

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONAL BENCH, BHOPAL**

Original Application No. 25/2014

CORAM:

**Hon'ble Mr. Justice Dalip Singh
(Judicial Member)**

**Hon'ble Mr. P.S.Rao
(Expert Member)**

BETWEEN:

Babulal Banjara S/o Shri Jairam Banjara
Age – 32 years, R/o Village- Pilukhedi,
Tehsil Narsingharh,
District Rajgarh.

Prithvee S/o Late Shri Durga Banjara
Aged 60 years, R/o Village- Pilukhedi,
Tehsil Narsingharh,
District Rajgarh.

.....Applicants

Versus

1. State of Madhya Pradesh
Through its Principal Secretary,
Department of Urban Administration and Development,
Vallabh Bhawan, Bhopal (M.P.)
2. State of Madhya Pradesh
Through its Principal Secretary,
Department of Water Resources,
Vallabh Bhawan, Bhopal (M.P.)
3. MP Pollution Control MPPCB
Through its Executive Director,
Paryavaran Parisar, E-5, Arera Colony,
Bhopal (M.P.)
4. The State Excise Officer
Through Excise Commissioner,
Moti Mahal, Gwalior (M.P.)
5. The District Collector
District- Rajgarh, M.P.

6. The District Excise Officer
Pilukhedi, Tehsil Narsingharh,
District Rajgarh, MP.
 7. Central Pollution Control Board
Through its Member Secretary,
Parivesh Bhavan, CBD Complex,
East Arjun Nagar, Delhi 110032.
 8. The Department of Commerce & Industries
Through Addl. Chief Secretary,
Vallabh Bhavan, Bhopal (M.P.)
 9. Vindhyachal Distilleries Private Ltd.
Through the Chairperson,
Pilukhedi, District Rajgarh, M.P.
 10. Central Ground Water Board
Through its Secretary,
Ministry of Water Resources, North Central Region,
Paryawas Bhawan, Block I, IV Floor,
Jail Road, Bhopal (M.P.)
-Respondents

<u>Counsel for Applicants :</u>	Shri Dharamvir Sharma, Adv. & Shri Om S.Shrivastav, Adv.
<u>Counsel for Respondent Nos.1, 2, 4, 5, 6 & 8</u>	Shri Sachin K.Verma, Adv.
<u>Counsel for Respondent No. 3 :</u>	Ms. Parul Bhadoria, Adv. for Shri Purushaindra Kaurav, Adv.
<u>Counsel for Respondent No. 9 :</u>	Shri Deepesh Joshi, Adv.
<u>Counsel for Bhopal Gelatine:</u>	Shri Vishal Bhatnagar, Adv. Shri Yogesh Bhatnagar, Adv.
<u>Counsel for Oswal Woollens Industries :</u>	Shri Akash Telang, Adv.

Dated : May 11th, 2015

JUDGEMENT

This Application has been filed under Section 18 read with Sections 14, 15 & 17 of the National Green Tribunal Act, 2010 with the prayer that the applicants are interested in the protection of environment and ecology as well as their surroundings and also on behalf of all other aggrieved villagers of village Pilukhedi, Tehsil - Narsingharh, District - Rajgarh (M.P.) who are mainly dependent on agriculture for their livelihood. The applicants stated that the

respondent No. 9 M/s. Vindhyachal Distilleries (Pvt.) Ltd. are manufacturers of rectified spirit, natural alcohol, country made and Indian made foreign liquor by using grain such as *jowar*, *bazra* etc. as raw material by the process of distillation which results in release of large quantity of waste water and solid waste having considerable impact on the environment particularly in the surroundings by polluting the air, water bodies and soil and also emanating foul odour which is a nuisance to inhabitants in the area. The effluent discharged by the aforesaid industry is found to be in dark brown colour and it is let out into agricultural fields located around the factory in village Philukhedi. The applicants further pleaded that the industry is violating the conditions imposed in the consent granted by the Madhya Pradesh State Pollution Control Board (for short 'MPPCB') under Section 25 & 26 of the Water (Prevention & Control of Pollution) Act, 1974 (for short 'Water Act') and under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 (for short 'Air Act') by releasing untreated effluents from their premises. The main violation is found to be not following the condition prescribed in the consent granted by the MPPCB that the industry shall conduct ground water analysis in the factory premises and also 100 m periphery of the plant boundary with special reference to critical parameters like potassium (K), BOD, COD, chlorine etc. atleast for one year on a monthly basis and results shall be submitted to the MPPCB. One more condition which was specified in the consent is that industry shall utilise the whole quantity of treated effluent within the premises itself for plantation, horticulture etc. purpose and effluents shall not be discharged outside the factory premises under any circumstances and shall maintain zero discharge. But as per the applicants this condition is found violating.

2. The applicants further contend that the industry is not following the

aforestated conditions imposed by the MPPCB while granting the consent and untreated liquid waste and mist emanating from the factory is allowed to enter/fall into the agricultural fields and also allowed to flow into the river Parvati which is located about ½ km from the factory thereby causing damage not only to the agricultural fields but also affecting the health of the villagers as well as their livestock besides polluting the river Parvati. The applicants stated that the representations made by the villagers to the concerned authorities have not yielded any result and the respondent industry continues to violate environmental norms, pollution is unabated and the villagers are compelled to use untreated 'spent wash' released by the respondent factory for irrigation of their crops which is causing serious health hazard and also polluting the ground water. The spent wash discharged into the adjacent agricultural fields is adversely affecting the soil health by increasing organic acid which causes immobilisation of plant nutrients thereby destroying the fertility of the soil.

3. The applicants further alleged that the industry is also causing damage to the health of the cattle by selling untreated grain fibre which is a by-product of the process of distillation for producing alcohol as cattle feed. In this context, the applicants have submitted that earlier, based on the representation of the villagers the District Collector, Rajgarh obtained a detailed enquiry report from the District Excise Officer but no action was taken against the industry. In the above circumstances, the applicants have prayed that the industry may be directed to restitute the damaged property in its original position and suitable compensation may be ordered to be paid to the victims of pollution whose agricultural land is affected and whose cattle are alleged to be dying because of pollution. Further, the applicants prayed that the industry may be directed to close the outlets of discharge

of spent wash into the adjoining agricultural fields and *nallahs* which ultimately lead to river Parvati. It was also prayed that the industry may be directed not to sell the untreated grain fibre as fodder to the cattle to prevent damage to the health of the cattle.

4. On filing of the application notices were issued to the parties. It was submitted before us that as per the permission granted to the respondent distillery unit by the MPPCB, the technology is based on zero discharge of effluents by the plant and it was stated by the respondent distillery as well by the MPPCB that in fact zero discharge was being maintained. But the applicants contested the statement made by the respondent industry as well as the MPPCB and made a submission before the Tribunal that to verify the claim of the MPPCB that in fact the industry is maintaining zero discharge a Court Commissioner may be appointed to find out the truth. Accordingly the prayer was allowed and vide order dated 27.08.2014 Shri Shantanoo Saxena, Advocate was appointed as Court Commissioner to visit the disputed site including the site where the applicants had dug up an open well for irrigating their crops. The Commissioner in his report has outlined his findings which are reproduced below:

“That during the time of the visit it was drizzling, however the visibility was sufficient, the following were the observations made during the said visit.

- *That during the said visit the undersigned entered the lagoon area of the said industry along with the Applicants, from the land adjoining the Respondent No. 10 Industry. It was observed that six separate lagoons have been made on the land within the premises of the Industry, some of which were having small quantities of affluent and were partially filled.*
- *That on the wall between two lagoons three mist evaporators were found installed however the same were not in operation during the said visit.*

- *It was further observed that poles of approximately 15 to 20 feet height have being erected as a structure on the boundary of the lagoon and green colour nets have being installed to prevent the flow of air carrying the mist, however it was further noticed that at some of places the net was found not covering the lagoon area.*
- *That the Applicants showed the undersigned various pipes coming out of the lagoons having the outlet in the open land adjoin the lagoons. That the undersigned was informed by the Applicants, that the land on which the said pipes are opening is not belonging to the industry.*
- *That the Applicants further showed the undersigned a well which was approximately 45 to 50 feet from the lagoon boundary and was a 'KACCHA WELL' i.e. not having proper concrete well wall, the water in the said well was reddish brown in colour.*
- *That the Applicants also showed the orchard having guava trees planted by him to the undersigned, which were having small fruits which have dried without developing completely. The said plantation of the guava trees done by the Applicants was approximately 100 M from the lagoon boundary.*
- *The photographs taken during the said visit are being annexed as Annexure- 'A'."*

5. He submitted that during the inspection he was accompanied by the applicants as well as the Learned Counsel for the Distillery and Shri Sanjeev Khanna, Director, Vindhyachal Distilleries (Pvt.) Ltd. on 31.08.2014 at around 15:00 hours. Further, the following observations have been stated in para 6 of the report regarding observations made during the aforesaid inspection:

- *That during this visit the undersigned entered the premises of the factory from the main gate. It was observed that at a small distance from the main gate a garden having grass has been developed and some trees have been planted on the periphery of the unit.*
- *The main unit of the factory was shown by the Project Proponent which was operations at that point of time, the proponent also shown the undersigned the bio gas plant which is used for providing additional energy thereby reducing the consumption of coal.*
- *That there after the project proponent showed an automatic air cooling tower which is being used to cool the water coming out of the main plant and same is being recycled and reused.*
- *That there after the project proponent took the undersigned to the unit where spent waste from the distillation tower is been collected from*

where it is taken to the lagoons, photographs of the said area are being annexed. The spent waste was observed to be of dirty colour.

- That from the said location the undersigned was taken to the lagoons where in one of the lagoon waste was being collected. That the three air mist apparatus were operation at the time of the visit and mist was coming out of them. The net surrounding the lagoon was lowered in a manner that it was covering the entire lagoon area. It was informed by the project proponent that the mist evaporators are usually not kept in operation during rains.
- That the project proponent also showed the undersigned the pipes coming out of the bottom of the lagoon having their opening in the land adjoining the lagoon and it was clarified by the project proponent that the said pipes are used for using gravitational force for transferring the waste from one lagoon to another using pipes. It was further informed by the project proponent that the land on which the said outlets are opening belongs to the Respondent No. 10, Vindhyaal Distilleries Private Ltd. distilleries and is in their ownership and is being used by them for the agricultural purposes.
- That it was further observed that a natural slope of the area from the boundary of the lagoon is flowing towards the nallah which eventually leads towards river Parvati however there are open tracks of acres of land between the said nallah and the lagoons.
- That it was further observed that there is a Gelatine factory on the other side of the road which is also capable of discharging affluent and if there is a discharge from this factory the same will also lead to the same nallah.
- The photographs taken during the said visit are being annexed as Annexure 'B'."

6. The MPPCB in their reply filed on 05.07.2014 stated that respondent industry was granted consent under Water and Air Acts on 30.06.2006 for production of industrial alcohol using grain/molasses as raw material with a capacity of 7500 KL per annum and the consent was renewed from time to time. It was further stated by the MPPCB that as per the directions of the Tribunal a team was constituted by the MPPCB and the team inspected the site on 28.06.2014 in the presence of the applicants and representative of the industry. It was submitted that as per the directions given earlier by the MPPCB to install Multi Effect Evaporators (for short 'MEE') the industry has started the installation of the

same along with dryer in a phased manner and the process will be completed by September, 2016. During the course of inspection it was found that the industry is not discharging any effluent into adjoining agriculture land and maintaining zero discharge as the entire effluent is made to evaporate into the atmosphere with the help of mist evaporator and the released water that is obtained by re-distillation of rectified spirit, is used for watering plantation and for gardening purpose in the factory premises besides boiler ash quenching and its quantity is roughly around 50 KL per day. However, the MPPCB has taken ground water samples during the inspection within the industry premises and within 100 m periphery and also from open wells in the nearby villages Turkipura and Sewas. The analysis of the water sample collected from the open wells indicates the following:

S.No.	Characteristic	Unit	Result (i)	Result (ii)
1.	Temperature	°C	26	26.5
2.	Turbidity	Ppm/NTU	-	-
3.	Appearance	-	-	-
4.	Colour	pt Co scale	Colourless	Colourless
5.	Odour	Threshold No.	-	-
6.	pH	pH Unit	7.46	7.82
7.	Specific Conductivity	u Mhos	2354	1796
8.	Total Solids	mg/l	1014	670
9.	Dissolved solids	mg/l	1004	655
10.	Suspended solids	mg/l	10	15
11.	Ammonical Nitrogen	mg/l	-	-
12.	Total Nitrogen	mg/l	-	-
13.	Organic Nitrogen	mg/l	-	-
14.	Nitrate Nitrogen	mg/l	-	-
15.	Nitrite Nitrogen	mg/l	-	-
16.	Phosphate (as P)	mg/l	-	-
17.	Chloride (as Cl)	mg/l	212.6	156.4
18.	Biochemical Oxygen Demand (B.O.D.)	mg/l	1.1	1.2
19.	Chemical Oxygen Demand (C.O.D.)	mg/l	12	14
20.	Oil & Grease	mg/l	-	-
21.	Total Hardness	mg/l	128	156
22.	Calcium Hardness	mg/l	70	84
23.	Magnesium Hardness	mg/l	58	72
24.	Sulphate (as SO ₄)	mg/l	-	-
25.	Fluoride (as F)	mg/l	-	-
26.	Dissolved oxygen (D.O.)	mg/l	-	-
27.	Sulphide as (S)	mg/l	-	-
28.	Sulphide as (SO ₂)	mg/l	-	-
29.	Total Alkalinity	mg/l	150	150

30.	Phenolic compound	mg/I	-	-
31.	Residual Chlorine	mg/I	-	-
32.	Free Carbon di Oxide	mg/I	-	-
33.	Sodium	mg/I	32	37
34.	Potassium	mg/I	37	44
	(i) Aluminium	mg/I	-	-
	(ii) Chromium	mg/I	-	-
	(iii) Copper	mg/I	-	-
	(iv) Lead	mg/I	-	-
	(v) Mercury	mg/I	-	-
	(vi) Zinc	mg/I	-	-
	(vii) Nickel	mg/I	-	-
	(viii) Iron	mg/I	-	-
	(ix) Manganese	MPN/100 ml	-	-
	(x) Boron	MPN/100 ml	-	-
35.	Total Coliform	Time 96 Hrs	-	-
36.	Fecal Coliform	-	-	-
37.	Biossay	mg/I	-	-
38.	Any other Test	mg/I	-	-

7. The MPPCB in its further reply has stated that there is no discharge of any dark brown effluent outside the industry premises or into the *nallah* leading to river Parvati or at any another place as alleged by the applicants. Samples from the effluent treated from Methane Digester are also taken and results are furnished as Annexure R/3-10 to the affidavit. A detailed inspection report signed by the Regional Officer, MPPCB, Guna along with the Jr. Scientist and Chemist was also filed along with the affidavit. It was further stated in the affidavit that the effluent treatment plant comprising of bedsitter and the mist evaporator with each of them having capacity of 150 KL per day, are under operation and they are properly functioning to ensure zero discharge and the industry has also started civil work for installation of MEE including dryer. It was further stated that there are leak proof and effectively lined 5 numbers of lagoons that have been constructed by the industry for holding the discharge. The report further says that grain fibre is disposed as cattle feed, lagoon sludge is used as bio-fertiliser and boiler ash is disposed for brick manufacturing purpose and hence there is no problem of management of solid waste discharge from the industry. With regard to air pollution the MPPCB replied that no such pollution has been noticed and as per the

norms a stack measuring 30 m in height along with multi cyclone dust collector is taking care of the emission and Ambient Air Quality is within the prescribed standards.

8. Subsequently, the MPPCB filed a detailed para wise reply on 27.08.2014 duly substantiating the contents of the earlier reply dated 05.07.2014 and emphatically stating that there is no discharge of any dark brown effluent from the industry outside its premises or in the river Parvati and/or at any another place as alleged by the applicants. The effluent treated from the methane digester is further taken to *pucca* lagoons equipped with mist evaporator for ensuring zero discharge. With regard to utilisation of grain fibre the MPPCB has stated that as per the Indian Standards 8032 -1976 (Re-affirmed in 2003) at the point no. 5.1.1 recovery of by-products from grain based distilleries and using them as cattle feed, solves the disposal problem of the distilleries and therefore it is clear that the sale of grain fibre by the industry and its usage as cattle feed is legal and industry is not violating the provisions of law.

9. During the course of hearing on 04.09.2014, when it was brought to the notice of the Tribunal that there are two more industries, namely, M/s. Bhopal Glue and Chemicals Pvt. Ltd. and M/s Oswal Woollen Mills Ltd. located in the vicinity and the discharge from these two industries may also be a source of contamination and pollution of the water, both surface as well as underground, it was directed that notices be issued to the aforesaid two units also. In response to the notices, both the aforesaid newly added respondents have put in their appearance.

10. The respondent No.10 Central Ground Water Authority (in short 'CGWA') in their affidavit filed on 26.11.2014 have stated that they have conducted detailed study of the chemical quality of the ground water in the area in question by taking the samples from dug wells and treated effluent from the unit of respondent No. 9 Vindhyachal Distilleries Private Ltd. as well as the two other industries i.e. Bhopal Glue and Chemicals Pvt. Ltd. & Oswal Woollen Mills Ltd. in the month of September, 2014. A total of 28 water samples were collected including that of the samples taken from the dug wells/pits in the agriculture fields of the applicants. The results indicated that the pH value of all the ground water samples taken in the industrial area of Pilukhedi ranged in between 7.21 to 7.59 and thus found within the permissible limits set by BIS. However, with regard to Electrical Conductivity (EC) the ground water samples from the dug wells DW1, DW3 & DW6 including that of the applicants (DW1) it was found that EC value was beyond the BIS acceptable limits indicating that the ground water has been contaminated and is of poor quality. With regard to carbonates and bi-carbonates, chloride, sulphate, calcium, magnesium as well as potassium they were found to be in excess. Even the heavy metal concentrations including cadmium were also found little higher than the prescribed limits. It was also submitted by the CGWA that the effluent collected from all the three industries i.e. Vindhyachal Distilleries Private Ltd., Bhopal Glue and Chemicals Pvt. Ltd. & Oswal Woollen Mills Ltd. and analysed and here also certain parameters were found little higher than the permissible limits. The Respondent No.10 CGWA ultimately concluded as follows:

- 1. The pH value and concentration of total alkalinity, Chloride, Fluoride, Iron, Zinc, Manganese, Copper, Nickel and Chromium in all the ground water samples belonging to the industrial areas of Pilukhedi are with permissible limits recommended by BIS.*

2. *BIS has not recommended Acceptable/Permissible limits for drinking in respect of Phosphate, Sodium, Potassium and Silica concentration in ground water.*
3. *The EC of 3 out of 9 ground water samples in the industrial Areas of Pilukhedi is more than BIS recommended permissible limit.*
4. *The concentration of Sulphate is more than BIS recommended permissible limits in 2 out of 9 locations (DW₁ and DW₂.)*
5. *The Concentration of Nitrate is more than BIS recommended Acceptable/Permissible limits in 5 out of 9 locations (DW₂, DW₄, DW₅, DW₆ and DW₇.)*
6. *The concentration of Calcium is more than BIS recommended permissible limits in 7 out of 9 locations (DW₁, DW₂, DW₃, DW₄, DW₅, DW₆, DW₇ and DW₈.)*
7. *The concentration of magnesium is more than BIS recommended permissible limits in 2 out of 9 locations (DW₁, DW₂.)*
8. *The total hardness of 8 out of 9 ground water samples is more than BIS recommended permissible limits (DW₁, DW₂, DW₃, DW₄, DW₅, DW₆, DW₇ and DW₈.)*
9. *Ground Water Samples from two locations namely DW₄ and DW₆ had Cadmium concentration higher than BIS acceptable/permissible limit.*
10. *All the nine ground water samples recorded Lead concentration of more than BIS acceptable/permissible limit.*
11. *The heavy metals particularly, Lead, Cadmium and Iron were found in effluents of the industries.*

It may be concisely stated that the Concentration of EC, Sulphate, Nitrate, Calcium, Magnesium, total hardness, Cadmium and Lead in the ground water in Pilukhedi Industrial Area is more than the BIS standards (permissible limits) for drinking water. The present study indicates that ground water has been contaminated in many localities in the industrial area of Pilukhedi. The presence of heavy metals (Lead and Cadmium) in ground water more than BIS Standards indicates Anthropogenic Pollution. However, based on the study, it is not possible to ascertain which particular industry is responsible for pollution.

11. The respondent No.9, M/s. Vindhyachal Distilleries Private Ltd., in their counter dated 27.08.2014 stated that the unit has been established at Pilukhedi, District Rajgarh for manufacturing spirit from molasses since 1987 and shifted to grain based technology in the year 2009. To prevent any pollution and to maintain zero discharge of the effluents turbo mist evaporators were installed and 5 lagoons were constructed for this purpose. It is contended by the respondent industry that enhanced industrial evaporator system was a well recognised process of attaining

zero discharge and is being adopted by the industry to the utmost satisfaction of the MPPCB and with full proof mechanism of preventing any pollution. It was further stated that the plant of the industry includes distillery unit, lagoons and way bridge comprising about 31.154 acres of land and remaining 66.238 acres of land of the industry is being utilized for successfully raising agricultural crops and plantations and if there is any pollution caused by the industry it would not have been possible to successfully cultivate the agricultural and plantation crops. With regard to grain fibre it was replied that it is not an effluent but it is a by-product and neither it is required to be treated nor it is a hazardous waste and therefore it is used as a cattle feed. No damage occurred to the health of the cattle and the averments made by the applicants in this regard are false. Finally it was replied by the respondent industry that the application was filed by the applicants with mala fide intention. As the industry was confirming to all the prescribed standards and maintaining zero discharge, the MPPCB is fully satisfied and regularly renewing the consent under the Water and Air Acts and therefore the question of causing damage to environment much less to the damage to the agricultural fields of the applicants and causing soil and ground water pollution does not arise and the application deserves to be dismissed.

12. Subsequently, in reply to the directions issued by this Tribunal during the course of hearing on 04.09.2014 and 29.10.2014 the respondent industry filed further reply stating that their company does not fall under the Companies Act, 2013 with regard to Corporate Social Responsibility as the industry profits do not fall under the category of industries having net worth of Rs. 500 Crores or turnover of Rs. 1000 Crores or net profit Rs. 5 Crores for the immediate preceding 3 financial years. However in spite of the aforesaid position the industry has

established a Primary Health Centre (PHC)/8 bedded hospital in the limits of Gram Panchayat Pilukhedi with full infrastructure but the State government has not posted required doctors and staff to operate the PHC to make it functional. Besides establishing the above aforesaid PHC certain other activities such as improvement of the government high school at Pilukhedi and primary schools in the locality has been taken up by the respondent industry and it also agreed to bear the cost of courtyard shelter (*Aanganwari*). Finally it was concluded that the industry is providing amenities for the benefit of the villagers of the Pilukhedi and not causing any environmental damage since it is duly confirming to the prescribed standards.

13. During the course of hearing, the applicants filed rejoinder to the reply of the respondent industry. The applicants quoted the inspection reports enclosed by the MPPCB vide their affidavit filed on 19.12.2014 during which it was stated that about 66 inspections were carried out by the MPPCB since July, 1993 when the industry was operating with molasses as raw material and during the inspection it was found that untreated effluent was discharged outside the premises of the industry and therefore every year the same violation has been repeatedly found during the inspection. It was further contended by the applicants that though the industry has constructed lagoons there are outlets opening into the adjoining lands (agricultural fields) and the water in the dug wells/pits in the agriculture fields which are located even upto 40-50 m away from the lagoons were found reddish brown in colour. It was also found that the slope is in such a way that the flow of effluent from the boundary of the lagoon leads into the agricultural fields and the adjacent *nallah* which in turn merges with the river Parvati. Because of contamination of ground water the guava trees planted by the applicants located approximately 100 m away from the lagoon boundary are not bearing fruits and it

was found that unripe fruits are falling from the trees thereby indicating that contamination of ground water as well as soil is leading to failure /decrease in the yield of the crops. The applicants averred that it is a clear case of causing soil and ground water pollution due to large scale illegal discharge of spent wash from the industry for a long period of time when it was using molasses as the raw material though the industry claims that the lagoons have been constructed and mist evaporators have been installed. The applicants averred that inspection reports submitted by the MPPPCB for the period from 1993 to 2014 in a tabular form clearly show that the seepage from the lagoons and discharge of untreated spent wash outside the factory premises is flowing into the river Parvati through *nallah* causing pollution. With regard to grain fibre the applicants stated that the Indian Bureau of Standard guidelines for treatment of the grain fibre are not being followed by the respondent industry and it is selling the fibre as cattle feed affecting the health of the cattle. The applicants concluded that the report of the State Government along with the soil analysis report indicate that there is some ground water pollution and therefore industry is liable to pay compensation and restitution of the property damaged to its original position.

14. The respondents 4, 5, 6 & 8 in their reply stated that an enquiry was already conducted on a complaint lodged with regard to the adverse effect of pollution on the standing crops in the said area by the District Excise Officer in the year 2011 and as per the enquiry report it was found that no adverse effect was noticed on the standing crops situated around the respondent industry at Pilukhedi. Subsequently as per the directions of this Tribunal issued on 29.10.2014, a compliance report dated 26.11.2014, has been filed by the respondent No.5 District Collector, Rajgarh wherein it was stated that an inspection team was constituted consisting

officers from Agriculture Research Station, Industries, Agriculture & Farmer Welfare, Revenue and Animal Husbandry Departments. The team conducted inspection of the site on 14.11.2014 and soil samples were taken near the respondent industry as well as the adjacent two other industries i.e. M/s. Bhopal Glue and Chemicals Industry Ltd., and M/s. Oswal Woollen Mills Ltd. The inspection report states that as far as the soil near the respondent industry is concerned there is no effect of pollution and no damage to the crop was noticed but after the inspection of water flow in lagoon it was found that there was chance of water pollution but unless ground water samples are tested one cannot conclude that there is a contamination/pollution and damage to the agriculture crops. With regard to the M/s Oswal Woollen Mills Ltd. no adverse impact was found and the same was the case with regard to M/s. Bhopal Glue and Chemicals. The inspection team further concluded that there is some variation in the yield of the agricultural crops raised by the farmers in the vicinity of the industry but no concrete evidence can be attributed to pollution of the ground water/soil and to co-relate the same with the activities of the industry. The inspection report contains average yield figures of main agriculture crops sown in the vicinity such as wheat, chickpea, *masoor*, maize, soybean for a period of 5 years from 2009-10 to 2013-14. Ultimately it was concluded that except there is a variation in the chemical/nutrient/mineral status of the soil samples which is varying from sample to sample wherein certain minerals were found beyond the prescribed norms no significant variation was found to attribute to any activity of the respondent industry and there is no direct correlation to conclude that industry is causing damage to the environment leading to reduction in the yield of the agricultural crops of villagers including the applicants.

15. As per the replies filed by the MPPCB with regard to M/s Oswal Woollen Mills Ltd. no pollution was reported which can be attributed to the activities of the industry but with regard to Bhopal Glue and Chemicals Pvt. Ltd. in the reply filed by the MPPCB on 29.10.2014 it was reported that the industry manufactures about 675 MTR of gelatine per annum and it comes under the small scale industry category and having valid consent under Air and Water Acts. During the course of inspection it was found that the industry has installed waste water treatment plant and also installed bio digester for generation of biogas which is used in the boiler and the treated water is collected in 7 numbers of lagoons which are then used for irrigating the crops in the adjacent fields. However when the water quality analysis from the samples collected from the lagoons was taken up it was found to be above permissible limits and therefore utilisation of the treated water for irrigating the agriculture crops in the long run may lead to contamination of the ground water and also the possibility of flowing of this treated water into the adjoining *nallah* through seepage cannot be denied. Accordingly the MPPCB submitted that they have written a letter dated 22.10. 2014 to M/s. Bhopal Glue and Chemicals Pvt. Ltd. informing them about the adverse water quality reports of the treated water and given directions to install osmosis and MEE. For this purpose the industry was asked to deposit bank guarantee of Rs. 1,00,000/- and submit an action plan. M/s Bhopal Glue and Chemicals Pvt. Ltd. in their reply dated 26.02.2015 stated that the plant was established in the year 1982 but started operations in the year 2000 and getting consent from the MPPCB from time to time by religiously complying with the environmental norms by installing waste water plant and bio-digesters. After the inspection was carried out by the MPPCB in the month of November, 2014 installation of RO equipment has been started, purchase order dated 04.10.2014 has been issued and bank guarantee of Rs. 1,00,000/- was also

furnished to the MPPCB and thus the industry is maintaining all the prescribed standards. M/s. Bhopal Glue and Chemicals Pvt. Ltd., finally stated that since the applicants have not raised any issue against them in the petition, it is not maintainable as per the statutory provisions of the National Green Tribunal Act, 2010.

16. Having gone through the record placed before us and having heard the parties at length we feel that the following points are required to be examined/answered to come to a conclusion whether the contention of the applicants that the respondent industry M/s Vindhyachal Distilleries (Pvt.) Ltd. is causing pollution to the environment including that of the adjacent agricultural fields of the applicants:

- i. Whether the industry before switching over to grain based technology when it was using molasses as raw material, has taken all precautions to prevent discharge of untreated effluents/spent wash and what was the situation prevailing at that time and whether the water reports of MPPCB and CGWA on the analysis of the water samples collected by them from the industry and its vicinity conform and lead to any pollution of the ground water and soil if so whether it can be attributed to the activities of the industry.
- ii. If there is a possibility of pollution of ground water and soil caused by the untreated effluent/spent wash discharged by the unit for a long period of time whether one can conclude that the agricultural and plantation crops of the applicants got affected and whether there is any reduction in the crop yield.

- iii. Whether the contention of the applicants that the respondent No. 9 industry is selling untreated grain fibre as fodder causing damage to the health of the cattle is acceptable and what conclusion one can make on this allegation and if found true how to quantify the damage and pay compensation.
- iv. If any unregulated and untreated effluent discharge is attributed to the respondent No. 9 industry then how to quantify the damage to the environment and compensate the affected persons/farmers and for restitution of the environment.
- v. Though the application is filed against the respondent M/s Vindhyachal Distilleries (Pvt.) Ltd. whether the aforesaid other two industries located in the vicinity are also responsible for causing pollution, and how to quantify and attribute damage if any to a particular industry.

Now we may examine each of the above points.

Re.: (i):

17. In this application the applicants alleged pollution by way of contamination of soil as well as water in irrigation ponds/pits/wells and also deterioration of quality of the soil in their agricultural fields in and around the area at village Pilukhedi, Rajgarh District where the respondent No. 9 Distillery is located adjacent to the agricultural field of the applicants. According to the applicants, the hazardous waste was unscientifically discharged by the industry since many years and as a result of such discharge, including drifting of spent

wash, the ground water in the area got contaminated. Learned Counsel appearing for the applicants submitted that the industry is still continuously discharging untreated waste. Whereas the Learned Counsel for the respondent industry disputed the averments made by the applicants. MPPCB also replied that at present there is zero discharge. Therefore with a view to clarify the aforesaid position, the prayer made by the Learned Counsels for spot inspection was allowed and Shri Shantanoo Saxena, Advocate was appointed as Court Commissioner on behalf of the Tribunal to inspect the aforesaid industry and the adjacent fields of the applicants and submit a report with regard to the issues raised in this application.

18. From the findings of the Court Commissioner, it can be deduced that various pipes are coming out of the lagoons constructed by the respondent industry and having the outlets of the pipes open into the land not belonging to the industry but located adjoining to the lagoons. He also noticed a *kaccha* well which was approximately 45 to 50 feet away from the lagoon boundary and the water in the said well is found to be reddish brown in colour. That it was further observed by the Court Commissioner that the natural slope of the area from the boundary of the lagoon is towards the *nallah* which eventually leads to river Parvati and in between there are open tracts of land between the said *nallah* and the lagoons which clearly indicates that there is a possibility of effluent/polluted water flowing into the adjacent agricultural land of the applicants. During the course of inspection by the Commissioner the applicants have shown him orchard having guava trees bearing small/underdeveloped fruits which are found dried up without ripening/developing fully. The said plantation of the guava trees raised by the applicants is found to be approximately 100 m away from the lagoon boundary. As respondent Distillery industry was initially established in the year 1987 and till

2009, the raw material used was molasses i.e. distillation was molasses based and as a result of the same, it was suggested that such a long period of about two decades of using molasses and discharge of the untreated effluent/spent wash in the open could have resulted contamination of soil and ground water in the vicinity of the unit affecting the fields of the applicants. Therefore the MPPCB was directed to submit a tabular statement regarding the inspections carried out by them and the findings made during the inspection of the industry since its inception as this information may be available in the Regional office or Head office of the MPPCB while considering the application of the respondent industry for renewal of consent to operate from time to time. The MPPCB reply at annexure R-01 gives a gist of 66 inspections of respondent industry carried out by the MPPCB officials for a period of 2 decades beginning from 1993. Some of the salient observations made during the inspection on various dates are as follows.

Date of inspection	Observations recorded
20-7-1993	Polluted water was found on open land and as well as in some pits and it was flowing into a nearby drain finally meeting at river Parvati at 2 km. distance.
12-8-1993	Effluent discharged from distillery was found filled in the drain which was merging river Parvati.
12-4-1993	Stored effluent in lagoon was found spreading into nearby fields and the entire area is having stench.
27-4-1994	Effluent is discharged into lagoon in an uncontrolled manner. Consequently effluent is leaking and getting discharged into <i>nallah</i> .
26-7-1995	Leakage of effluent was found from the lagoon nos. 2 and 3
6-11-1997	Effluent was found discharged through drain from the premises of the industry
24-9-1998	It was found that there is seepage from lagoon number 3.

29-10-1998	Excessive seepage was found in the lagoon number 4. It requires to be made leak proof.
24-2-1999	Coloured polluted water was found in the nearby <i>nallah</i> and the effluent was also found to be flowing into <i>nallah</i> . The lagoons are filled to brim and the industry was directed to arrest the seepage of effluent.
8-3-1999	Coloured polluted water was found at the point where the <i>nallahs</i> joins the river from where the sample was collected. Dark brown water was found in the river downstream for about 500-700 m length.
12-8-1999	Seepage found from lagoon no. 1. Discharge of treated effluent found to be seen from land application area also.
1-4-2000	Nominally treated waste water was dried by spreading on the land and by leakage it was found in <i>nallah</i> . Water in the well dug on the farmer's field located on the side of the lagoon in the industrial premises has become red in colour . It appears that by percolation ground water is getting affected.
21-1-2003	Water in the various hand pumps in villages Gilakhedi and Pilukhedi were found non-potable. Analysis of samples showed excessive amount of Potassium. Hence it would be convenient to create pisometric point in surroundings of lagoon.
1-3-2006	Bulk volume fermenter was completely filled with waste water. Mist evaporators are not effectively working.
18-3-2006	Because of excessive amount of effluent in the lagoons the company has stopped production.
19-5-2006	Because of excessive amount of effluent in the lagoons the company has stopped production
20-4-2009	Grain based production started from Feb. 2009
03-5-2012	Since 3 years as grain is used as raw material instead of molasses the problem of pollution is under control.
29-10-2013.	It was found that the effluent is flowing in its own farm land in the premises of industry towards western side

19. The above observations made by the PCB from time to time clearly reveal that the respondent industry was causing pollution by discharging untreated effluents/spent wash into adjacent lands as well as into the *nallah* which flows into river Parvati for almost 2 decades before it stopped using molasses as raw material in the year 2009. In their rejoinder the applicants also averred that the above inspection reports submitted by the MPPCB for the period from 1993 to 2014 clearly show that the seepage from the lagoons and discharge of untreated spent wash outside the factory premises into the adjacent agricultural fields and river Parvati through *nallah* is causing water pollution. The MPPCB reports clearly indicate that dug pits/wells showed existence of coloured water and exceeded the prescribed norms. One can decipher that the pollution of the water due to addition of chemical called 'melanoidins' in the distillery effluents is the reason for change in the water colour which makes it rather dark brown or coffee colour. In other words, the water was not colourless as per the normal appearance.

20. The respondent industry was established in 1987 with molasses as raw material with anaerobic digester and trickling filter for treatment which was later replaced with the mist evaporator. It constructed lagoons for storing the spent wash and for temporary storage of primary treated effluent before it is used for composting and ferti-irrigation purpose. But the aforesaid findings of MPPCB during their regular inspections carried out from 1993 onwards show that the process is not effective and there was open discharge and leakage. Same might have been the position from 1987 to 1993 for which period the MPPCB was not able to produce the record of inspection. Perusal of the reports of MPPCB further shows that several conditions were imposed upon the industry for taking pollution control measures. However, the reports clearly indicate that the status of the

conditions needed to be complied by the industry but it is far from satisfactory. No doubt, the respondent industry installed certain pollution control equipments but the pollution of ground water was not prevented fully and effectively. The reports show that the ground water contamination encountered could be attributed to leakage from lagoons and open discharge of untreated and partially treated effluents into the adjacent fields and also the *nallah* for almost 2 decades before it stopped using molasses as raw material in 2009. The respondent PCB submitted their further replies enclosing the water sample test reports for the samples collected in Oct. and Nov. 2014. Raw pit water sample from the land of the applicant collected on 17th and 23rd Nov. 2014 gave the result that BOD, potassium and chloride are found above the limit. Infact the concentration of potassium was found 258.4 mg/l which is quite high.

21. The respondent No. 10 CGWA in their affidavit filed on 26.11.2014 have stated that they have conducted detailed study of the chemical quality of the ground water in the area in question in Pilukhedi village by taking the samples from dug wells/pits and treated effluent from the Respondent No. 9 Vindhyachal Distilleries Private Ltd. as well as the other two aforesaid industries in the month of September, 2014. A total of 28 water samples were collected including that of the samples taken from the dug wells/pits in the agriculture fields of the applicants. The results indicated that the pH value of all the ground water samples taken in the industrial area of Pilukhedi ranged between 7.21 to 7.59 and thus found within the permissible limits set by Bureau of Indian Standards (BIS). However, with regard to Electrical Conductivity (EC) the ground water samples from the dug wells DW1, DW3 & DW6 including that of the applicants (DW1) it was found that EC value was beyond the permissible limit of BIS acceptable limits indicating that the

ground water has been contaminated and is in poor quality. It was also submitted by the CGWA that chemical analysis of the effluent revealed that certain parameters were found higher than the permissible limits. With regard to carbonates & bi-carbonates, chloride, sulphate, calcium, magnesium as well as potassium all of them were found to be in excess quantity. Even the heavy metal concentration such as cadmium was found little higher than the prescribed limits. The EC of 3 out of 9 ground water samples is more than BIS recommended permissible limit. The concentration of sulphate is more than BIS recommended permissible limit in 2 out of 9 locations (DW₁ & DW₂). The Concentration of nitrate is more than BIS recommended acceptable/permissible limit in 5 out of 9 locations (DW₂, DW₄, DW₅, DW₆ and DW₇). The concentration of calcium is more than BIS recommended permissible limit in 7 out of 9 locations (DW₁, DW₂, DW₃, DW₄, DW₅, DW₆, DW₇ and DW₈). The concentration of magnesium is more than BIS recommended permissible limit in 2 out of 9 locations (DW₁, DW₂). CGWA study indicates that ground water has been contaminated in many localities in the industrial area of Pilukhedi.

22. It is clear that the conclusion by CGWA is manifested into the occurrence of coloured water. Definitely there is a contamination of the ground water though the CGW stated that it is not possible to ascertain which particular industry is responsible for pollution but the circumstantial evidence and inspection reports of the PCB gives conclusion that the respondent Distillery industry which is under operation from 1987 onwards and which was using molasses as raw material is mainly responsible for contamination of the ground water particularly in the agricultural fields located adjacent to the industry.

23. There is no dispute about the fact that the respondent industry before switching over to grain based technology was using molasses as raw material for distillation. The coloured water analysis report of samples collected from the alleged pit/well of the applicant's agricultural field located adjacent to the industry reflected high amount of potassium indicting there was pollution of ground water when the unit was using molasses as raw material and even though the unit improved the pollution control measures and later switched over to grain based technology in the year 2009 the ground water pollution caused by it is still having its effect as the water is found to be still dark brown in colour. Thus the contamination is having long lasting effect. In fact the sample collected from the TFE at ETP outlet before entering into lagoon reflected high amount of potassium which is the offshoot of using molasses as raw material. Waste water discharge into *nallah*/river was also still found and water contaminated. Again high amount of potassium has been found in had pumps/dug wells.

24. Molasses, a by-product of sugar industry is used as raw material by most of the disallaries for production of fermentation and distillation process. Molasses based distilleries are one of the most polluting industries generating large volumes of high strength wastewater. Cane molasses contain around 2% of dark brown pigment melanoidins that imparts color to the spent wash. Spent wash is very important from the environmental point of view and due to structural complexity, dark colour and offensive odor, it poses serious threat to soil and aquatic ecosystem and release of melanoidins causes increased load of recalcitrant organic material to natural water bodies. Distillery spent wash is the unwanted residual liquid waste generated during alcohol production and pollution caused by it is one of the most critical environmental issues. The main source of wastewater

generation is the distillation step wherein large volumes of dark brown effluent get generated. More than 80% of the molasses constituents end up as waste. Molasses spent wash has had very high levels of BOD, COD, COD/BOD ratio as well as high potassium, phosphorus and sulphate content. Long term use of distillery effluent affects ground water in agricultural fields and poses threat the crops because of high risk of leaching of organic and inorganic ions from effluent amendment. This affects the soil health. Presence of high concentration of potassium in the soil leads to poor absorption of nutrients by the plants leading to decrease in the yield.

25. As per the record placed before us it is found that complaints were being made against the industry about pollution of water and also alleging that agricultural lands were being damaged as a result thereof due to discharge of effluents/spent wash. Using of molasses as raw material for such a long period and not adopting required pollution control measures strictly have definitely given a scope for contamination of ground water. It is perplexing that in spite of observing such serious shortcomings during their inspection for such long period of time for about 2 decades till 2009, it appears that the PCB has not taken any concrete action against the polluting industry and allowed it to operate. However after switching over to grain based technology there is improvement as it is evident from records placed before us on the the recent inspections carried out by the PCB. Thus what one can conclude from the foregoing discussion is that there is reliable evidence to draw inference about continuation of ground water pollution as a result of discharging of industrial effluent/spent wash by the respondent Distillery industry. Thus one can conclude that the past activities of the respondent industry before it

switched over to the grain based technology were causing pollution to both water and soil.

Re.: (ii):

26. The applicants in their application have *inter alia* prayed that compensation be granted to the victims of the pollution whose agriculture land has been affected and also those persons whose cattle died as a result of drinking water polluted with spent wash released by the respondent industry. It was brought to our notice that in the year 2011 a complaint in this behalf was made and an enquiry was ordered by the District Collector the reports of which are filed by the applicants. As per the aforesaid reports *prima facie* it was concluded in the enquiry that there was pollution as well as contamination and also damage to the agricultural crops and cattle as well. Recommendations have been made by the enquiry officer for payment of compensation. Therefore the District Collector, Rajgarh as well as the applicants were directed to file the available statistics with regard to the loss of agricultural income so far as reduction in yield is concerned and the details of cattle died/affected. The District Collector was also directed to submit whether any recommendation for payment by way of compensation to the affected persons including the applicants was made. The respondent District Collector in reply, stated that it is true that an enquiry was conducted on a complaint lodged with regard to the adverse effect on the standing crops in the said area by the District Excise Officer in the year 2011 and as per the enquiry report it was found that no adverse effect was noticed on the standing crops situated around the respondent industry at Pilukhedi. We do not know whether the Dist. Collector accepted the report. All said and done the Dist Excise Officer did not give any finding to the effect that M/s Vindhyachal Distilleries was not responsible for discharge of any

effluent nor any pollution was being caused due to the discharge of any effluents or spent wash of the said industry in the adjacent agricultural fields of the applicant.

27. With regard to the contamination of soil compliance report has been filed by the respondent District Collector, Rajgarh. The inspection report states that as far as the soil near the respondent industry is concerned there is no effect of pollution and no damage to the crop was found but after the inspection of water flow in lagoon it was found that there was chance of water pollution but unless ground water samples are tested one cannot conclude that there is a contamination/pollution and damage to the agriculture crops. The inspection team further concluded that there is some variation in the yield of crops raised by the farmers in the vicinity of the respondent industry but no concrete evidence can be attributed to pollution of the ground water/soil and to co-relate the same with the activities of the industry. The inspection report contains average yield figures of main agriculture crops sown in the locality such as wheat, chickpea, *masoor*, maize, soybean for a period of 5 years from 2009-10 to 2013-14 which reveals not much variation of yield from year to year. Ultimately it was concluded that except variation in the chemical/nutrient/mineral status of the soil samples which is varying from sample to sample wherein certain minerals were found beyond the prescribed norms, no significant variation was found to attribute it to any activity of the respondent industry and there is no direct correlation to conclude that the industry is causing damage to the environment leading to reduction in the yield of the agricultural crops of villagers including the applicants. But as stated supra the MPPCB and CGWA reports clearly indicate that there is ground water pollution. The annual agricultural crops which are shallow rooted may not have been affected as much as the perennial plantation crops such as guava. High concentration of

potassium in the soil and water affects nutrient intake which may be the reason for underdevelopment and poor yield of guava fruits in the orchard of the applicant as observed by the Court Commissioner. There are strong grounds to concur with the averments made by the applicant that farmers have suffered agricultural losses due to the water pollution caused by the respondent industry. The industry must be held accountable for the loss caused to the farmers. However, though, it appears that certain loss is caused to the fertility of the agricultural lands of the villagers in the area yet, quantification of the loss is rather a difficult task. We do not have any mechanism to assess such a loss. We, however, conclude that the agricultural lands in the proximity of the respondent industrial unit lost fertility of the soil and we hold the industry is partially liable to pay the damages for losses caused to the applicants, to bear cost of remediation.

Re.: (iii):

28. It was submitted by the learned counsel for Respondent No. 9 Distillery that in fact the issue raised and concern of the applicants is not with regard to contamination of water of the well of the applicants but with regard to the sale of residue i.e. grain fibre by the Distillery. But no record or evidence is placed before us to the effect that the grain fibre sold by the industry is affecting the health of the cattle. Therefore this point is answered negatively. However, we order that the respondent industry for the benefit of the residents of the area who are allegedly, adversely getting affected as a result of the activities of the industrial units at Pilukhedi, should draw a scheme for formation of Cooperative Society or otherwise for deriving benefit as a result of purchase and sale of grain fibre from the Distillery. It is submitted that daily about 40 tonnes of grain fibre residue is produced by the Distillery as a by product and even if it is sold for 1 Rupee per kilogram, the same would work out to a whopping Rs. 40,000/- per day and it can

be a benefit to such society of the residents and the amount can be utilised for the benefit of the residents either cumulatively or for benefit to the affected persons by a scheme that may be drawn by the District Collector.

Re.: (iv):

29. The main impact of spent wash on the environment is the decline in water quality and other effects related to induced changes to the pattern of land use and in the process, air, water and other natural systems including the ecosystem may also be affected. Long-term effect of pollution of agricultural fields may pose a serious threat to the groundwater quality. Monitoring of groundwater beneath the effluent irrigation site is, therefore, important for maintaining its quality because of risk of leaching of organic and inorganic ions from effluent amendment. In this case, no quantitative evaluation of leaching of salts from distillery effluent affected/irrigated fields has been made to assess the risk of groundwater pollution. Hence it is difficult to quantify the damage to the environment. However, there are strong grounds to concur with the averments made by the applicants that farmers have suffered crop losses due to the water pollution caused by the respondent industry. Though, it appears that certain loss is caused to the fertility of the agricultural lands of the villagers in the area yet, no record is placed before us to quantifying damage.

Re.: (v):

30. The MPPCB has submitted inspection report after inspection was carried out of the units. As regards M/s Bhopal Glue and Chemicals Pvt. Ltd., certain doubts have been expressed in the inspection report and in terms of the notice / directions issued by the MPPCB, rectification measures as suggested, have been carried out by the industry and it is in the process of installation of RO plant and

the equipment having been installed are put under operation on a regular basis and separate electricity connections and meters have been installed for operating such pollution control equipment will indicate that the same are operational. As far as M/s Oswal Woollen Mills are concerned as per the inspection report, the same was found operational and nothing adverse was reported. Therefore we conclude that though the reports filed by MPPCB and CGWA indicate the pollution in Pilukhedi area where these 2 industrial units are located, there is no direct evidence produced before us to conclude that they are responsible for causing pollution and we leave it to the authorities to monitor the units regularly particularly the M/s Bhopal Glue and Chemicals Pvt. Ltd. and take appropriate action

31. The essence of our aforesaid discussion is that there is evidence to draw inference about pollution caused as a result of discharging of Industrial effluent/spent wash by M/s Vindhyachal Distilleries (Pvt.) Ltd. The groundwater pollution continued for a long period when the industry was utilizing molasses. The PCB reports clearly reveal that the efforts taken by the respondent industry were inadequate and it did not completely stop the water pollution. Therefore, we are not fully satisfied with the efforts made by the industry and they dealt the issue of pollution casually when they were operating the unit based on molasses as raw material.

32. It is now well settled and recognized as has been held by the Hon'ble Supreme Court in the case of *Vellore Citizen Welfare Forum V/s Union of India* 1996 (5) SCC 647 wherein Para 11 of the judgement having earlier referred to the Brundtland Report explaining the salient features of sustainable development as follows :

“11. Some of the salient principles of "Sustainable Development", as culled-out from Brundtland Report and other international documents, are Inter-Generational Equity, Use and Conservation of Natural Resources, Environmental Protection, the Precautionary Principle, Polluter Pays principle, Obligation to assist and cooperate, Eradication of Poverty and Financial Assistance to the developing countries. We are, however, of the view that "The Precautionary Principle" and "The Polluter Pays" principle are essential features of "Sustainable Development". The "Precautionary Principle" - in the context of the municipal law - means :

(i) Environmental measures - by the State Government and the statutory authorities - must anticipate, prevent and attack the causes of environmental degradation.

(ii) Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

(iii) The "Onus of proof is on the actor or the developer/industrialist to show that his action is environmentally benign."

(emphasis supplied)

33. The National Green Tribunal Act also under Section 20 enjoins upon the Tribunal that “while passing any order or decision or award apply the “Principle of Sustainable Development, the Precautionary Principal and Polluter Pays Principle.”

34. In the instant case while deciding the question No. 1, we have come to the conclusion that the reports of the Pollution Control Board right from 1993 indicated that the Respondent Industry was causing pollution by discharging untreated effluents into the adjacent lands as well as into the nallahs which ultimately entered the Parvati river. This continued unabated for a duration of roughly two decades till the industry M/s Vindhyachal Distilleries stopped using molasses as raw material in the year 2008 and switched over to grain based raw material and have subsequently also resorted to other environment friendly measures to check the pollution including creating of lagoons and measures for observing zero discharge. However, as concluded by us, these measures have been

installed by the Respondent M/s Vindhyachal Distilleries only in the recent past and for a considerable period of time of nearly 20 decades they have been continuing to discharge the effluents and untreated waste without due precautions and treatment which in our opinion, on appreciation of the water samples test report conducted by the Central Ground Water Authority which indicated that the effluents revealed certain parameters which were higher than the permissible limits also with regard to carbonates and bi-carbonates, chloride, sulphate, calcium, magnesium as well as potassium they were found to be in excess. Even the heavy metal concentrations including cadmium were also found little higher than the prescribed limits. The EC of 3 out of 9 ground water samples has more than BIS recommended permissible limits. Based upon the material that was placed before us, we concluded that the conclusion of the CGWA that the water was coloured, there is contamination of the ground water and visibility. Therefore, in the facts and circumstances of the present case that this has resulted as a result of the long standing use of molasses as a raw material by M/s Vindhyachal Distilleries which commenced operation in the year 1987 and discontinued the same by switching over to grain based only in the year 2009. During this period, even inspection reports of the PCB highlighted that there were violations and shortcomings on the part of the industry resulting in untreated discharge which can be the possible reason for the contamination of ground water as well as soil. As have been explained by the Hon'ble Supreme Court in the above quoted paragraph of *Vellore Welfare Citizen's Forum (supra)* that :

“Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.”

35. It was argued before us by the Learned Counsel for the Respondent No. 9 M/s Vindhyachal Distilleries that there is no concrete evidence linking the

pollution of the ground water to the discharge from the distilleries and no definite opinion has been given in that behalf. However, as we have held above, the only plausible reason that appears to us is as a result of the use of molasses as a raw material by Respondent No. 9 and their discharging the untreated waste without proper treatment over a long duration of 20 years. On the basis of the above we feel the Respondent No. 9 M/s Vindhyachal Distilleries needs to be saddled with responsibility on the Polluter Pay principle.

36. In view of the above, we are inclined to allow the application partially and issue following directions:

(i) The applicants could not produce any data on damage to their crops and reduction of yield. But considering the observations made by the Court Commissioner and based on the reports of the PCB and CGWA it is clear that the applicants' agricultural field located adjacent to the Distillery unit because of uncontrolled release of spent wash got affected with pollution and it will be having a long lasting effect on the soil fertility and productivity. Therefore under Polluter Pay Principle the respondent M/s. Vindhyachal Distilleries Private Ltd. can be held liable to compensate the loss to the applicants. However, since there is no definite material filed before us to assess the loss occasioned to the applicants, we deem it proper to grant liberty to the applicants to file application under Section 15 of the NGT Act, 2010.

(ii) The Collector, Rajgarh shall constitute a committee consisting of scientists from the MPPCB, CGWA and Agricultural University, Jabalpur to suggest remedial measures for ameliorating the groundwater pollution and improving the soil fertility in the Pilukhedi industrial area particularly in the vicinity of the respondent Distillery unit and take appropriate action based on the report of the committee. The cost of inspection and finalizing the report is to be

borne by the industries located in the area as decided by the Dist. Collector in consultation with the Chairman, MPPCB. The report of aforesaid committee shall be submitted to the Collector within a period of 3 months from the date of this judgment. We direct the Collector that a copy of said report shall be given to the Respondent industries and objections invited within a period of 3 weeks thereafter followed by review with the assistance of MPPCB for securing time-bound remedial measures, as recommended by committee and also the MPPCB which comprehensively shall be treated as part of the directions of this Tribunal for the purpose of remedial measures that should be adopted. Cost of remediation/restitution shall be estimated by the MPPCB and that the measures are to be complied by the industrial units in prescribed time limit.

37. In view of the above, we direct the State Government as well as the MPPCB to carry out sample surveys with the help of the Central Ground Water Authority of the water and analysis of the ground water in the vicinity of other distillery units in the State also as was ordered by the Hon'ble Supreme Court while considering the case of *Indian Council for Enviro Legal Action V/s Union of India 1996 3 SCC 212* while giving final permission under Para 70 (4) where the Hon'ble Supreme Court provided as follows:

“The Central Government shall consider whether it would not be appropriate, in the light of the experience gained, that chemical industries are treated as a category apart. Since the chemical industries are the main culprits in the matter of polluting the environment, there is every need for scrutinising their establishment and functioning more rigorously. No distinction should be made in this behalf as between a large-scale industry and a small-scale industry or for that matter between a large-scale industry and a medium-scale industry. All chemical industries, whether big or small, should be allowed to be established only after taking into considerations all the environmental aspects and their functioning should be monitored closely to ensure that they do not pollute the environment around them. It appears that most of these industries are water-intensive industries. If so, the advisability of allowing the establishment of these industries in arid areas may also require examination. Even the existing chemical industries may be

subjected to such a study and if it is found on such scrutiny that it is necessary to take any steps in the interests of environment, appropriate directions in that behalf may be issued under Section 3 and 5 of the Environment Act, the Central Government shall ensure that the directions given by it are implemented forthwith”.

38. In the light of the above observations having found the contamination of the ground water as well as the soil in & around and in the vicinity of such distilleries more particularly which have been using or had been using in the past molasses as raw material, the contamination of ground water, the issue needs to be addressed and remedial measures recommended by experts.

39. With the above directions we dispose of this Application. However, in the facts and circumstances of this case we direct the Respondent M/s Vindhyachal Distilleries / Respondent No. 9 to pay to each of the applicants costs amounting to Rs. 1,00,000/- (Rupees One Lakh Only).

40. For reporting compliance the matter be listed on 20th August, 2015.

Bhopal:
May 11th, 2015

(Mr. Justice Dalip Singh)
Judicial Member

(Mr. P.S. Rao)
Expert Member