000 onwards. The unit was established at a radial distance of about 2.6 KM from the embankment of Manjalaru River which is a Tributary of Vaigai River and about 7 KM away from Vaigai River which is a notified water source of the area and the norms prescribed by the Government in G.O.Ms.No.213 dated 30.3.1983 and G.O.Ms.No.127 dated 8.5.1998 have been satisfied and the unit is located in a dry land which is an isolated place. The 5th respondent has applied to the 3rd respondent – Board on 1.4.2002 seeking ‘consent to establish’ yarn mercerizing and bleaching unit viz., Unit – 1 which is classified as ‘orange’ category industry, commenced its operation with ‘consent’ from the 3rd respondent Board dated 19.5.2003 to generate 270 KLD trade effluent with subsequent renewals every year, the last renewal being upto 31.3.2012

32. The 5th respondent has also applied on 1.4.2002 to the 3rd respondent Board seeking ‘consent to establish’ its 2nd unit which is a yarn dyeing unit classified as ‘red’ category under the provisions of the Water and Air Acts. That application came to be rejected by the Board on 1.7.2002 for the reason that the unit was located in a non traditional area to carry out such industrial activity.

33. It was in those circumstances, the 5th respondent has filed an appeal before the Appellate Authority created under the Water and Air Acts

in Appeal No.16 of 2003. The learned Appellate Authority in the detailed order dated 6.2.2004 directed the 3rd respondent Board to issue 'consent to establish' for the 2nd unit of the 5th respondent and the said order of the Appellate Authority has become final.

34. The 3rd respondent Board has accordingly issued 'consent' on 4.3.2004 to the 5th respondent to establish the 2nd unit with various conditions. The unit was established complying with the said conditions and the Board has also given 'consent to operate' for the 2nd unit on 22.11.2005. The 2nd unit has been in operation for the last five years with continuous renewal for every year, the last renewal being upto 30.9.2010. It is further stated that the 5th respondent has subsequently applied on 11.11.2005 to the Board seeking 'consent to establish' its 3rd unit viz., fabric dyeing unit under 'red' category under Water and Air Acts and 'consent to establish' was granted by the Board on 12.12.2005 with various conditions. While in respect of the 2nd unit 'consent to establish' was granted by the Board as per the direction of the Appellate Authority, in respect of the 3rd unit, 'consent' was given by the Board, having satisfied with the compliance of conditions and proposed ZLD system. Accordingly, the 3rd unit of the 5th respondent company was established and 'consent to operate' was granted on 29.11.2006 and the unit has been in operation for the last four years with renewal every year, the last renewal being upto 30.9.2010.

35. It is stated that the 'red' category - yarn and fabric dyeing units are consented to generate an effluent of 1378 KLD. Even though the units generate effluent, since it adopts advanced proven technologies to treat, re-use maximum portion of the treated effluents and evaporate minimum non-usable portion, thereby not discharging any effluents at all. The 5th

respondent has ZLD system and the stages of such treatment are stated to be as follows:

Effluent Treatment Plant (ETP)

(Beginning of Recycling Process)

Ultra Filtration

Reverse Osmosis Stage I ---- Re-usable Effluent

Reverse Osmosis Stage II --- Re-usable Effluent

Reverse Osmosis Stage III --- Re-usable Effluent

(Evaporation Process for Membrane Non-Usable Effluent)

Mechanical Evaporator – Stage I

Mechanical Evaporative Crystallizer – Stage II

(Natural Sunlight Evaporation for Mechanically Non-Vaporisable Effluent)

Solar Evaporation Pans (SEP)

(Zero Liquid Discharge System Completion)

Scientific Secured Land Fill (SLF) for Sludge

36. It is further stated that the sludge generated in the process is stored in a scientific Secured Land Fill (SLF) with the permission of the 3rd respondent Board as per the prescription of the Central Pollution Control Board (CPCB) and maintaining record to reduce sludge production daily

with adequate safeguard measures to monitor sludge permeability. It is also stated that as per the advice of the Board, the 5th respondent also requested the Ultratech Cement Ltd, Ariyalur to accept their sludge to be used in kiln and the said Ultratech Cement has also agreed to take the sludge through their letter dated 20.12.2010. The 5th respondent has also stated about various investments made to the extent of Rs.13 Crores. It is stated that the activity of the 5th respondent from its inception is closely monitored by the 3rd respondent Board.

37. It is further stated that the 5th respondent has continuously invested to upgrade the ZLD system according to the latest technology. Recently they have also invested in spreading 1000 micron Virgin Grade Geo Membrane Sheets for Solar Evaporation Pans at a cost of Rs.21 Lakhs., Triple Effect Mechanical Evaporation Crystallizer to drastically reduce the Solar Evaporation Pan load at a cost of Rs.75 Lakhs, apart from Biological Aeration Tank to reduce sludge generation at a cost of Rs.150 Lakhs. The 3rd respondent has been continuously monitoring the unit of the 5th respondent and at every time renewal is granted only after inspection which conclusively establish that the effluents of the 5th respondent unit are well within the standard.

38. That apart, the 5th respondent is ISO certified company for its operational systems, apart from Environmental Management Systems. It is further stated that the company has also developed green belt area with horticultural trees surrounding the unit which stands testimony to the commitment of the 5th respondent to the environment. Therefore, it is false to state that the dyeing unit was established in 2003, on the other hand it was operational only from 2005 after obtaining necessary 'consent' from the Board.

39. While denying the allegation that the agricultural activities are affected by the 5th respondent unit, it is stated that there is no discharge of any effluent by the 5th respondent unit and there is no possibility of contamination of water. Further, the allegation that the villagers are affected because of the functioning of the 5th respondent unit is denied. The workers and staff are working in the factory and they have no health problem. The allegation of loss of goats is purely imaginary and there is no contamination of ground water by the conduct of the 5th respondent. The further allegation that the 5th respondent is storing the sludge in the open and dumping the same by digging huge pits around the factory is denied. The sludge is stored in scientifically created Secured Land Fill (SLF) as per the norms prescribed in the Central Pollution Control Board guidelines.

40. Pursuant to the direction of the 3rd respondent Board dated 3.12.2010, the Solar Evaporation Pan (SEP) was provided with impermeability based on a study made by the Department of Civil Engineering, Anna University, Chennai and there is no scope for any effluent being discharged from SEP. It is stated that many of the villagers mentioned in the affidavit are living far away from the 5th respondent unit and the applicant association has been created only for the purpose of filing this application. The details of renewal of 'consent' periodically have been given by the 5th respondent in the reply as follows:

S.No.	Year	Yarn- Air & Water		Delay in No. of days	Fabric-Air & Water		Delay in No of days
		Expired on	Renewed on		Expired on	Renewed on	
1.	2007-08	31.03.07	27.04.07	27	31.03.07	30.04.07	30
2.		30.09.07	24.01.08	116	30.09.07	23.01.08	115
3.	2008-09	31.03.08	16.06.08	77	31.03.08	16.06.08	77
4.		31.03.09	26.06.09	87	31.03.09	26.06.09	87
5.	2009-10	31.03.10	06.05.10	36	31.03.10	06.05.10	36

While obtaining renewal of consent, the 5th respondent has been paying the amount as requested by the Board as 'consent fee' and therefore the activities of the 5th respondent are carried on in accordance with law.

41. In the additional affidavit filed by the 5th respondent dated 28.4.2011 certain subsequent developments have been explained to show that the application becomes infructuous. It is specifically denied that the 5th respondent has dumped sludge along road side. It is stated that in the near vicinity of the complained area other sludge generating industries are in existence. As the 5th respondent has got its own Scientific Secured Land Fill Facility within its premises, as per the permission of the 3rd respondent Board and in accordance with the guidelines of the Central Pollution Control Board and maintaining the register for the purpose of recording daily sludge generation and adequate safeguard and therefore, there is no necessity to dump sludge on the road. It is also stated that the 5th respondent has also obtained permission from the 3rd respondent Board to transport and dispose of their sludge to Ultratech Cement Ltd., Ariyalur on 7.3.2011 and pursuant to the same, the 5th respondent has commenced to dispose of the same, as permitted by the 3rd respondent. In respect of the renewal, there has been some procedural delay and that cannot be put against the 5th respondent unit.

42. It is also denied that the 5th respondent factory is drawing water from the nearby village. As a matter of fact, by following the ZLD system, the entire quantity of effluents generated has been recycled and re-used and to make up the water requirement, the factory is using the ground water from the borewell existing in the factory premises. The 5th respondent which is also owning agricultural land in Genguvarpatti Panchayat in an extent of 56 acres planting variety of horticultural trees and

for agricultural purposes, pumping water from the wet land in Genguvarpatti to the dry land at Viralipatti Village where the unit is having its own property and that has nothing to do with the 5th respondent factory.

Application No.15 of 2013:

43. The applicant in Application No.15 of 2013 who has originally filed writ petition in W.P.(MD).14257 of 2010 on the file of Madurai Bench of the Madras High Court which was subsequently transferred before this Tribunal and numbered as Application No.17 of 2012 challenging the Award passed by the Loss of Ecology Authority dated 15.11.2011 stated to have been served on the applicant on 9.1.2012 and also for a direction against the Loss of Ecology Authority to assess the damages of all affected farmers of Eluvanampatti, Veriyappan Nayaknpatti, Kadamanoor, Aaraychi, Utchapatti, Viralipatti, Kottapatti, Perumalkoilpatti and Kodngi Nagar Villages of Dindigul and Theni Districts by the pollution caused by the 5th respondent.

44. The applicant who has filed the earlier writ petition with the prayer, as narrated above, while reiterating the averments stated in the said writ petition, has stated that on receipt of complaint from individual farmers and a letter dated 3.12.2010 of the Board, the 2nd respondent Loss of Ecology Authority has issued notice to the 5th respondent to answer the complaint and such notice was served on the applicant also. Even though the parties were called upon to appear before the Loss of Ecology Authority on 29.8.2011, the applicant states that they have not appeared along with their advocate. However, the 5th respondent was ready with its advocate and without making any further hearing of the applicant, the Award was sent by the 2nd respondent Authority in the month of November, 2011. Since the applicant has not been given due opportunity and the amount of Award

passed by the Loss of Ecology Authority is inadequate and the complaint of the applicant and others have not been properly considered, the applicant has chosen to challenge the Award on the ground of violation of principles of natural justice.

45. It is the further case of the applicant that the Technical Team of the Loss of Ecology Authority, represented by Dr. B. Jeyaraman has submitted a Report and the copy of that Report has not been given to the applicant. Further, no other documents or materials weighed the mind of the 2nd respondent Authority on any other materials that have been given to the applicant . The Analysis Report regarding water quality has not been served and the finding of the Authority is based on no evidence. It is further stated that the 2nd respondent should have analysed the water samples taken from all the affected individual farmers and the 2nd respondent ought to have considered that the TDS value was more than the prescribed limit particularly in the circumstances that the villagers have no other source of drinking water.

46. Further, the finding of the 2nd respondent pertaining to tolerance of crops, cultivation of crops have no evidence and it is not known as to how the Authority has arrived at the conclusion that the crops like Cholam, Cumbu and Cotton etc., are high salinity crops. Further, the Soil Analysis Report referred in the Award is not known to the applicant. It is further stated that some of the farmers who were awarded compensation were not at all affected, but still they were shown as persons eligible for compensation inspite of the fact that their lands are situated 5 KM away from the SEP. It is the further case of the applicant that there are common wells for two or more farmers.

47. On behalf of the 2nd respondent Loss of Ecology Authority an affidavit dated 3.4.2013 came to be filed by the Under Secretary and Environmental Scientist of the Loss of Ecology Authority. It is stated that the Authority has elaborately discussed the entire issue and rejected the prayer of the applicant for closure of the 5th respondent industry.

48. The 4th respondent Board on 3.12.2010 has requested the 2nd respondent Authority to conduct an extensive study on the location and assess the damage caused to the agricultural land, ground water and surrounding premises because of the industrial activities carried on by the 5th respondent industry. Some individual farmers have also sent telegrams to the 2nd respondent regarding loss of ecology and environment. The 2nd respondent Authority has instructed the Technical Experts of the Authority to conduct a *suo motu* investigation in and around 5th respondent industry within the radius of 5 KM consisting of Viralipatti, Veriyapanaikanpatti, Ezhuvanampatti and Kottarapatti and submit a detailed report.

49. The Technical Team has conducted a field inspection on 19.7.2011 and 22.7.2011 and took water and soil samples in the presence of the applicant and representatives of the 5th respondent, Revenue Officials and District Environmental Engineer of the Board of Dindigul and Theni Districts and relevant documents and necessary particulars of the 5th respondent industry were obtained from the Board. It is specifically stated by the 2nd respondent that the Loss of Ecology Authority has sent notice on 12.8.2011 to the applicant and 5th respondent to appear before the Authority in person or through counsel to represent on 29.8.2011, as it is accepted by the applicant in its affidavit. It is stated that during the Field Inspection of the Technical Team of the 2nd respondent Mr. M. Murugan

and Mr.K. Nalluthevar, the President and Secretary of the applicant association were present.

50. In fact, the applicant association has contended for closure of the 5th respondent industry and requested the Authority to award compensation to the affected farmers, as it is seen in the Award itself. Further, the applicant association agreed to furnish list of members of the association to the 2nd respondent which ultimately was not furnished. However, their elaborate argument was heard. Further, the inspection report of the Technical Team wherein the Team has noted TDS level etc., was inducted in the presence of the applicants' office bearers. Ultimately, the applicant was given sufficient opportunity to put forth their case for closure and award of compensation and therefore the allegation that no notice was served and no opportunity was given to the applicant, is false. Further, the Loss of Ecology Authority has conducted a meeting on 19.7.2011 at the Town Panchayat Office of Batlagundu in the presence of the applicant and the villagers of the concerned villages and the officials of the Board, District Revenue Officer and the representatives of the 5th respondent industry.

51. The Structural Engineering Wing of the Civil Engineering Department of the Anna University has issued a certificate on 10.1.2011 regarding the impermeability of SEP, as it is indicated in the Award itself and therefore the 2nd respondent considered all those records carefully to arrive at the conclusion that impermeability of SEP has been completed and therefore restricted the period of compensation payable by the 5th respondent only from 1.12.2005 to 31.12.2009. It is stated that 79 polluted wells which are situated within 5 KM radius of the 5th respondent industry were inspected and water samples were taken and analysed. The TDS level upto 2100 mg/l is the prescribed limit of the Board and therefore it

cannot be said that there is no scientific evidence that the TDS value between 1001 and 2100 is unpolluted. In respect of the tolerance of crop, the Technical Team of the 2nd respondent has relied upon the literature MASS and HOFFMAN (1977) and MAAS (1984).

52. As per the judgment of Hon'ble Supreme Court, opportunity should be given after getting expert opinion and the said procedure was followed and therefore according to the 2nd respondent the Award was passed following the procedure. Along with the reply, the 2nd respondent has also filed a copy of the Report of the Technical Team of the Loss of Ecology Authority.

53. The 3rd respondent - District Collector has filed his reply dated 3.4.2013 which has been adopted by the 1st respondent – Government of Tamil Nadu. In the said reply, the 3rd respondent – District Collector has stated that the 5th respondent industry was established in Dindigul District under valid permission from the competent authority. It is the case of the District Collector that on receipt of the complaint, the Loss of Ecology (Prevention and Payment of Compensation) Authority has inspected the affected lands and wells and after assessment of the damages, has passed the Award of compensation. It is stated that after the Award was passed by the Authority, many farmers are visiting the office of the District Collector, requesting to pay compensation to them. However, the applicant has advised them not to receive the compensation. The damages caused to the land and wells were assessed by the Authority with the help of the revenue officials.

54. The 4th respondent – Board in the reply filed on 16.7.2013 while reiterating the nature of the 5th respondent unit that the unit has provided full fledged ZLD system and the records maintained by them show the

achievement of 'zero' discharge of effluent, has stated that the unit was issued 'authorisation' on 7.3.2011 to transport ETP sludge to M/s. Ultra Tech Cement, Ariyalur for co-processing and the 'authorisation' has expired on 26.7.2012 and the unit has applied for renewal of 'authorisation' which is yet to be issued as the said cement industry has to obtain permission from the Central Pollution Control Board. Again by reiterating various steps taken by the 5th respondent industry, as found by the Board on inspection, the Board has left the decision to the Tribunal.

55. The 5th respondent industry in the reply dated 29.2.2013 has reiterated that there is no discharge of any effluents by the 5th respondent unit and therefore the allegation of ground water pollution by the conduct of the 5th respondent is totally denied. While denying the loss stated to have been caused due to loss of goats and cows, the 5th respondent has reiterated that Zero Liquid Discharge System has been perfectly functioning from the date of inception of their 'red' category dyeing unit in 2005. However, during the initial period of 2010 the Board has received complaints and noticed increased salinity levels in few wells located on the East side of the ground level Solar Evaporation Pan. Since the 5th respondent factory has been maintaining ZLD – ETP system, the exact reason for salinity is not ascertained.

56. Therefore, the Board has referred the matter to the Loss of Ecology Authority for a detailed technical assessment to ascertain the reason and pass orders. The 5th respondent was also directed by the Board to prove the impermeability of the ground level Solar Evaporation Pan to reputed Engineering Colleges and institutions. Accordingly, the HOD, Civil Engineering Department of Anna University was requested by the 5th respondent to conduct various studies which has made an elaborate study

after inspecting the SEP and conducted detailed inspection on 25.12.2010 and 2.1.2011 respectively and has given a detailed report on 10.1.2011 certifying that the SEP system with the laying of 1000 micron virgin grade Geo membrane sheets is impermeable.

57. In accordance with the reference of the Board, the Loss of Ecology Authority has conducted a detailed scientific assessment of about 120 surrounding wells in 5 KM radius of the industry in the presence of the representatives of the applicant sangam and the officials of the Revenue Department and the Board, villagers apart from the representatives of the 5th respondent industry.

58. After completion of the scientific assessment and referring to various proofs and hearing the argument of both sides, the Loss of Ecology Authority has passed the final Award on 15.11.2011, confirming that the reason for pollution is the seepage of the old ground level SEP which has been subsequently abandoned, also stating that the same is arrested in 2009 and currently there is no pollution and therefore the plea of the applicant for closure of the industry cannot be accepted.

59. Further, the Authority has passed the Award, granting compensation to 33 affected farmers in Dindigul and Theni Districts for an amount of Rs.16.50 Lakhs and that the amount has already been deposited with the District Collector in the Environmental Protection Fund for disbursement to the affected farmers. It is stated that while almost all the eligible farmers have received the compensation amount from the Theni Collectorate, many are in the process of getting the same from Dindigul Collectorate. Therefore, it is stated by the 5th respondent that the industry has not caused pollution, however complied with the orders of the Loss of Ecology Authority by paying the entire amount of compensation.

60. Even though the 5th respondent has proved impermeability of ground level SEP by laying 1000 micron virgin geo membrane sheets, it has also invested in 2010 in a latest technology i.e., Triple Effect Evaporative Crystalizer to completely avoid the final reject effluent from going to even elevated solar evaporation pans. The second stage of Multiple Effect Evaporative Crystalizer also extracts salt from the reject water which is being reused for the dyeing process. For evaporating the left lower minor quantity final reject effluent from the second stage multiple effect evaporators, the 5th respondent has also constructed elevated solar evaporation pans as directed by the 4th respondent.

61. The allegation of the applicant that they were not given opportunity by the Loss of Ecology Authority is denied. The Authority in the letter dated 12.8.2011 has informed the applicant as well as the 5th respondent to appear in person or through pleader and submit reply, if any. It is stated that few members of the applicant association were present before the Loss of Ecology Authority on the date of hearing and made oral submissions. Therefore it is not correct to state that no opportunity was given to the members of the applicant association. Further, the allegation that the Authority has not considered the loss caused to the villagers affected by the 5th respondent is denied.

62. There was a meeting held by the officers of the Authority in the Town Panchayat office at Batlagundu in the presence of the nearby villagers in which the representatives of the applicant association and the 5th respondent also participated to identify the reason for increasing the salinity level in the nearby wells and to assess the loss caused by the 5th respondent. Thereafter, the 2nd respondent conducted a detailed assessment of possible damages caused by the 5th respondent factory,

assessing water samples in the entire surroundings from 19.7.2011 to 22.7.2011. The allegation that neither the technical team nor the Authority has issued notice to the individual farmers while taking samples from their wells is also denied. In fact, the Loss of Ecology Authority has communicated to the applicant, respondents 4 and 5 and all the concerned revenue officials of Dindigul and Theni District through the respective Collectors two months before the date of field inspection. In addition to that on 19.7.2011 the Authority has also conducted a meeting in Town Panchayat Office, Batlagundu wherein the applicant as well as its office bearers have participated.

63. The Authority has given a finding regarding the arrest of seepage from the SEP of the 5th respondent not only based on the Report of the 5th respondent which has made inspection through Anna University but also on the report of the Technical Team of the Loss of Ecology Authority viz., Environmental Scientist attached to the Authority. The limiting of the period of compensation to 2010 is with the proper reason by the Authority and therefore the Award is scientifically correct.

64. The further allegation that the TDS level between 1001 and 2100 mg/lit as unpolluted is not with scientific evidence, is also denied. The Award itself has dealt with the same. Further, the Award itself makes it abundantly clear that the crops like cholam, cumbu, cotton etc., are high salinity crops and the allegation to the contra is false. Crop tolerance is depending upon schematic literature. In fact, the literature relating to crop tolerance and yield potential of selected crops as influenced by irrigated water salinity has been discussed in detail and it cannot be stated that the decision arrived at by the Authority is unscientific.

65. It is further stated that even during the course of hearing on 29.8.2012 both the applicant and the 5th respondent were given opportunity by the Authority to place their argument, the extent of land in respect of particulars of patta for the purpose of deciding the compensation and the compensation amount was decided, based on the government data from the revenue department and the same cannot be said to be arbitrary or illegal.

M.A.No.290 of 2016

66. The applicant in Application No.15 of 2013 has filed M.A.No.290 of 2016 seeking for amendment of the prayer in the application to substitute the following prayer:

“to issue a writ of certiorarified Mandamus calling for the records pertaining to the Award passed by the second respondent dated 15.11.2011 served on the petitioner by letter dated 9.,1.2012 quash the same and direct the second respondent to assess all the damages to affected farmers of Eluanampatti, Veriyappannayakanpatti, Kadamanoor, Aarachi, Utchapatti, Veralipatti, Kottapatti, Perumalkovilpatti and Kondangi Nagar Villages of Dindigul and Theni Districts respectively by the pollution caused by the fifth respondent”

“directing the fifth respondent to provide compensation and damages to all the affected farmers of Eluvanampatti, Veriyappannayakanpatti, Kadamanoor, Aarayhi, Utchapatti, Veralipatti, Kottapatti, Perumalkovilpatti and Kondangi Nagar Villages of Dindigul and Theni Districts respectively including the Members of the petitioner’s Association due to the pollution caused by the fifth respondent who were not adequately compensated by not properly assessing the damages and left out by the Loss of Ecology Authority”

67. It is the submission of Mr. Arul that individual farmers are not enumerated by the Authority, particularly when the Expert Report has not been properly appraised. It is submitted by the counsel that now that the matter has been transferred to NGT, the Tribunal is having adequate powers under Section 15 of the NGT Act to decide the issue relating to payment of compensation which may be even more than the Award passed by the Loss of Ecology Authority. He would submit that there is no reason

to restrict the period upto 2010 which itself shows that there is a finding of irregularity on the part of the 5th respondent/project proponent and therefore the continuous loss and damages ought to have been calculated and compensation be paid. According to him the effect of pollution still continues. He would now submit that even in the hearing, it is only the office bearers of the applicant have participated and therefore there is no occasion for deciding the names of the farmers who were affected and therefore a fresh enquiry should be directed to be conducted by fresh investigation by taking samples in order to render justice.

68. Mr. Arul, the learned counsel appearing for the applicant in both these cases, while reiterating the averments made in the affidavit filed in support of the application, has made a specific reference that the Loss of Ecology Authority, while issuing notice on 12.8.2011, directing the parties to appear on 29.8.2011, has failed to give individual notice to the members of the Association as well as the affected farmers and therefore, according to him, it should be treated as inadequate opportunity. It is his submission that when the Loss of Ecology Authority has *suo motu* power even to visit the place affected by pollution, it should have identified the affected farmers. When the Committee sent by the Authority has not submitted its Report, the Award passed, based on such non existing Report suffers from infirmity. He has referred to various portions of the Committee's Report to show that the Committee has not properly applied its mind while conducting enquiry regarding the loss caused because of the pollution. He has also submitted that while ascertaining the list of affected farmers, the authority ought to have approached the District Collector. Out of 127 members, the Authority is able to identify only 33 members for payment of compensation and that itself shows the inadequacy and impropriety of the procedure

followed by the Authority. He has also submitted that when once *prima facie* the Authority has found that by the conduct of the project proponent pollution has been caused, even though the Authority has restricted the Award till 2010, the Tribunal can certainly pass orders regarding reclamation of land to the farmers and restoration of the natural environment.

69. Per contra, it is the contention of Mr. Abdul Saleem, learned counsel appearing for the Government that when the Board has been periodically renewing 'consent' after conducting inspection of the 5th respondent unit and when such 'consent' has not been challenged anywhere, it is certainly not open to the applicant to pray for closure of the unit and therefore his submission is that the prayer in Application No.17 of 2012 is not maintainable. In so far as it relates to the Award passed by the Authority which is under challenge in Application No.15 of 2013, it is his contention that the Loss of Ecology Authority is now defunct and therefore the prayer is no longer in existence for this Tribunal to decide. In any event, he would submit that on a whole reading of the Award, one cannot arrive at a conclusion that it is against the principles of natural justice or against the scientific concept to abate pollution.

70. It is brought to notice of this Tribunal that when the term of office of the Loss of Ecology Authority has come to an end by virtue of the Notification issued by the Government of India, the Award of the Authority cannot be directed to be reopened.

71. After hearing the learned counsel appearing on both side, referring the pleadings extensively and on our careful consideration of the entire fact, the following points are to be decided on the facts and circumstances of the case.

(1) Whether the 5th respondent should not be permitted to proceed with its industrial activity?

(2) Whether the Award passed by the Loss of Ecology Authority dated 15.11.2011 is inadequate and liable to be reopened by appointing a fresh Committee and conducting enquiry by this Tribunal?

DISUSSION AND CONCLUSION:

72. Before analysing the issue relating to the first point, it is relevant to consider some of the factual aspects concerning the case. The site in question in which the 5th respondent/project proponent has put up its industry is stated to be at a distance of 2.6 KM from the embankment of Vaigai and Manjalaru Rivers and about 7 KM away from the perennial Vaigai River and this is stated to be an admitted position, as it is seen in the order of the Hon'ble Appellate Authority constituted under the Water Act dated 6.2.2004 passed in Appeal No.16 of 2003 which has become final. The learned Appellate Authority has also concluded finally that the prohibition of distance criteria imposed in respect of setting up of an industry in G.O.Ms.No.213 dated 30.3.1989 and G.O.Ms.No.127 dated 8.5.1997 has no application. It is also not in dispute that the locality where the unit is established, there is no other industry of any kind on the date of the order of the Appellate Authority, as stated above and it is an isolated place, surrounded by dry lands. There are three hillocks on the North, South and Western sides.

73. The report submitted by GARP Consultancy, Madurai Kamarajar University has stated that the Northern hillock is about 0.5 KM away from the site. The Southern and Western hillocks are also away by about 1.65 KM and 1 KM respectively from the site. When a question was raised in the said appeal that the proposed site is like a bowl and possibility of flood

during rainy season cannot be ruled out which was disputed by the project proponent, a reliance was made to the said study of the Consultancy and its report in respect of which no objection was filed. In the report, as elicited by the learned Appellate Authority it is stated as follows:

“The rain water drains through a natural odai from the catchment area beginning in the hillocks located at the west and south of the proposed site and the rain water from these hillocks has no chance to reach the industrial site due to its distance as well as topography. Similarly the catchments from the hillock in the north gets drained through a natural odai called Silodai which follows the general slope of the terrain and flows from north east of the proposed site to Kottai – Karuppanaswamy koil Kanmai. As there is a local ridge between the proposed site and Eluvanampatti Village and as the village is located in the southern side of the site, there is no possibility of rain water reaching the village from or through the site. The contour pattern shown that the run off from the proposed site will have flow access only through the silodai which flow from the hillock to the north called Seelakkaradu and feeds Karuppanaswami Koil Kanmai near Viralapatti village which is 5.5 KM away from the site.”

74. The learned Appellate Authority has also relied upon another report filed by M/s. Coimbatore Eco Foundation which was taken as additional evidence by the learned Appellate Authority in respect of which also no objection is filed. The learned Appellate Authority has found that the report also supports the case

“that there is no scope for rain water flood in the area and consequently ground water contamination also could not happen. It could be seen that Karuppanaswamy Koil Kanmai of which reference is made earlier, is situated about six kilometre away from the proposed site.”

The report gives the details of climate condition which shows that

“the climate is normally dry. It has also taken into consideration the rainfall for the last thirty years. Because of drought, well situated in the village are mostly dry. It is also evident that the appellant is the owner in possession of more than 180 acres of land in and around the site and even they are taking water only from a well situated two kms away. The few wells which belong to the appellant in the same area have also become dry. When there is open land between the hillocks, the contention that the proposed site is like a bowl is not correct.”

75. The above said fact, as found by the learned Appellate Authority, is evidenced by the Certificate issued by the Tahsildar, Nilakottai dated 15.3.2002 wherein he has stated that Survey No.952, subject matter of a registered document on the file of the Sub Registrar, Batlagundu and situated in Village No.6, Eluvanampatti in Viralipatti Village, Nilakottai, wherein the proposed unit of the project proponent viz., Saravana Fine Yarn is stated to be situated is 2.6 KM away from Manjalaru and 7 KM away from Vaigai River.

76. The project proponent has made an application to the Board on 1.4.2002 to establish Mercerising and Bleaching Division, an 'orange' category industry in R.S.Nos.952, 948/1A, 1008/2, 951/2, 1009/1, 3 & 5, 1010/1 to 6, 494/1& 2m 1012/3A, 3B & 3C and 961 Viralipatti Village, Nilakottai Taluk stated to be Unit – I and the Board in its order dated 5.4.2002 has granted 'consent to establish' for a period of two years or till the industry obtains 'consent to operate'.

77. Subsequently, in respect of the said unit relating to Mercerising and Bleaching Division, the Board in its Consent Order No.37/OM/2003 dated 19.5.2003 has given its 'consent to operate' order making it valid till 31.3.2004. The said 'consent' order appears to have been renewed as it is seen in the order of the Board dated 1.4.2008 and the 'consent to operate' in respect of Mercerising and Bleaching Division has been made valid upto 31.3.2012 with the following additional conditions:

'1.The unit shall operate and maintain the Effluent Treatment Plan provided efficiently and continuously, so as to bring the quality of the treated trade effluent to satisfy the standards prescribed by the Board at all times.

2. The unit shall utilize the treated trade effluent on its own land for gardening/tree plantation/cultivation without any ponding or stagnation.

3. The unit shall not exceed the consented capacity. If the production exceeds the consented capacity, the unit has to obtain fresh consent, failing which this consent order would be withdrawn.'

78. The 5th respondent-project proponent has also applied on 1.4.2002 to the Board for 'consent to establish' another unit viz., Yarn Dyeing Unit which is admittedly a 'red' category industry. The Board, after carrying out inspection on 15.6.2002 has rejected the application for 'consent to establish' in respect of the said unit, as it is seen in its order dated 1.7.2002. The said rejection order states the following reasons for rejection:

"The matter of issue of consent to your unit was analysed in all aspects and the Board decided to reject the application for consent received from the unit of M/s.Saravana Fine Yarns (A unit of Sri Saravana Spinning Mills Ltd.) S.F.No.9521, Viraalipatti Village, Nilakottai Taluk, Dindigul District for the following reasons:

- 1. The proposed site is located in a non-traditional area for dyeing unit.*
- 2. The proposed site is like a bowl located in an elevated place nearer to hillock. Hence, the run-off during the rainy season will lead to flooding and washing etc.*
- 3. The Village Eluvanampatti is located on the downstream side of the site where in a lot of wells are located. Chances of runoff can contaminate ground water even through the industry envisages zero discharge.*
- 4. The industry uses lime to treat the trade effluent and hence chemical primary sludge expected and proposed to be stored inside the unit may leach during rainy season may possibly contaminate ground water.*
- 5. Adjacent to the proposed site agricultural activities were noticed. Chances of pollution cannot be ruled out in the eventuality of failure of reverse osmosis rejects.*
- 6. Even though the industry reported, verbally, that is acquired about 150 acres of land surrounding the proposed site control of rain water run off from the industrial site cannot be contained during monsoon periods.*

7. The operation of the industry at this site may lead to complaints from the neighbours positively in future due to topography of the site.”

79. It is as against the said order relating to dyeing unit the project proponent has approached the learned Appellate Authority by filing Appeal No.15 of 2013 under Water and Air Act. The learned Appellate Authority who have made various observations elicited in the previous paragraphs in the order dated 6.2.2004 while allowing the appeal and setting aside the order of rejection of the Board dated 1.7.2002, directed the Board to issue order of ‘consent to establish’ making it clear that the Board is entitled to put such other terms and conditions as necessary and effectively monitor compliance of the same while the unit is being established. The learned Appellate Authority while arriving at such conclusion in its elaborate order discussing various principles governing environmental protection like precautionary principle, polluter pays principle and relying upon various judgments of the Hon’ble Supreme Court has made the following observation which is significant

“24. It is not disputed that the appellant proposes to install machineries to see that there is zero discharge. If that is accepted there is no scope for any water contamination. After the initial inspection by DEE, appellant was asked to explain how they are going to implement the zero discharge. Full details was given and from the impugned order, it is clear that the appellant case has been accepted. They only apprehend that in case of failure of zero discharge, environment will be affected. The respondent has given consent to establish as well as to operate dyeing units who are implementing zero discharge is admitted. Why there should be a different standard for the appellant is not explained. By employing the process of reverse osmosis filtration and mechanical evaporation, there is no scope of effluent water let into the earth. The appellant have also taken steps to see that rain water also do not get mixed with effluent water. It is also in evidence that steps have been taken to prevent any damage to environment, even in the case of failure of reverse osmosis system.

80. Based on the said order of the learned Appellate Authority, the Board in its order dated 4.3.2004 has granted 'consent to establish' for the dyeing division of the 5th respondent for a period of two years and ultimately the Board has granted 'consent to operate' order for the said yarn dyeing division of the 5th respondent on 22.11.2005 till 31.3.2006 and on 4.4.2006 the 'consent' was renewed for the dyeing division valid till 30.9.2006 with the following conditions:

"1. The unit shall provide computer recording arrangements for the EMFMs provided.

2. The unit shall obtain land use reclassification to Industrial zone from DTCP.

3. The unit shall provide scientific secure landfill facility as per Central Pollution Control Board guidelines in due compliance with Hazardous Waste (M & H) amend Rules, 2003.

81. Likewise, the 'consent' order was renewed by the Board on 5.9.2006 in respect of yarn dyeing division valid upto 31.3.2007. Again in the order dated 27.4.2007 the 'consent' order was renewed upto 30.9.2007. On 24.1.2008 a further renewal of 'consent' was made upto 31.3.2008. On 16.6.2008 the 'consent' was renewed till 31.3.2009 followed by a subsequent order dated 26.6.2009 renewing the 'consent' in respect of yarn dyeing division upto 31.3.2010 and further renewed in the order dated 6.5.2010 till 30.9.2010 and it is stated that the said renewal continues periodically.

82. As it is seen on record, the project proponent appears to have filed another application on 11.11.2005 seeking for 'consent to establish' another unit called Unit – III for Fabric Dyeing Division which is also classified as 'red' category unit and the Board in its order dated 12.12.2005 has granted 'consent to establish' the said unit with a validity period of two years. The Board having satisfied that all conditions of 'consent to

establish' have been complied with in respect of fabric division, has granted its 'consent to operate' order on 29.11.2006 valid upto 31.3.2007 which was subsequently renewed on 30.4.2007, 23.1.2008, 24.1.2008, 16.6.2008, 26.6.2009 and 6.5.2010 and stated that the renewal continues. There are records to show that the Board has granted 'authorisation' to the project proponent under the Hazardous Wastes (Management and Handling) Rules, 1989 as amended in 2003 and in the letter of the Member Secretary of the Board dated 3.12.2010 in respect of all the units, the Board has directed the project proponent to prove the impermeability of the SEP provided, as the TDS readings in the nearby wells are in the value of 1840 -8184 mg/lit through nearby reputed Engineering Colleges/Institutions or through Anna University, Chennai/IIT-M, Chennai.

83. The Structural Engineering Division of the Department of Civil Engineering, Anna University, Chennai has issued a certificate on 10.1.2011 regarding the impermeability of the SEP of the 5th respondent. The certificate issued by the Anna University as per the above said direction of the Board is as follows:

"The SEP under study in the above factory, spread over an area of about 9000 sq.m. is used for natural evaporation of the mechanical evaporator rejected effluent.

The construction of SEP has been done with series of layers of filled earth hardened to even surface, PCC of 0.150 m thickness, cement mortar of 200 mm thickness, recycled HDPE sheet of 1.5 mm thickness, PCC of 75 mm thickness, floor finish with 20 mm mortar thickness. Above the finished civil structure, a HDPE Geo Membrane Virgin Grade Sheet of 1000 microns thickness has been spread.

The Geo Membrane Virgin Grade Sheets used are impermeable and the joints are welded so that no leakage could happen.

Sample bore wells were also made at few points around the SEP structure to confirm the SEP impermeability.

The conclusion is that the existing Solar Evaporation Pans arrangement, with its structural stability are laying of 1000 micros thickness Geo Membrane HDPE Sheets, ensures impermeability/ no seepage into the ground.””

84. The Board has also granted ‘authorisation’ to handle hazardous waste of the 5th respondent unit in respect of the chemical sludge from waste water treatment, authorisation to transport and dispose of the said hazardous waste arising from the combined ETP provided by the Yarn Dyeing Division and Fabric Dyeing Division to M/s. Ultratech, Ariyalur for co-incineration, as it is seen in the proceeding of the Board dated 7.3.2011. The Board, in its various reply affidavits, as stated above, has also confirmed the same.

85. Therefore, it is clear that the various units of the 5th respondent are being run in accordance with the ‘consent’ order or ‘authorisation’ issued by the Board under the provisions of the Water and Air Act and admittedly the applicant has not taken any step to challenge any of the ‘consent’ orders before the appropriate authority. However, the applicant has chosen to state that there has been large amount of pollution caused by the industrial activity of the 5th respondent. In the absence of challenge to any of the ‘consent’ or ‘authorisation’ orders issued by the authority competent under the Water and Air Act which has got a remedy of appeal , we are unable to accept the contention raised by the learned counsel appearing for the applicant in these cases that it should be presumed as if the pollution continues as on date. This is particularly so when the Loss of Ecology Authority has found categorically that after 2010 there is no effect of pollution by virtue of the conduct of the business establishment of the 5th respondent.

86. The Report of the Centre for Environmental Studies (CES) Department of Civil Engineering, Anna University, Chennai of May, 2016 regarding performance evaluation study and waste audit of the textile effluent treatment plant at SSM Fine Yarns, Batlagundu is relevant to be mentioned to find out the real existing situation of the 5th respondent unit. In fact, as per the direction of the Board, the 5th respondent industry has approached the above said Centre for Environmental Studies, Anna University for evaluation of the treatment plant performance etc. Accordingly, a Team of Professors of CES, consisting of Dr. S. Kanmani, Director – CES, Dr. K. Nagamani, HoD, Civil Engineering and Dr. K. Palanivelu, Profesor – CES have made a preliminary visit on 22.11.2015 and collected the actual data during the field visit on 30.1.2016 and subsequent interaction with CETP operational staff, made the report which was placed before this Tribunal. The Report, in the introduction states about the consented production capacity as follows:

“M/s.SSM Fine Yarns, a division of Sri Saravana Spg. Mills Pvt. Ltd. Eluvanampatty situated at Periyakulam Road, Viralipatty Village, Nilakottai TK Near Batlagundu 624 202 is involved in Mercerizing, bleaching & dyeing of yarn and bleaching, dyeing and finishing of fabric from 2003 vide the consent to establish issued on 5th April 2002 (10/2002) by Tamil Nadu Pollution Control Board (TNPCB) and the recent TNPCB consent letter dated 25th January, 2016 (Consent order number 16081334284, 16082334284). The consented production capacity (MT/month) for bleached fabric, Dyed yarn and Dyed fabric are 77 tons, 240 tons and 554 tons. The current production is 43.0 tons, 202.02 tons and 391.57 tons respectively. The water consumption (m³ /day for processing is Yarn dyeing – 329³ /day, Fabric dyeing – 769³ /day, Fabric Bleaching. -73 m³ /day and thus a total quantity of 1171 m³ /day. Sodium sulphate salt is used in the dyeing process. The Company has a combined effluent treatment plant with a Zero Liquid Discharge scheme for an Effluent Capacity of 2000 KLD as against the consented quantity of 1502 KLD.

87. The Committee of Experts have studied the treatment for ZLD under various heads viz., Effluent Treatment for Colour Removal, Reverse

Osmosis Plant, Multiple Effect Mechanical Evaporators and Elevated Solar Evaporation Pans with Twin Tower Natural Evaporator. While considering the effluent treatment for colour removal, the report finds various methods of treatment of effluents generated from the yarn dyeing, fabric dyeing and Mercerizing and bleaching division of the 5th respondent and ultimately states that the colour of the effluents is removed after reduction of COD and BOD. This effluent is subjected to a Colour Removal Process before it enters into the Reverse Osmosis plant. The colour of effluent is removed by adding a combination of chemicals consisting of a Cationic Polymer Colour removing chemical, Poly Aluminum Chloride and Anionic Poly Electrolyte. The effluent after decolourisation is allowed to settle again in Tertiary Clarifier and the solid wastes are collected through a sequence of Thickener and Filter Press/De-canter arrangement. The overflow water is passed to the next process. The Tertiary clarifier outlet water is neutralized by 98% sulphuric acid. The treated water is collected and passed through Pressure Sand Filter (PSF) and Multi Grade Filter (MGF) for filtration of Suspended Solids present in the treated effluent water. This is the final stage of effluent treatment in ETP, after which it enters into the Reverse Osmosis Plant. The solid waste (sludge) is collected from Filter Press/De-canter and transferred to the Scientific Secured Land Fill provided in the same campus itself. This Scientific Secured Land Fill is constructed as per CPCB guidelines. This stored Solid Waste is transported to Ultratech Cements Ltd., as permitted by TNPCB for use in their Cement Factory.

88. While considering the Reverse Osmosis, the report elicited various stages and ultimately found that in all four stages put together, 91% of water is recovered as clear water which is very well suitable for re-use for the dyeing process.

89. Again while considering Multiple Effect Mechanical Evaporators, the report concludes that this is also a Multiple Effect Mechanical Evaporator where the concentrated reject effluent is evaporated with the help of steam and approximately 85% of feed quantity is evaporated and recovered as condensate water for reuse. The remaining 15% of highly concentrated reject effluent is re-circulated in the same evaporator.

90. While considering the next aspect of Elevated Solar Evaporation Pans, the Expert Report, after considering the details of treatment units and Electro Magnetic Flow Meters summarized in the form of table considering the effluents treated periodically during November, 2015 to January, 2016.

91. The Report has also considered the performance evaluation study of treatment plant with various datas, samples collected from different units and concluded that the monitoring wells around the factory area and raw water (bore well) quality shows the TDS values in the range 1082 – 2150 mg/l. The chloride value was higher than sulphate in the monitoring wells and within permissible limit. There is no organic contamination in the well as evident from low COD values.

92. The report has also considered the waste audit, particularly relating to recovery of salt, apart from the list of cameras installed and finding that the flow meters are also connected to Care Air Centre for monitoring the ETP by TNPCB. The report gives its ultimate findings and recommendations which are as follows:

“The performance of the M/s SSM Fine Yarns, Batlagundu Combined ETP and waste generated was evaluated by the CES Team based on field on field visit on 30 January 2016, monitoring and review of records maintained by the ETP. The following are the main points out of the study.

- *The combined, neutralized effluent containing coloured organic dyes are effectively decolourised by aerated biological treatment process, Chemical coagulation with PAC and finally filtered using PSF and MGF.*

- *After the colour and organics (COD & BOD) removal the effluent is then subjected to four stage RO units for water recovery (91%) which is used for the dyeing process.*
- *RO reject effluent with 3-4% salt is treated in two stage multiple effect mechanical Evaporator to recover water-80% (condensate) and concentrated reject (20%) to recover sodium sulphate with chiller.*
- *Cleaning solution and mother liquor from mechanical evaporator is evaporated using Elevated Solar Evaporation Pans.*
- *Twin Tower Natural Evaporator, a unique and clean system with low cost of operation is also used for concentrating the reject.*

Overall the performance of the existing treatment plant is satisfactory for colour removal and water and sodium sulphate salt recovery. The Zero Liquid Discharge System is followed and seems to be maintained well.

- *The Sodium Sulphate salt recovered from ETP is fully re-used for their dyeing process.*
- *Sludge generated is being sent for co-processing in cement industry at Ariyalur as the company has an agreement.*

Recommendations

- *Coal storage area at present is open yard. This may be covered by providing a shed at the earliest to stop the flying of dust.*
- *The accumulated sludge in the SLF to be cleared soon by sending it for cement industry.*
- *Small quantity of mixed salt is stored in a covered area. Efforts may be made to find use for this salt or for its safe disposal.*
- *TNPCB shall periodically monitor the performance of the key unit processes of the zero liquid discharge system and verify the monitoring and measurement being carried out by the ETP.*
- *The present coagulation process using PAC generates chemical sludge which warrants SLF or careful disposal. In future, attempts may be made for colour removal making use of sludge free process.*

93. Therefore, as per the findings of the Committee of Anna University Experts, the overall performance of the treatment plant of the 5th respondent industry is satisfactory for colour removal, reverse osmosis, salt recovery, apart from maintenance of ZLD system. The said report also

makes it clear that on the factual circumstance, there is no necessity for taking any action against the 5th respondent industry either for closure or otherwise.

94. In addition to that, after the initial submissions made by the counsel for the parties stating that the complaints forwarded to the Board have been sent to Loss of Ecology Authority for granting of Award and the applicant has raised an issue of pollution because of the industrial activity of the 5th respondent stated to be existing as on date based on some documents, while on the other hand various studies show otherwise and in the circumstances of contrary submissions made, the Tribunal in the order dated 27.3.2015 has constituted a Two Member Expert Committee to make an inspection and survey and study of the area of the land in question and also waterbodies around the industry in question and file a report to enable the Tribunal to take an effective decision.

95. Accordingly, the Tribunal has appointed Professor C.A. Srinivasamurthy, Department of Soil Science and Agricultural Chemistry, University of Agricultural Sciences, Bangalore, as Chairman and Dr. C.A. Rama Rao, Principal Scientist (Agriculture Economics), CRIDA, ICAR, Hyderabad, as Member. The following Terms of Reference have been framed by the Tribunal for the Committee to consider.

1. *Review of all the reports prepared by different organisations and filed before the Tribunal, with specific reference to the methodology employed, data sets made available and adequacy of the findings to understand the ground truth conditions related to the case on hand. Specific observations and comments on the economic aspects may be given.*
2. *Visit to the industry in question and record observations with regard to*
 - a. *Process details*
 - b. *Sources and types of pollutants/wastes generated*

c. Raw Materials inventory and sourcing including water and power

3. *Details of STP and ETP: units of operation – their adequacy, treatment efficiency, quantum of waste water treated and disposal of treated sewage and wastewater.*
4. *ZLD system and its working status.*
5. *Generation, storage, treatment and disposal practices with regard to hazardous and non-hazardous solid wastes.*
6. *Air pollution control measures in place and their efficiency.*
7. *An outline survey of the agricultural area allegedly affected by the activities of industry in question and marking the zone of influence of the effluent discharge.*
8. *Inventory of the extent of land area affected by the discharge of effluent from the industry in question.*
9. *Analysis of top soil in respect of parameters of agricultural importance and comments on the same in comparison with the past date as available in reports cited above.*
10. *Sampling and analysis of ground water from representative bore wells, open wells, other water bodies in the area allegedly affected by the discharges from the unit concerned. The parameters of agricultural and toxicological importance may be given priority.*
11. *Patterns of cultivation and list of crops raised in the study area.*
12. *A review of agricultural production in the area in question for years 2011-2014 as available in Government records (Department of Agriculture, Horticulture etc.)*
13. *Observations and comments on time trace impact of effluent discharges from the unit in question on agricultural productivity in the area covered during the study.*
14. *Impacts of the emissions and effluent discharge of the unit in the zone of influence as outlined during the study in Economic terms.*
15. *Comments on the applicability and correctness of the method employed by the Loss of Ecology (Prevention and Payments of Compensation) Authority (LoEA) with regard to the compensation already awarded.”*

96. The said Expert Committee has filed its Report in December, 2016. Regarding ToR 1. The Committee has given the following opinion:

“The Committee also went through the report of water analysis made by TNPCB from 2009-2013 and submitted by the petitioner (document at S.No.4 above). From these water analysis reports, the committee could not make out exactly the location of the wells as the analysis reports do not contain any information required to identify the locations from where the samples were drawn. In the absence of such information, the Committee could not draw any conclusions from the reports of the water analysis.

Regarding the report of the technical team of the loss of Ecology 9p & PC) Authority for the State of Tamil Nadu, the Committee is of the view that the LoEA made a detailed and scientific study by collecting as many as 124 water samples from wells/ bore wells distributed around the industry. These samples were analysed to assess the changes in water quality parameters and to award compensation to the farmers. They have analysed only two soil samples – one each from the affected area and unaffected area – to take a decision on pollution of soil by the industry. They considered only four crops for award of compensation.

97. Likewise, in respect of ToR 2 which relates to the process details, sources and types of pollutant, raw materials inventory, the Team observed that the working of the three divisions is as per the approved norms of the TNPCB. The team also took an inventory of the raw materials used by the industry.

98. Regarding ToR 3, in respect of STP and ETP operation, the quantity of effluents treated in 2013 to 2015 which are detailed in the table have been considered and observation in that regard is as follows:

“In the initial years the treated effluent was being stored in ground level cemented solar evaporation pans/lagoons which resulted in percolation of effluent and caused increase in salinity of water in the wells around the factory.

Subsequently in the year 2010, to overcome the draw backs of ground level solar evaporation pans the same were made impermeable using geo membranes. Subsequently, as per

the directions of TNPCB, the new technologies of elevated solar evaporation pans were installed in 2011.

In 2015, the entire ETP area was connected with CCTV cameras with provision to monitor the working of ETP by TNPCB office at Dindigul.”

99. Regarding ToR 4, about the working of ZLD system, the Committee found that at present the working of ZLD system is satisfactory.

100. Again, regarding ToR 5 in respect of generation, storage and disposal practices and hazardous and non hazardous solid wastes it is found that the same is covered in covered roof godown and disposed of in SLF site.

101. In respect of ToR 6 regarding air pollution control measures and their efficiency, the Committee found that the same was satisfactory.

102. Regarding ToR 7 in respect of outline survey of the agricultural area stated to have been affected by the activities of the industry, the Committee has accepted the Report of the Expert Committee submitted before the Loss of Ecology Authority.

103. Regarding ToR 8 about the inventory of the extent of the area affected by the discharge of effluent, the Committee found that the analysis has not been completed.

104. Regarding ToR 9 in respect of analysis of top soil in respect of parameters of agricultural importance, the Committee in the Report has given its views which are as follows:

“Before presenting the results of soil testing, it is not out of place to note that some variation between soil test values as reported by the two laboratories was observed. Such variations are bound to occur due to differences in the type of instruments used for analysis and the analytical skills of the technician who has carried out the analysis. By and large, the trend of values reported by the two laboratories is almost same. Hence, the following conclusions are drawn:

1. *There are no indications on the build up of soluble salts as reflected by the low electrical conductivity values of soil samples. In spite of irrigating the crops with water from wells having higher EC values (salt content) there was no substantial increase in the salt content of soil. The EC values of soil are considered safe or normal for growing most of the crops.*
2. *The exchangeable sodium percentage (ESP), a measure of buildup of sodium in soil, which in turn affect the physical, chemical and biological properties of soil is below the critical value of 15.*
3. *The soils were low to medium in available nitrogen, medium to high in available phosphorus and potassium, low in available sulphur in nutrient status of soil (fertility) may be because of addition of lower doses of nutrients through manures and fertilizers than what is recommended for a crop. It is also well known that the fertility of soil depends on the crops grown and the quantity of manures and fertilizers applied over years. Hence, it can be said that the effluent discharges/ storage by the industry has not affected the fertility of soil.*
4. *The harmful heavy metals viz., chromium and nickel are not present in all the five soil samples. Only very low concentration of lead and cadmium has been detected in the soil samples. The presence of this cannot be attributed to irrigation water since water samples were not found to contain these heavy metals.*

The LoEA collected one soil sample from within the polluted area and one sample away from the polluted area and based on the results, they concluded that there is no pollution of soil. The recommended practice is to collect more number of soil samples within the so called polluted area to draw conclusions.”

105. In respect of ToR 10 sampling and analysis of ground water from representative borewells the views given by the Committee are as follows:

1. *All the 27 water samples were found to be alkaline in reaction and the pH values ranged from 7.53 to 8.52. Water sample of only one well recorded pH value of 8.52. Twenty water samples recorded pH values ranging from 7.5 to 8.0 and 6 samples had pH value ranging from 8.0 to 8.5.*

2. *The salt content of the water sample was less than the cut off value of 3.24 ds/m in samples and in 19 samples it was more than 3.24 ds/m. The higher salt content of the water sample may be mainly because of the geological nature (rock strata) of the area and to some extent the percolation of the effluent which was stored in ground level lagoons during 2004 to 2009.*
3. *The chloride content is substantially high in 13 well water samples, medium in 12 samples and low in 2 samples.*
4. *The SAR of water samples, an indicator of the quality of water, is low (1-10) in 24 samples and was medium (10-18) in three samples indicating that for these three soils farmer has to apply based on the gypsum requirement of crops and then go for leaching the salts with water.*
5. *The residual sodium carbonate content of water < 2.5 in all the samples. In 15 samples, the value is < 1.25 indicating that they are safe for irrigation and in 15 samples, the RSC value ranges from 1.25 to 2.5 indicating that the water has to be used with adequate care.*

106. ToR 11, 12, 13, 14 and 15 relate to pattern of cultivation and loss of crops which are relevant to decide about the second point regarding the Award passed by the Loss of Ecology Authority and that will be dealt with at the appropriate place.

107. Therefore, as per the study made by the Expert Committee appointed by this Tribunal in respect of the pollution standard of the 5th respondent industry, there is nothing for this Tribunal to come to a conclusion to close the units. Accordingly, due to the reasons stated above, Point No.1 is answered to the effect that the 5th respondent industry need not be closed. However, the measures of recommendations suggested by the Expert Committee from the Anna University, elicited above, shall be directed to be followed strictly by the 5th respondent/project proponent in addition to various conditions imposed by the Board from time to time including the Central Pollution Control Board such compliance is required and the Board shall continuously monitor the functioning of the 5th

respondent and whenever it is found that the 5th respondent breaches the environmental norms, it is for the Board to pass appropriate orders. With the above direction, Point No.1 is answered.

108. Regarding the next point about the validity or otherwise of the Award, the prayer of the applicant is to set aside the Award of the Loss of Ecology Authority and send it to the Authority for fresh decision for refixing the quantum of compensation.

109. At the outset, it has to be taken that when once the Loss of Ecology Authority constituted as per the direction of the Hon'ble Supreme Court and period of its office comes to an end as per the Notification issued by the Government of India, such prayer becomes automatically infructuous.

110. It is only realising the same, the applicant association has chosen to file M.A.No.290 of 2016 seeking to amend the prayer in Application No.15 of 2013 to direct the 5th respondent/project proponent to provide compensation as damages to all the affected farmers who were not adequately compensated by properly assessing the damages. The prayer in the M.A by the applicant, otherwise means a direction from this Tribunal to award compensation by revising the Award passed by the Loss of Ecology Authority. This otherwise means claim of compensation from this Tribunal which is permissible under Section 15 of the National Green Tribunal Act which reads as follows:

15. "Relief, compensation and restitution – (1) The Tribunal may, by an order, provide, -

(a) relief and compensation to the victims of pollution and other environmental damage arising under the enactments specified in the Schedule 1 (including accident occurring while handling any hazardous substance);

(b) for restitution of property damaged,

(c) for restitution of the environment for such area or areas, as the Tribunal may think fit.

(2) The relief and compensation and restitution of property and environment referred to in clauses (a), (b) and (c) of sub-section (1) shall be in addition to the relief paid or payable under the Public Liability Insurance Act, 1991 (6 of 1991)

(3) No application for grant of any compensation or relief or restitution of property or environment under this section shall be entertained by the Tribunal unless it is made within a period of five years from the date on which the cause for such compensation or relief first arose.

Provided that the Tribunal may, if it is satisfied that the applicant was prevented by sufficient cause from filing the application within the said period allow it to be filed within a further period not exceeding sixty days.

(4) The Tribunal may having regard to the damage to public health, property and environment, divide the compensation or relief payable under separate heads specified in Schedule II so as to provide compensation or relief to the claimants and for restitution of the damaged property or environment, as it may thin fit.

(5) Every claimant of the compensation or relief under this Act shall intimate to the Tribunal about the application filed to, or, as the case may be, compensation or relief received from, any other Court or authority.”

111. Therefore, by virtue of the said provision not only the affected party claiming compensation must approach the Tribunal within the period of five years from ‘the cause of action first arose’ but also the court fee of 1% for the claim made has to be paid. Even if it is assumed that the cause of action first arose, as provided under Section 15 of the NGT Act may not be continuous cause of action, but is a recurring cause of action, as the damages caused occurs every time when there is a crop failure when compared to the original crop yielding or in cases of deformity, it is for such affected person to approach the Tribunal under Section 15 of the NGT Act claiming compensation. Even if the applicant association, for argument’s sake, can represent larger number of farmers of the so called affected area which as per the record is not even a case of the applicant, it is for the parties to approach the Tribunal by appropriate application under Section 15 of the Act and in accordance with law.

112. Till such legal recourse is resorted to and taking into consideration of the peculiar situation of the expiry of period of the Loss of Ecology Authority, the Award passed by the Authority has to be sustained. If the applicant's stand is that out of the larger extent of persons stated to have been affected only few persons have been chosen for the payment of compensation, it is for those persons who were left out to work out their remedy in the manner known to law. In these proceedings, there are no records available for this Tribunal to arrive at the just conclusion as to the number of persons affected and the method by which the loss is being calculated and therefore it is certainly not possible for this Tribunal to decide the same simply because MA.No.290 of 2016 has been filed by the applicant.

113. Incidentally, it is necessary to refer to the Award passed by the Loss of Ecology Authority. The applicant admitted in the application that the Loss of Ecology Authority has issued notice to appear either by the party or through counsel on 29.8.2011 as per the notice dated 12.8.2011. The case of the applicant is that even though the person authorised to receive notice has received notice from the Loss of Ecology Authority dated 12.8.2011, it was under the impression that it is preliminary enquiry and therefore counsel need not be present and therefore they were not ready. However it is the specific case of the Loss of Ecology Authority that the representatives of applicant were present. Be that as it may, when once the Authority constituted has given notice to the persons to appear and in spite of having received the notice if there is a failure, it does not mean that the Authority should shirk its responsibility from proceeding with the enquiry particularly when the authority has got *suo motu* powers to make such enquiry. It is not as if the Authority has just conducted an enquiry

without having any material. The Authority was guided by a Report of the Experts connected with it and the report itself was based on inspection made in which large number of people have participated. A reference to the Award passed by the Loss of Ecology Authority shows that the Technical Team of the Authority, headed by Dr. P. Jeyaraman, Under Secretary, Loss of Ecology (P & PC) Authority, Chennai inspected the lands in Viralipatti, Eluvanampatti, Ganguvarpatti, Kottarapatti and Veeriyapanaikenpatti in the presence of the officials of the Revenue Department, Pollution Control Board and representatives of the applicant and farmers association between 19.7.2011 and 22.7.2011.

114. The Loss of Ecology Authority considered the entire issue in the light of not only the Report of the Expert Committee of the Authority, but also previous orders as enumerated above to come to a conclusion that there is no case for closure of the industry. At this point it is relevant to note that this Tribunal has to come to a conclusion regarding Point No.1 not only based on the contents of the Award of the Loss of Ecology Authority but more particularly on the scientific report of Centre for Environmental Studies, Anna University consisting of Experts and another Report of the Expert Committee constituted by the Tribunal itself consisting of eminent Scientists. The Award while considering the point relating to other reliefs, has specifically stated that even though complainants have not claimed compensation for the environmental degradation, the Authority has taken efforts to assess the damages caused to the agricultural land and ground water in the surrounding premises of the 5th respondent industry, particularly taking note of the fact that SEP are stated to be contaminated because of the enhanced TDS value upto 8184 mg/l. It is relevant to point out that inspite of the direction given by the Loss of Ecology Authority and

the promise given by the applicant to furnish the list of members of the Agricultural Environment Protection Sangam, the list of affected persons has not been given to the Authority. The Authority came to a conclusion that as per report of the Division of Structural Engineering, Department of Civil Engineering, Anna University dated 10.1.2011 that the SEP system of the 5th respondent is found to be impermeable and found that the pollution was in existence in between 2005 and 2009 and the 5th respondent was liable to pay compensation for the damages caused during that period. The Authority has relied upon the Technical Expert Team which has given separate list for four reference water samples in respect of Viralipatti, Veriyappanaikenpatti in Dindigul District and the hamlet of Kottarapatti in Genguvarpatti Revenue Village and found out 24 affected individuals in Viralipatti and 14 affected individuals in Genguvarpatti and a total compensation of Rs.17,16,898 was arrived at which was ultimately refixed when it was found that there was a clerical mistake by awarding Rs.1,75,805 for Dindigul District and Rs.14,69,719 for Theni District by enumerating the persons entitled for receiving the compensation as per the Annexures 1 and 2 contained in the Award.

115. In such view of the matter, we are of the view that when there is no sufficient material produced by the applicant or any other farmers before the Authority there is no reason to hold that the Authority in having acted as per the scientific report of the Experts is wrong. In such circumstance, it is not a ground for setting aside the Award.

116. Further, in the December, 2016 Report of Expert Committee constituted by the Tribunal consisting of Dr. C.A. Srinivasamurthy, as Chairman and Dr. C.A. Rama Rao, as Member submitted before this

Tribunal, the Terms of Reference 11 to 15 are relating to issue of compensation.

117. While dealing with ToR 11, which relates to pattern of cultivation and loss of crops raised in the area, the Expert Committee has framed two tables relating to Dindigul and Theni Districts respectively and ultimately found as follows:

"Compared to the period 2005-09, there is no particular trend observed in the area sown under different crops. With respect to the four crops for which the compensation was recommended by LoEA, area under sorghum and bajra decreased in Dindigul district and the area increased in case of cotton and coconut. In Theni district the area under coconut increased whereas the area under the other three crops viz., sorghum, bajra and cotton decreased. However, the yield of all the four crops has increased in both the districts."

118. Considering the next ToR 12 regarding the review of agricultural crop production in the area in question for years 2011-14 the following materials available in government records were taken into consideration which cannot be found fault.

Table 11:

Crop	2011-12	2012-13	2013-14	2014-15
Area (ha)				
Paddy	20	2	5	15
Cholam	79	10	5	20
Cumbu	2	1		2
Maize		5	2	5
Red gram	1	2	2	3
Black gram		15		10
Green gram	2			
Cow pea	5	2	1	20
Sugarcane			1	
Cotton	10			
Gingelly				1
Production (MT)				
Paddy	172	11.2	38	131.2
Cholam	225	2.6	13.5	58
Cumbu	6.2	2.8		6.2
Maize		38.2	13.2	43.7
Red gram	0.95	1.7	1.72	2.9

Black gram		5.6		3.6
Green gram	0.75			
Cow pea	2.1	0.64	0.39	7.7
Sugarcane			70	
Cotton	18			
Gingelly				0.46
Productivity (Kg/ha)				
Paddy	8600	5600	7600	8750
Cholam	2850	2600	2700	2900
Cumbu	3100	2800		3100
Maize		7650	6600	8750
Red gram	950	860	860	980
Black gram		375		360
Green gram	375			
Cow pea	420	320	360	385
Sugarcane			70000	
Cotton	1800			
Gingelly				465

Table 12

Crop	2011-12	2012-13	2013-14	2014-15
Area (ha)				
Paddy				
Cholam (Unirrigated)	1		40	13
Cumbu (Unirrigated)		3		1
Maize	5	5	2	1
Cowpea (Unirrigated)	3		4	1
Red gram (irrigated)		1	0	
Black gram (irrigated)				1
Green gram				3
Gingelly (Unirrigated)		30	2	15
Cotton (Unirrigated)	40	2	8	10
Coconut	215	188	189	166
Production (MT)				
Paddy				
Cholam (Unirrigated)	2.35		82	44.2
Cumbu (Unirrigated)		5.4		2.45
Maize	39.26	26.75	9.5	4.56
Cowpea (Unirrigated)	2.33	0.85	3.28	0.98
Red gram (irrigated)		0.798	0.392	
Black gram (irrigated)				0.666

Green gram				2.16
Gingelly (Unirrigated)		19.5	0.814	12.75
Cotton (Unirrigated)	128	6.4	20.8	35
Coconut	4836375 Nos.	4237875 Nos.	4255875 Nos.	3328560 Nos.
Productivity (Kg/ha)				
Paddy		7200	7200	7200
Cholam (Unirrigated)	2350	2150	2050	3400
Cumbu (Unirrigated)		1800	1800	2450
Maize	8300	5350	4750	5700
Cowpea (Unirrigated)	860	850	820	980
Red gram (irrigated)		600	980	
Black gram (irrigated)				600
Green gram				800
Gingelly (Unirrigated)		650	450	850
Cotton (Unirrigated)	3200	3200	2600	3500
Coconut	22500 Nos.	22500 Nos.	22500 Nos.	20100

Table 13

Crop	2011-12	2012-13	2013-14	2014-15
Area (ha)				
Paddy				
Cholam (Unirrigated)	0.42		40	13
Cumbu (Unirrigated)		3		1
Maize	2	5	2	0.8
Cowpea (Unirrigated)	1		4	1
Red gram (irrigated)		1.33	0.4	
Black gram (irrigated)				1.11
Green gram				2.71
Gingelly (Unirrigated)		30	1.81	15
Cotton (Unirrigated)	15	2	8	10
Coconut	5	188.35	189.155	165.59
Production (MT)				
Paddy				
Cholam (Unirrigated)	0.987		82	44.2
Cumbu (Unirrigated)		5.4		2.45
Maize	16.6	26.75	9.5	4.56
Cowpea (Unirrigated)	0.86		3.28	0.98
Red gram (irrigated)		0.798	0.392	
Black gram (irrigated)				0.66

Green gram				2.168
Gingelly (Unirrigated)		19.5	0.81	12.75
Cotton (Unirrigated)	48	6.4	20.8	35
Coconut	112500 Nos.	4237875 Nos.	4252500 Nos.	3328359 Nos.
Productivity (Kg/ha)				
Paddy			7200	7200
Cholam (Unirrigated)	2350	2150	2050	3400
Cumbu (Unirrigated)		1800	1800	2450
Maize	8300	5350	4750	5700
Cowpea (Unirrigated)	860	850	820	980
Red gram (irrigated)		600	980	
Black gram (irrigated)				600
Green gram				800
Gingelly (Unirrigated)		650	450	850
Cotton (Unirrigated)	3200	3200	2600	3500
Coconut	22500	22500	22500	20100

119. Again while considering ToR 13 regarding the observations and comments on time-trace impact of effluent discharges from the unit in question on agricultural productivity in the area, the particulars are furnished as follows:

Table 14

S.No	Crop	Unit	Within the boundary	Outside the boundary	Decrease in yield (%)
(1)	(2)	(3)	(4)	(5)	(6) = ((5)-(4))/(5)*100
1	Coconut	No/ha	7000	14000	50.0
2	Cotton	Kg/ha	1300	2430	46.5
3	Maize	Kg/ha	1200	5000	76.0
4	Gingelly	Kg/ha	200	875	77.1
5	Cholam	Kg/ha	980	4500	78.2
6	Chillies	Kg/ha	2800	12500	77.6
7	Beetroot	Kg/ha	4900	25000	80.4
8	Bhendi	Kg/ha	2100	10000	79.0
9	Pumpkin	Kg/ha	2600	15000	82.7
10	Sapota	Kg/ha	7300	20000	63.5

120. Regarding ToR 14 relating to the impact of the emission and effluent discharge of the unit in the zone of influence as outlined in economic terms, it is true that the Expert Committee constituted by this Tribunal has opined that the economic costs or loss of production of these crops may be included in the compensation in addition to what was already recommended by LoEA. But, as stated above, in the absence of particulars relating to the persons affected and for want of individual particulars, this Tribunal is unable to decide anything in that regard. However, it is left to the affected parties to work out their remedy in the manner known to law.

121. Ultimately, while considering ToR 15 relating to the comments on the applicability and correctness of the method employed by the Loss of Ecology Authority with regard to the compensation, the Expert Committee Report is as follows:

“However, it was observed during the field visit and also from the information provided by the Department of Agriculture that some farmers were growing crops such as chillies, gingelly and maize. The impact of salinity on yield of these crops has not been considered for award of compensation. Also, during our interaction with farmers it was brought to our notice that some of the farmers with wells within the boundary area have not been considered for award of compensation.”

122. Again it is relevant to note that the applicants who are affected are not before this Tribunal and in the absence of such particulars, it is not possible for this Tribunal to make any change in the award of compensation, particularly in the circumstances when the Loss of Ecology Authority has become defunct.

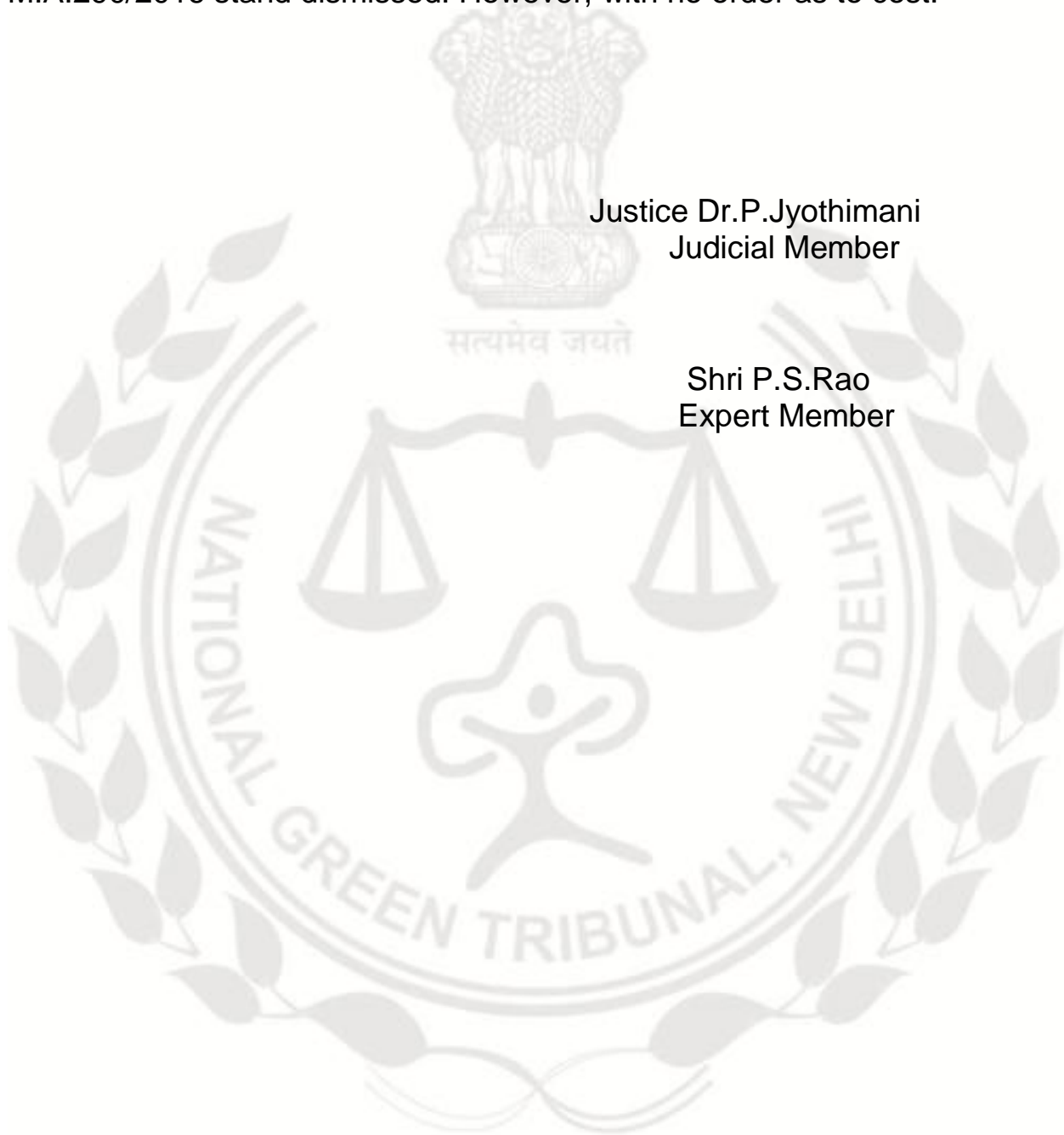
123. Therefore, looking into any angle, we are of the considered view that the Award passed by the Loss of Ecology Authority dated 15.11.2011 does not require any reconsideration for the reasons stated above, except

leaving it open to the farmers who are affected and who are not considered, to work out their remedy in the manner known to law.

124. Therefore, both the application Nos.17 of 2012 and 15 of 2013 and M.A.290/2016 stand dismissed. However, with no order as to cost.

Justice Dr.P.Jyothimani
Judicial Member

Shri P.S.Rao
Expert Member



NGT



NGT



NGT