

**BEFORE THE NATIONAL GREEN TRIBUNAL
(WESTERN ZONE) BENCH, PUNE**

APPLICATION No. 42/2014(WZ)

CORAM:

Hon'ble Mr. Justice V.R. Kingaonkar

(Judicial Member)

Hon'ble Dr. Ajay A. Deshpande

(Expert Member)

B E T W E E N:

Shri Sant Dasganu Maharaj Shetkari

Sangh Akolner, Taluka : Nagar,

Distt : Ahmednagar.

Through : Member Mr. Jalandar

Nana Jadhav, Aged 63 years,

Occn : Agriculture, R/o. Akolner,

Taluka : Nagar, Distt : Ahmednagar.

....Applicant

A N D

1. The Indian Oil Corporation Ltd.,

Having their Storage tank at Akolner,

Tq. Nagar, District : Ahmednagar,

Through : Its Depot Manager/Depot in charge.

At Akolner, Tq. Nagar, Distt : Ahmednagar.

2. The Bharat Petroleum Corporation Ltd.,

Having their Storage tank at Akolner,

Tq. Nagar, District : Ahmednagar,

Through : Its Depot Manager/Depot in charge.

At Akolner, Tq. Nagar, Distt : Ahmednagar.

3. The State of Maharashtra,

Through : Chief Secretary,
Ministry of Revenue and Forest,
Mantralaya, Mumbai 400 032.

4. Maharashtra Pollution Control Board,

Having its Sub Regional office at Akolner,
Savitribai Phule Commercial Complex,
Near T.V. Centre, Savedi,
Ahmednagar 414 001.

5. The Director,

Directorate of Ground Water Surveys
And Development Agency,
(GSDA), Ahmednagar, Kothi Road,
Behind Collectorate office,
Ahmednagar 414 001.

6. The Collector,

The Collectorate Office,
Ahmednagar 414 0011.

7. The Police Sub-Inspector,

Nagar Taluka Police Station,
Near Collectorate Office,
Ahmednagar 414 001.

...Respondents

Counsel for Applicant :

Mr. Asim Sarode,
Mr. Pratap Vitankar,

Counsel for Respondent No.1 :

Mr. Saurabh Kulkarni,

Counsel for Respondent No.2 :

Mr. Sanjeev Pashankar,

Counsel for Respondent No.4 :

Mr. D.M. Gupte, w/.

Mrs. Supriya Dangare

Counsel for Respondent No.5 :

Mr. R. Patil, holding for

Mr. Mulchandani, A.S.G.

DATE : 10th November, 2014

J U D G M E N T

1. The Applicant, represents of group of 24 families residing and based at Akolner village, Taluka and District Ahmednagar. The present Application is filed by the Applicant alleging Groundwater Pollution caused by leakages of petroleum storage tanks and pipe lines installed by the Respondents.

2. Respondent No.1 is M/s. Indian Oil Company Ltd., while Respondent No.2 is the Bharat Petroleum Corporation Ltd. Both these Respondents are Government of India Companies. Respondent No.3 is Environment Department, Government of Maharashtra, Respondent No.4 is Maharashtra Pollution Control Board (MPCB), the Directorate of Groundwater Survey and Development Agency (GSDA) is Respondent No.5. Collector, Ahmednagar is Respondent No.6 and the Police Sub Inspector, Ahmednagar is Respondent No.7. Respondent Nos.3, 6 and 7 have not filed separate reply Affidavits. As the role of Respondent Nos.3 and 7 in the present Application is limited one, their affidavits are not

necessary, though the role of Collector, Respondent No.6 is important and dealt with in the Judgment in due course.

3. The Applicant states that Respondent Nos. 1 and 2 have installed the petroleum storage tanks at village Akolner, Taluka and District Ahmednagar for storage of petroleum products. Respondent Nos.1 and 2 have installed total 14 storage tanks which are situated at not more than 100 ft. of distance from the residential locality of the Applicant. The Applicant submits that since the year 2008, the Applicant began to get repugnant smell of petrol, diesel and kerosene. In the year 2009, one of the Member namely Bapu Tabaji Gaikwad found that his well is contaminated with petrol, diesel and oil mixed in it, due to seepage from the storage tank facilities of Respondent Nos. 1 and 2. The situation got more aggravated in 2012 when the water in his well was mixed with about 50 per cent of petroleum products and hence, the Applicant submits that they were not able to use this well for drinking as well as agricultural purpose and on inquiry, they came to know that most of the wells in surrounding area are also contaminated with petroleum seepages.

4. The Applicant submits that subsequently, its members made complaints to the Respondents and also to the Government authorities for immediate action. However, no effective and corrective measures have been enforced by the Government (Respondents) nor any corrective steps were taken

by the Respondent Nos.1 and 2. The Applicant further submits that the local Talathi made panchnama on 27-3-2012 confirming the Groundwater contamination by seepage of petroleum products and subsequently, the Sub Division Magistrate, Ahmednagar issued orders under Section 133 of Code of Criminal Procedure to Respondent Nos. 1 and 2 to stop leakage of petroleum products within three (3) days. The Applicant further submits that the MPCB also conducted investigation and submitted a detailed report to the Collector vide letter dated 4th April 2012 which also confirms the Groundwater contamination as the oil and grease contents in the well water is about 50 per cent which is abnormally high. The Applicant further submits that GSDA-Respondent No.5 also conducted investigations and submitted a report on 29-3-2012 to the Collector, confirming the Groundwater Pollution due to discharge and mixing of petroleum products and even raising an alarm that if such seepage from Respondent No.1 and 2 is continued, the entire ground water source of that area will be contaminated. Respondent No.5 even recommended that it is necessary to take help of expert agencies like Maharashtra Engineering Research Institute, Nasik for control of pollution.

5. The Applicant, therefore, alleges that the Groundwater Pollution in Akolner is caused by the seepages from the petroleum storage tanks of Respondent Nos.1 and 2 and the

same is being continued even today. The Applicant, therefore, submits that this Groundwater Pollution has affected their livelihood due to paucity of water for drinking and agricultural activities, loss of agricultural yield, depletion of live-stock and also adverse health effects. The Applicant has therefore, prayed for following main reliefs:

- A.** Directions may kindly be given to the Respondent Nos.1 and 2 to build overhead water tank of drinking water having sufficient capacity for the villagers of Akolner (considering the norm of 70 litres water per head per day) and provide pipelines to carry the water to their homes and farms.
- B.** Directions may kindly be given to the Respondent Nos. 1 and 2 to build water tanks at ground level for drinking water to domestic animals of the farmers in the village Akolner.
- C.** Directions may be given to the Respondent No.7- The S.P. Ahmednagar to submit action taken report by the police at Akolner village regarding law and order situation arisen after dispute on ground water contamination.
- D.** Directions may be given to the Respondent No.6- The District Collector, Ahmednagar with the help of Respondent Nos.3, 4 and 5 to find out the seepage/leakage from the storage tank or underground water pipeline of Respondent Nos. 1 and 2.
- E.** The Respondents may kindly be asked to submit plan of action and steps that could be taken to stop

this seepage/leakage and mixing of petrol, diesel and/or oil in their wells and bore-wells at village Akolner.

F. To direct the Respondents to frame Rules regarding regulation, monitoring and construction of pipelines to carry crude oils, natural gas, liquefied natural gas, liquefied petroleum gas (LPG) and petroleum products and publish the recommended practices covering pipeline operations.

G. The Respondent No.5 may kindly be directed to collect, analyze interpret and disseminate data on ground water levels, quality and also to submit periodic assessment of ground water resources on scientific lines related to the Akolner area.

H. The Respondent No.4 may kindly be directed to submit their action taken report on the Akolner villagers' issues and give reasons as to why they failed in taking legal actions against the Respondent Nos.1 and 2.

I. Directions may be given asking the Respondent Nos. 1 and 2 to pay compensation at the tune of Rs.5,00,000/- per family to the villagers of Akolner for the constant and life-threatening health hazards being committed by the Respondent Nos.1 and 2 and for their loss in yield as well as loss of domestic animals.

6. Respondent Nos. 1 and 2 have filed separate reply Affidavits and claimed compliance of all statutory regulations related with the installation and operation of petroleum storage

tanks. Respondent Nos.1 and 2 also categorically refute the charge of any leakage, seepage or any other mode by which the petroleum products are released into environment from their petroleum storage and handling facilities, causing Groundwater Pollution. Respondent No.1 filed Affidavits through Shri Maheshkumar S. Mehta, on 11th July 2014 and 25th August 2014. Respondent No.1 submits that their petroleum storage depot at Akolner village was commissioned in July 1997 and consists of nine (9) product storage tanks having total capacity of 20,000 killo litres. The Depot is spread over an area of approximately 56 acres and is adequately secured. It is the contention of the Respondent No.1 that the Depot is located on a steep gradient and the well, mentioned by the Applicant is located on the higher elevation and therefore, even if there is any oil spillage, it cannot roll back in reverse direction as alleged by the Applicant. Respondent No.1 further submits that the entire unloading area of Railway siding has concrete flooring and is washable, to Rule out any possibility of percolation of oil in the ground. If at all, there is any spillage which may occur during unloading at the siding, only under some abnormal circumstances, the spilled product is specially routed through the oil water separator installed in their facility, which is adequate to separate oil contained in such spillage. Respondent No.1 submits that there are three (3) wells within their premises and they have tested the water samples of the said wells through Government approved

laboratory and the water from these wells is found to be safe for drinking.

7. Respondent No.1 further submits that the product storage tanks are cleaned once in five (5) years and the tanks are internally inspected for the leakage and other tests. The Respondents further deny any incident of 2009 and further deny that there is any ground water contamination due to leakage or seepage from their industrial operations. Respondent No.1 further submits that they have complied with the suggestions of the Expert Committee which were communicated to them and a compliance report is already submitted.

8. Respondent No.2 filed Affidavit of Mr. Amit Gunjan. He submits that the petroleum storage depot at Akolner was commissioned in 1997 and consists of nine (9) products storage tanks having total capacity of 13,390 K.L. The Depot is spread over an area of 25.6 acres and is adequately secured. Respondent No.2 submit that the well of the Applicant is located on the higher elevation and at a distance of about 400 mtrs. Respondents further submit that they have provided adequate arrangements at the wagon unloading area and any leakage in unforeseen circumstances is also properly collected and treated for separating the petroleum products. Respondent No.2 further informed that the Akolner Depot was closed during the period from June 2006 to March 2011 and

was not having any product storage at the depot during such period. The Respondents submit that during the investigation by MPCB in March 2012, only one (1) well out of twelve (12) wells surveyed in the village, was found to be contaminated with oil which create grave suspicion about the claim of the Applicant and show their malafide intention to harass answering Respondents. The Respondents deny that there is any leakage/ seepage from depot of the present Respondent and further deny any ground water contamination due to their operations. Respondent Nos.1 and 2, therefore, oppose the Application.

9. Respondent No.4 filed Affidavits on 4-8-2014 and 25-8-2014. The Maharashtra Pollution Control Board (MPCB) submits that the Respondent No.1 has obtained consent to operate which is valid up to 31st March 2014. Similarly, Respondent No.2 The Bharat Petroleum Corporation have consent to operate up to 31-7-2014. The MPCB further submits that the Sub Regional Office, MPCB, Ahmednagar had collected samples of wells and bore well located in and around village Akolner on 29-3-2012. The MPCB submits that the result of samples collected at twelve (12) different location shows that only one sample (open well of Bappa Tabaji Gaikwad) is heavily contaminated (50 per cent) with oil and grease, having yellowish and orange colour. Further, the MPCB Sub Regional Office, Ahmednagar, collected the samples

of wells and bore wells located in the premises of Indian Oil Corporation, Akolner on 30-4-2014.

10. Respondent No.4 in Affidavit dated 25-8-2014 submitted the Inspection Reports of the officials dated 29-3-2012, 30-4-2014 and 17-3-2014.

11. Respondent no.5 filed an Affidavit through Shri Rushiraj Shrinivas Goski, Sr. Geologist and submitted the reports of survey and inspection carried out in April 2012 and August 2014. The report of April 2012 mentions that the sample from the affected well of Bappa Tabaji Gaikwad contents about 90 to 95 per cent of petrol and have brownish colour of petroleum smell and this water sample could not be analysed as it is volatile. It is seen that total five (5) samples were collected of which three (3) are coloured while all have unpleasant or petrol smell. The Report of 2014 mention that total 28 samples were collected of which 18 samples have odour resembling with petroleum products and the water samples are not fit for human consumption.

12. Considering the pleadings and arguments of the learned Advocates for the parties, following issues can be framed for adjudication :

1. Whether the Ground water in the wells of Applicants is polluted by the presence of petroleum products?

2. If yes, what are the likely contribution factors and cause for such Ground Water Pollution of the well water ?
3. Whether there is any material available to indicate any co-relation of activities of Respondent Nos.1 and 2 with the ground water contamination, if any?
4. Whether the Applicants are entitled for any damages compensation towards loss of agricultural yield, drinking water sources and health effects ?
5. Whether any directions are required to be given by the Tribunal by restitution and restoration of ground water quality in the disputed wells ?

As to Issue No.1 :

13. When the matter was listed on 24th April 2014, considering gravity of grievances and *prima-facie* material placed on record, we had appointed a Inspection Committee of Regional officer of MPCB, Sr. Officer of Oil Industries safety Directorate (OISD) and Dy. Collector, Ahmadnagar to survey relevant sites of oil depots and also examination of pipe lines underneath the sites, if required by utilizing modern technology in order to locate source and extent of pollution. The Committee has submitted its report vide letter dated 17-6-2014 which is taken on record. The Committee has also made some recommendations while recording that although as per the circumstantial evidence, the Committee feels that there are no

chances of ingress of oil into the well, still however, the Committee has also visited the affected villages and one random water sample was collected from the well owned by Bappa Tabaji Gaikwad. However, the analysis reports of the ground water sample(s) are not attached with the Committee Report.

14. We have perused the Affidavit of MPCB and the Reports of analysis of the Ground Water collected on 29-3-2012. The analysis report shows that oil and grease concentration in one well of Bappa Tabaji Gaikwad is 50 per cent. MPCB has also placed on record the Visit Report of 29-3-2012 where it is recorded at point No.10 that :

“It is observed in the visit, in the vicinity, one well having layer of petroleum oil and other, some well water having petroleum smell.”

15. The MPCB has also placed on record, Visit Report of 17-3-2010 where it is mentioned that some ground water samples were collected. However, the Analysis Reports are not enclosed. The Applicant has placed on record letter from MPCB, to the District Magistrate, dated 4-4-2012 wherein it is recorded that during the visit the well water contained oil/petrol. The letter goes on recommending Collector to issue instructions to Respondent No.1 and 2 to avoid seepage. We have also perused the report of the Respondent No.5 i.e. GSDA of 2012 and 2014. The Report of 2012 indicates that out of five (5) samples, three (3) samples are coloured one and all the

five (5) are having foul smell. Further, the water from well of Bappu Tabaji Gaikwad contains 90 to 95 per cent of petrol. Similarly, Report of 2014 indicates that out of twenty eight (28) water samples, eighteen (18) samples have odour resembling with petroleum products and water samples are not fit for human consumption. In fact, the report indicates that out of twenty one (21) water samples collected from outskirts of company premises, seventeen (17) samples are having odour resembling petroleum product. The GSDA has submitted that sub surface of geological formation of the area is favourable for percolation for any kind of liquid. Considering the submissions made by both MPCB and GSDA which are technical organisations, we have no hesitation to conclude that there is a ground water contamination due to seepage of petroleum products in some of the wells in village Akolner District Ahmednagar. Therefore, we record our finding on issue No.1 in the “AFFIRMATIVE”.

As to Issue No.2 and 3:

16. Now, it is rather difficult task involved in this Application is of identifying the source of such oil water contamination. MPCB and GSDA are two specialised agencies of highly technical and scientific human resources and as per the relevant legal framework, both these agencies were expected to identify such source of pollution and also, take effective control and remedial measures. However, we are

constrained to note that there is hardly any substantial ground water quality data, which can be statistically relied upon, from both these agencies, regarding ground water quality trends and characteristics, and hence it has become necessary for this Tribunal to use the available data for inferring and taking the things to its logical end. Such an exercise may have certain un-certainty, guess work and use of robust common sense.

17. In the absence of factual information available, the Tribunal has to decide on guess work (uncertainty) based on the entire calculation of the quantity of hazardous waste which got drifted away from the proximate area. The Apex court in “A.P. Pollution Control Board vs Prof.M.V.Nayudu (Retd.) & Others” has held that:

Uncertainty becomes a problem when scientific knowledge is institutionalised in policy making or used as a basis for decision-making by agencies and courts. Scientists may refine, modify or discard variables or models when more information is available; however, agencies and Courts must make choices based on existing scientific knowledge. In addition, agency decision making evidence is generally presented in a scientific form that cannot be easily tested. Therefore, inadequacies in the record due to uncertainty or insufficient knowledge may not be properly considered....

The ‘uncertainty’ of scientific proof and its changing frontiers from time to time has led to great changes in environmental concepts during the period between the Stockholm Conference of 1972 and the Rio Conference of 1992. In Vellore Citizens' Welfare Forum vs. Union of India and Others [1996 (5) SCC 647], Hon’ble Apex Court referred to

these changes, to the 'precautionary principle' and the new concept of 'burden of proof' in environmental matters. Kuldeep Singh, J. after referring to the principles evolved in various international Conferences and to the concept of 'Sustainable Development', stated that the Precautionary Principle, the Polluter pays Principle and the special concept of Onus of Proof have now emerged and govern the law in our country too, as is clear from Articles 47, 48-A and 51-A(g) of our Constitution and that, in fact, in the various environmental statutes, such as the Water Act, 1974 and other statutes, including the Environment (Protection) Act, 1986, these concepts are already implied. The learned Judge declared that these principles have now become part of our law.

18. We do not know in spite of such high concentration of oil and grease in the well water in March 2012, why MPCB has not followed track of the matter by regular sampling, even after institution of this Application. MPCB has also not clearly brought on record with a proper ground water quality data to confirm or to reject claim of the Applicant regarding the ground water pollution, though collection of such water quality data is an important mandate of the State Board under Section 17 of the Water (P&CP) Act, 1974. As mentioned above, the data collected by Respondent Nos. 4 and 5 is random and do not conform to the ground water sampling requirement as specified under Uniform Water Quality Monitoring Protocol notified under Environment (Protection) Act, 1986, though both the agencies are part of the implementation and enforcement of the frame work of this statutory protocol.

Faced with this difficulty, we enquired with the contesting parties about potential local sources of such contamination, either by presence of other industries or facility etc. in the surrounding area. The Learned Advocate appearing for MPCB, on instructions of the officials present during the final argument, informed that there are no industries in the immediate vicinity except these two storage facilities. The Applicant also agreed to the same, so also the Respondent Nos. 1 and 2. Though, we could observe that there is absolutely no co-ordination between MPCB and GSDA regarding such monitoring such ground water pollution at source and also the failure of MPCB to conduct regular ground water monitoring, in spite of observing abnormal high oil and grease concentration in 2012, the available data is sufficient enough to draw reasonably plausible inferences.

19. The principle of proximity is one of the basic principles, relevant in identification and impact assessment of potential sources of water pollution. As submitted by the MPCB and other Respondents, there are no other industrial activities in the nearby area, particularly generating high oil bearing effluents. In the present case, the well water is found to be contaminated with high concentration of oil and grease, which is similar to the products handled at the storage facilities of Respondent Nos.1 and 2. This is further strengthened by the fact that the oil and grease concentration in the disputed well

is found to be as high as 45 to 50 per cent, or even 90-95 per cent as submitted by GSDA, which cannot be the likely scenario in case of other types of polluting sources except the oil bearing waste. And therefore, the most likely scenario suggests that the activities of Respondent Nos.1 and 2 are the potential sources of the pollution. This is case where principle of *Res ipsa loquitur* is applicable.

20. We have also gone through the visit report submitted by the MPCB dated 29th March 2012 wherein it is mentioned that in one well, the layer of petroleum oil is observed and in some other wells, water was having petroleum smell. Further, the GSDA has not conducted the oil and grease test which can indicate concentration of the oil contamination, though they have mentioned that the water sample is having large oil contents and is volatile. Such high concentrations of oil in well water clearly negate the allegations made by Respondent-2 about the malafide intentions of Applicants. Respondent Nos.1 and 2 have flatly refuted any chances of seepage and leakages, and have claimed to have a full proof petroleum product handling system. However, MPCB's visit report dated 29-3-2012 shows a different scenario. MPCB had observed at point No.7 that the collected spillages are disposed without treatment. Considering the available data, analysis reports and documents, we are of the considered opinion that there is a strong co-relation between type of contamination of the well

waters and the activities of Respondent Nos. 1 and 2. And therefore, the issue No.2 and 3 is answered in the AFFIRMATIVE.

As to issue No.4 :

21. As mentioned above, one well at village Akolner is found to be contaminated with highly excessive concentrations of oil and grease since the year 2012. The water quality observed by MPCB and GSDA in 2012 and 2014 clearly indicates that this well water cannot be used for any purpose including agriculture, cattle breeding, drinking etc. Further, the GSDA report of 2014 also clearly indicates that out of 28 (twenty eight) samples, fourteen (14) samples have odour resembling with petroleum products and are not fit for human consumption. Similar observations have been made in the year 2012. Needless to say that the well waters having petroleum smell cannot be used for drinking purpose, even if, the concentrations are low. The Respondent Nos.1 and 2 have argued that they have got tested samples of wells in their premises and the water is found to be fit for human concentration. We have noticed that these samples have been collected by Respondent Nos. 1 and 2 and got it tested at the public health laboratory, which has duly made endorsement on the analysis reports that the samples are not collected by the laboratory; therefore, we are not inclined to give much credence to these analytical reports. Further even, GSDA

report shows oil smell to some of the samples collected from premises of Respondent 1 and 2.

22. We may take brief survey of settled legal position in the context of pollution of water bodies. The Apex Court in “*Tirupur Dyeing Factory Owners Vrs. Noyyal River A. Protection Association & Others, 2009 (9) S.C.C. 739*” took survey of the relevant case law viz. :

- (i) *Indian Council for Enviro Legal Action and Ors. Vrs. Union of India (UOI) and Ors. (1996) 3 S.C.C. 212.*
- (ii) *Vellore Citizens’ Welfare Forum Vrs. Union of India (1996) 5 S.C.C. 647*
- (iii) *People’s Union for Civil Liberties Vrs. Union of India, (1997) 3 S.C.C. 433 : (1997) SCC (Cri) 434.*
- (iv) *A.P. Pollution Control Board Vrs. Prof. M.V. Nayudu, (1999) 2 SCC 212.*
- (v) *M.C. Mehta Vrs. Union of India, (2009) 12 SCC 118.*

23. The Apex Court held that the Members of “*Tirupur Dyeing Factory Owners Association*” caused unabated pollution on account of discharging the Industrial effluents into Noyyal river to the extent, that the water of the river was neither fit for irrigation nor potable. It is observed :

“They cannot escape the responsibility to meet out the expenses of reversing the ecology. They are bound to meet the expenses of removing the sludge of the river and also for cleaning the dam. The principles of “polluter pays” and

“precautionary principle” have to be read with the doctrine of “sustainable development”. It becomes the responsibility of the members of the appellant Association that they have to carry out their industrial activities without polluting the water”

24. The facts of the present case would show that legal position considered and made applicable in case of “Tirupur Dying Factory Owners Association” (supra) is applicable herein. There is no escape from conclusion that Respondent 1 and 2 are liable to pay costs and damages caused due to the ground water pollution, restore the environment and ensure that there shall be no further pollution of ground water near village Akolner, due to industrial activities of these Respondents.

25. Considering above situation and also the analysis results placed on record, we are of the opinion that the Applicants are entitled for damages to the well owned by Bappa Tabaji Gaikwad as this well water cannot be used for any purpose. Further, the waters from other identified wells by GSDA cannot be used for drinking purpose and cattle growing purpose due to the smell and therefore, the Applicants are entitled for the compensation for making alternative arrangements for the drinking water supplies and also the non use of one well of Shri Bapa Tabaji Gaikwad for intended uses. Therefore, the issue No.4 is also decided in the AFFIRMATIVE.

26. The Polluter Pay's Principle is commonly interpreted as; the Polluter must pay for the cost of Pollution abatement, cost of environment recovery, cost of incident management and compensation costs for the victims of the damages, if any, due to Pollution. It implies that those who caused environment damage by polluting should pay the costs of reversing that damage and also, controlling the further damage. Though the Principle is very simple, its implementation is rather difficult and complex mainly due to the difficulty in identification of the Polluters and apportioning their responsibilities. Another concern, in implementation of this principle, is to how the polluter should pay. Even the difficulties in restoring the ecological system, once it is disrupted or contaminated makes the assessment of payment in the terms of loss (loss of biodiversity, loss of habitat, loss of top soil, so on and so forth) difficult.

Moreover, the payment is, at the end of the day, probably a monetary one. It is well documented that the monetary compensation do not essentially fully make up for ecological loss or loss of resource such as ground water, top soil, biodiversity and therefore, in reality to some degree, at least, the polluter never pays the real cost of the pollution, even if, some restitution or compensation is possible. The environmentalist generally, therefore, advocate the importance of 'Precautionary Principle' over the 'Polluter Pay's Principle' in

the enforcement policies. The environment damage assessment costing is an evolving subject and can involve both non market valuation as well as market valuation. There are various methodologies in literature for such environmental damage costing such as methods of direct market method, surrogate market based method, constructed market based method and experimental method. In the instant case where the damages are related to contamination of ground water quality of Akolner village, change in the characteristics of agricultural fields and also loss of means of livelihood due to not taking crop in the agricultural fields or cattle growing, a multi-pronged approach based on above methodologies needs to be taken by this Tribunal.

27. It is established that the well water of Bappa Tabaji Gaikwad is contaminated with excessive concentrations of oil. Further, as per the report of MPCB and GSDA, many of the other well waters also have the oily/petroleum smell. However, both these agencies have failed to quantify the level of contamination and also, have not come out with remedial action plan. Under these circumstances, we are of the considered opinion to adopt a hybrid approach to deal with remedial measures and compensation claimed by Applicant. The well of Bappa Tabaji Gaikwad needs immediate remediation and as this well, cannot be used for any purpose, certain compensation is also justified. The other wells need

proper assessment for its contamination and required remediation. We intend to entrust this responsibility to Central Groundwater Board (CGWB) which has office in Pune and have done similar works in past. Further, these wells may not be useful for drinking water purpose, and hence, we intend to ensure adequate and safe water supply to the dependent population and the cattle. These aspects have been considered while passing the final directions.

28. We would like to note that identification and scoping of pollution sources plays an important role in remediation and containment of contaminant plume. The reliable and accurate estimation of ground water pollution sources remains a challenge because of uncertainties involved and the lack of adequate observation data in most cases. Ground water cleanups are never easy, especially in fractured geological formations, as present in the subject area. With petroleum contamination, however, these are a few physical and chemical characteristics which allow it to be cleaned up more easily than a soluble, dense nonaqueous – phase liquid or metal or salt contamination. Petroleum products accumulate and float at the first saturated zone with the resulting dissolved – phase contamination, rarely migrating for a very long distance. We are of the opinion that such a remediation exercise will require close co – ordination among various stake holders, and also require use of highly scientific and analytical tools/ techniques

at is hightime that the concerned authorities like MPCB, GSDA, shall acquire such expertise, considering the increasing incidences of ground water contamination.

As to issue No.5 :

29. It is observed from the pleadings that there are regular complaints regarding the well water contamination of village Akolner since the year 2009 at the local level, however, the regulatory authorities including the Collector, MPCB and GSDA received such complaints in 2012 and it is observed that the MPCB and GSDA have conducted necessary inspection and investigation in March 2012. Both these agencies have submitted their report to the Collector informing that there is an oil contamination of the well waters and in fact, have proposed to the Collector that necessary instructions be given to Respondent Nos.1 and 2 to ensure that there is no seepage or leakage from their activities. It is surprising that after observing such contamination of the ground water, both these agencies choose to remain silent till the present Application is made to this Tribunal. Even afterwards, the MPCB has chosen not to collect samples from the wells to verify the present water quality status. It is also noticed that the consent validity of both these Respondents 1 and 2 has expired already. Further, MPCB has not detailed possible sources of pollution/contamination, such as treatment of oil sludge, efficacy of bio-remediation plant as claimed by Respondents etc, which can

be potential sources of pollution . We are concerned with such lackadaisical approach of MPCB which is specialised scientific agency created by the statute to enforce the Water (Prevention and Control of Pollution) Act 1974. Section 17 and 31 A of the Water (Prevention and Control of Pollution) Act 1974 have given mandate and powers to the MPCB to take immediate corrective actions, if such pollution is observed. We may note here that MCPB has necessary expertise and previous experience to deal with such issues, as way back in 2003-4, it had recovered remediation cost of @ 1.4 cr from Ms Dabhol Power Corporation, for well water contamination due to oil/naptha. Both these agencies, MPCB and GSDA have not identified the quantum of pollution, the possible sources of pollution besides for not taking any action for controlling the pollution and remediation the polluted wells. We are, therefore, concerned with such an approach of both these agencies and would like to deal this issue while issuing the final directions.

30. We are also concerned with the action or rather inaction by the district administration in the entire matter. Though, regular complaints are received from 2009, no conclusive action was taken. Records show that in 2009, notice under Section 133 of CrPC was issued, but nothing is on record to indicate the compliance of same. In fact, though Collector is also a Respondent in the present Application, no

separate reply is filed, except, a report filed by SDM, of the expert committee formed by this Tribunal. It is also seen that both MPCB and GSDA submitted technical reports to Collector in 2012, however, no action is seen to be taken by Collector in pursuance to these reports. District Collector is an important functionary and is required to attend such serious issues on priority either through his own administration or through other organs of state governments, operating in District, being head of District administration. We are therefore constrained to record our unhappiness about the actions taken by Collector Ahmednagar, and expect him to take corrective measures to set the system in correct perspective.

31. Accordingly, the Application is partly allowed in following terms under the powers conferred upon this Tribunal under section 14, 15, 17 and 19 of the National Green Tribunal Act, 2010.

- a)** Collector, Ahmednagar shall ensure that the water from the well owned by Bappa Tabaji Gaikwad which is reported to from high oil and grease contents is pruned for the necessary treatment and disposal, by the Respondent Nos.1 and 2 under the overall supervision and guidance of MPCB with immediate effect till the entire well water is appropriately treated.
- b)** The Central Ground water Board, Kendriya Sadan 'B' Wing, GPOA, First Floor, Akurdi, Pune, shall conduct the assessment of groundwater quality and status of pollution at the disputed wells and

also, suggest the restoration and remediation measures, in next two (2) months to the Collector, Ahmednagar.

- c)** Regional Officer, MPCB shall take immediate steps for restitution and restoration of the groundwater quality of the disputed wells with the help of Collector, Ahmednagar and GSDA in a time bound manner in next four (4) months.
- d)** The entire costs of all above activities shall be borne by Respondent Nos.1 and 2 who shall deposit tentative amount of Rs.5,00,000/- (Rs. five lakhs) each with Collector, Ahmednagar for execution of the above work.
- e)** Respondent Nos. 1 and 2 shall pay compensation of Rs.5,00,000/- (Rs. Five lacks) to Bappa Tabaji Gaikwad, whose well is found to be contaminated with oil, within next six (6) weeks, through Collector, Ahmednagar.
- f)** All above directions (a to e) shall be enforced by Collector and MPCB. In case, the Respondent Nos. 1 and 2 do not comply with the directions, Collector, Ahmednagar shall recover the costs as if it is a land revenue arrears under Maharashtra Land Revenue Code, 1966 by attachment and sale of Industrial units, stock and barrel.
- g)** The Collector, Ahmednagar shall ensure supply of adequate quality of water for the drinking and cattle feeding for village Akolner and in case, improvement/upgradation/expansion of the existing water supply scheme is necessary, Respondent Nos.1 and 2 are liable to pay costs of the same.

- h)** The MPCB and GSDA shall regularly monitor ground water quality in this area till the compliances are made. The MPCB shall include the well water sampling of Bappa Tabaji Gaikwad in their regular State/National Quality Water Monitoring programme, immediately.
- i)** The Chairman, MPCB and Chief Executive Officer, GSDA shall cause to enquire why such serious incident of ground water pollution was not adequately investigated since 2012, in spite of abnormal oil concentrations in well water and no regular data and information is available about the contamination of the disputed wells, even after institution of this Application, and take suitable action in next three (3) months.

Application is accordingly disposed of.

....., **JM**
(Justice V. R. Kingaonkar)

....., **EM**
(Dr. Ajay. A. Deshpande)

Date : 10th November, 2014