

**Chronology of Events Leading to Dilution of Standards for Remediation of Mercury Contaminated Site in Kodaikanal, Tamilnadu, to Benefit Hindustan Unilever Ltd, by Dr. Tapan Chakrabarti, NEERI, officials of the Tamilnadu Pollution Control Board, and members of a Special Experts Committee.**

May 3, 2005, was the last meeting of the Hazardous Waste Monitoring workers

<b>Date</b>	<b>Event</b>	<b>Comments</b>
1947 to 1977	Chesebrough Pond's Inc. (CPI) worked in India through a full-fledged branch company.	
1977	CPI gave 49 percent to Indian public. CPI (US) retained 51 percent. The Indian company was called Pond's India Ltd.	
March 1983	Civil structures and roofing ready in Kodaikanal	Non-mercury plant arrived first along with Er. Jerald Hamilton, Chesebrough Pond's and D.C. Franklin, Indian engineer
November 1983	Mercury plant arrived along with 35,000 WIP thermometers for training from Watertown, NY  Trial run for non-mercury area begins.	
December 1983	Tech team from the US consisting of Jim Davis, President, Chesebrough Pond's (Thermometer – Medical products division); Jerald Hamilton; Bruce Hammonds (QA); Tim Lipp (Chemist and printing); Sandra Thomas and Linda for training in machine operations for workers  By month-end, mercury area workers had also received training using the WIP thermometers.	
February 1984	Production commenced	
March 1984	48,384 thermometers (4 cases) were exported as first shipment from Kodaikanal plant.	
December 1984	1 <sup>st</sup> year of production.	Produced 2.8 million pcs in 8 months
1986 or 1987	CPI (US) hived off thermometer division to Sherwood Medical Systems. Jim Davis, president of CPI's thermometer division, moved to Sherwood Medical Systems as president.  Pond's India marketed its thermometers in the US through Sherwood Medical Systems.  In 1986, the rule requiring workers to bathe in the factory after work and before leaving for home was relaxed due to a serious water crisis. It was never resumed. Instead, the washing machine was moved to one of the bathrooms.	There is talk of some environmental problems in Watertown, NY, caused by CPI's discharge of mercury into the public sewage system. No confirmation of this. Needs more investigation in the US.
End 1988 or early 1989	Sherwood closed down. CPI set up Faichney Inc, Chesterfield, US, to market PIL's thermometers	
1988	<ul style="list-style-type: none"> <li>CPI purchased by American Home Products (AHP). AHP 51 percent owned by Unilever NV (Check)</li> <li>Began urine tests and annual check-ups. In 1988, urinalysis and medical check-up was done 6-7 times as per WHO guidelines.</li> </ul>	Need to get information on urine testing, medical check-up protocols, frequency in Watertown, NY, plant.

	<ul style="list-style-type: none"> <li>Medical check-ups and urinalysis were done only for full-time workers, not for contract workers or women workers who numbered close to 200.</li> </ul>	Also, need to get more information on environment, safety and health aspects in Watertown, NY.
1989	Distillation unit began. Full financial control by Unilever Plc (UK). Unilever Plc began imposing auditing and accounting procedures. Mr. V. Narayanan, PIL's MD, was inducted in Hindustan Lever Ltd (HLL) board as director, and one HLL director was nominated to PIL board.	
1990	Recovery process began	Between 1990 and 1998, 68 tons (of mercury?) was processed.
1993	Retail packing of thermometers done in Kodaikanal.	Until 1992, retail packing was done in Chesebrough Pond's Watertown, NY, facility.
1998	HLL acquired PIL after which Pond's company ceased to exist. Products and brandnames remained.	
March 7, 2001	Kodaikanal residents uncover HLL's mercury waste in a scrapyard in town.	
March 23, 2001	HLL suspends thermometer production	
March 23, 2001	Closure order issued to the unit by Tamilnadu Pollution Control Board	
May 9, 2001	Tamilnadu Pollution Control Board constitutes Hazardous Waste Management Committee (a.k.a. Working Committee) to ensure safe disposal of mercury wastes and suggest remediation measures. Proc. No. HWM /12391/ D1 / DGL / MERCURY DT. 9.5.01	
May 28-29, 2001	1 <sup>st</sup> Mtg of HWMC in Kodaikanal township hall. HLL submits preliminary environmental impact report prepared by its consultant URS Dames and Moore.	
June 20, 2001	HLL made to clean up scrapyard in Moonjikal under supervision of TNPCB and local community. HLL weighs scrap on insistence by community. Contrary to HLL's claims that only 5.3 tons of mercury wastes were sent to Moonjikal, weighment in the presence of TNPCB and community revealed that 7.4 tonnes of glass wastes, and 2.7 tonnes of soil were removed.	
July 10, 2001	Letter from Navroz Mody to TNPCB commenting on Dames & Moore report	
November 9, 2001	HLL terminates contract of 130 remaining workers and settles their account.	
September, 2002	Indian People's Tribunal headed by Justice S.N. Bhargava visits Kodaikanal. Hindustan Lever invited to depose, but fails to depose.	
October 11, 2002	Meeting of HWMC. Committee approves removal of mercury bearing wastes from HLL's site to the USA. Navroz Mody expressed objections about the 10 mg/kg target level being too high for the site as it abuts a forest site. Navroz Mody was asked to submit documents supporting is claim that 0.03 mg/kg is a more suitable target level considering the ecological sensitivity of the site.	

	HLL informed Committee that “around Feb-March, they had without permission excavated the flooring of the factory and removed highly contaminated soil from below.”	
March 12, 2003	TNPCB issues order for removal of mercury-bearing wastes and virgin mercury to Bethlehem Apparatus, USA.	
April 12, 2003	Under close supervision of TNPCB, HLL ships 290 tonnes of mercury wastes over a month-long period.	
June 2003	Indian People's Tribunal report on Kodaikanal released.	
December 2003	Greenpeace report on mercury in Lichen in Kodaikanal.	
February 13, 2004	Meeting of HWMC to finalise protocol for decontamination of equipment, remediation of soil, and reassess mercury balance based on figures of mercury recovered from exported wastes. No discussion on point three as HLL fails to submit figures of recovered mercury despite repeated requests.	
August 4, 2004	Navroz Mody writes to TNPCB commenting on Dr. Shyam Asolekar's protocol for decontamination of equipment.	
September 20, 2004	Visit by Supreme Court Monitoring Committee, and September 2004 report on, among other matters, HLL's mercury contamination in Kodaikanal. Ex-workers and community submit letter to SCMC.	
September 29, 2004	SCMC orders remediation of contaminated areas to pristine levels as it was before the commencement of the factory. Bank guarantee of Rs. 50 crores, and Rs. 10 crores for clean-up should be provided by HLL. TNPCB must oversee the preparation of Detailed Project report. TNPCB must constitute Local Area Committee to oversee decontamination and remediation work.	
December 17, 2004	TNPCB appoints reconstituted Working Committee and a new Local Area Environment Committee vide proceedings No. HWM / 27566 / D1 / DGL / MERCURY VOL 18-2 / dt. 14.12.2004	
January 25, 2005	First meeting of Local Area Environment Committee	
January 31, 2005	NEERI scientists visit factory site and take samples. LAEC gives letter to NEERI dated 31/12/2005	
April 30, 2005	Second LAEC meeting in Kodaikanal	
May 3, 2005	TNPCB convenes meeting of HWMC and LAEC in Chennai. Raja Mohammed hands over letter regarding health remediation and livelihood rehabilitation.	
June 30, 2005	Dr. Tapan Chakrabarti and Mahendra Patil visit HLL site to evaluate decontamination of machinery.	
July 7, 2005	HLL removes machinery to scrap dealers in Chennai. Only NEERI present. No TNPCB official present. Navroz Mody writes to Claude Alvares, SCMC, that HLL-NEERI had begun dismantling machinery without due process, and highlighting inaction by TNPCB despite being alerted.  Navroz Mody also writes to Mr. R. Ramachandran, TNPCB.	
July 9, 2005	LAEC writes to Chairman, SCMC, about HLL-NEERI dismantling of machinery and lack of response from	

	TNPCB.	
July 11, 2005	LAEC writes to Chairman, SCMC, alleging collusion between NEERI and HLL, and subversion of order on decontamination of machinery. Ex-workers Association files police complaint.	
July 12, 2005	Greenpeace writes to A. Raja, Minister of Environment about collusion between HLL and SCMC member NEERI.	
July 18, 2005	LAEC attends meeting of SCMC at TNPCB office, Chennai, to discuss illegal removal of machinery at HLL. LAEC members hand over letter to Chairman, SCMC.	
August 3, 2005	Letter to SCMC by people of Bhopal, Trivandrum about conflict of interest in NEERI's membership in SCMC	
August 16, 2005	SCMC's sub-committee issues directives regarding decontamination of machinery at HLL and soil remediation.	
September 9, 2005	SCMC appoints experts committee to recommend decontamination methods.	
September 13, 2005	LAEC writes to Mr. Ramachandran, TNPCB, requesting DPR/DFR, and reminding about health study by NIOH.	
September 14, 2005	LAEC sends reminder to Jayakumar Ethiraju, JCEE, TNPCB, enclosing copy of 13/9/05 letter to Mr. Ramachandran requesting DPR/DFR.	
December 17, 2005	Experts committee appointed by SCMC visits HLL factory.	
February 6, 2006	LAEC writes to Chairman, SCMC (copy MS, TNPCB) about rehabilitation and remediation of site and machinery.	
February 17, 2006	Madras High Court issues interim order suspending decontamination of machinery and equipment. Direct HLL/TNPCB to prepare DPR, feasibility studies and seek approval from Working Committee. WP 4686 of 2006	
February 22, 2006	Court allows decontamination of equipment to resume. Directs TNPCB to furnish copies of protocol as well as copies of all relevant documents pertaining to schedule of work for removal of contaminated material.	This information was subsequently obtained through a RTI application in October 2008.
September 2006	Centre for Compositional Characteristics of Materials, Department of Atomic Energy, releases study confirming presence of significant levels of mercury in Kodaikanal, Berijam and Kookal lakes and fish. <a href="http://www.sipcotcuddalore.com/Kodaikanal/DAE%20Study%20Karunasagar.pdf">http://www.sipcotcuddalore.com/Kodaikanal/DAE%20Study%20Karunasagar.pdf</a>	
February 28, 2007	NEERI submits protocol for remediation of mercury contaminated site at HLL, Kodaikanal.	
April 17, 2007	TNPCB Member Secretary writes to Director, NEERI with comments on protocol stating that it is necessary to obtain approval of Panel of Experts for remedial process regarding: a) Site Specific Target Level in Dames & Moore report of 10mg/kg v. NEERI's recommendation of 25 mg/kg b) Demonstration of the identified contractor's ability to do the remediation. c) NEERI asked to make a technical presentation on the protocol.	

May 1, 2007	NEERI's Dr. T. Chakrabarti writes to MS, TNPCB, confirming 2/6/07 for presentation.	
June 2, 2007	<p>TNPCB convenes meeting "to review protocol for remediation of mercury contaminated site at M/s Hindustan Lever Limited, Kodaikanal." Present are TNPCB, members of Expert Committee, HLL and HLL's consultants NEERI and ERM. HWMC and LAEC not invited to the meeting. No local representatives are present.</p> <p>NEERI's proposal to replace Dutch target level of 10 mg/kg with 25 mg/kg as maximum allowable concentration accepted by Experts Committee. "Clean-up criteria recommended by the Expert Committee was that the maximum allowable concentration can be 25 mg/kg with an average value of 20 mg/kg.</p> <p>"Areas of concentration may be identified and experiments carried out in modules fixing the clean-up criteria as 20 mg/kg. Based on the studies, in various modules, the maximum allowable concentration may be finalised."</p>	
06/15/07	<p>Letter from Dr. T. Chakrabarti to Dr. N. Sundaradevan, Chairman, TNPCB, expressing his disagreement with 20 mg/kg SSTL. Instead, he points out that "full scale remediation will be based on the cleanup criteria agreed upon during the meeting (maximum allowable concentration of 25 mg/kg with average concentration of 20 mg/kg). We therefore request you to make necessary corrections and revise the minutes."</p> <p>The letter also warns the Board that "<b>there will not be any mid-course revision of the clean-up criteria once the actual site remediation is started.</b>" (emphasis in original)</p>	
July 6, 2007	<p>Letter by Chairman, TNPCB to "Members of Expert Committee"</p> <p>Letter No. T14/TNPCBd/HWM/F27566/HLL/DGL/07/dated 6.7.07</p> <p>Enclosing Dr. T. Chakrabarti's letter, chairman asks members of Expert Committee to "confirm the clean-up criteria level and furnish report to the Board so as to inform NEERI &amp; M/s HLL early."</p>	
July 16, 2007	Letter from Expert Committee member Dr. T. Thirunalasundari, Bharatidasan University, intimating Chairman, TNPCB, of her note of the clean-up criteria as: "the maximum allowable concentration of 25 mg/kg with average concentration of 20 mg/kg. This is what the committee agreed."	
July 30, 2007	Letter from Dr. S. Rajamani to Chairman, TNPCB. "While analysing the treated soil, the number of samples satisfying the condition i.e. less than 20 mg/kg should be at least 95 % of the number of samples analysed. Further only a maximum of 5 % of the number of samples analysed may exceed 20 mg/kg mercury and none of the samples shall exceed 25 mg/kg of mercury."	

August 20, 2007	<p>Letter No. T14/TNPCB/HWM/F.27566/HLL/DGL/07/dated 20.8.07 to Dr. T. Chakrabarti, NEERI, and Factory Manager, M/s HLL, Kodaikanal.</p> <p>“After further clarification obtained from the members of the expert committee, it is hereby informed that after treatment of contaminated soil, the concentration of mercury shall be less than or equal to 20 mg/kg for 95 % of the samples analysed and only for 5 % of samples analyzed the maximum allowable concentration shall be 25 mg/kg.”</p>	
November 11, 2007	<p>NEERI/ERM present project report titled “Soil Remediation at HUL Factory Site, Kodaikanal, Tamilnadu, India. Detailed Project Report.” Dated: October, 2007. Prepared by ERM in collaboration with NEERI, for Hindustan Unilever Ltd.</p>	
November 26, 2007	<p>Meeting held at TNPCB, Guindy, to review the project report on remediation of mercury contaminated site at M/s Hindustan Lever Ltd, Kodaikanal. Present are TNPCB, Members of Expert Committee, HLL and HLL's consultants NEERI and ERM.</p> <p>Decisions:</p> <p>1) “The TNPC Board will issue in principle clearance to start basic works in the Remediation of contaminated Soil at HLL, to avoid any delay in the remediation process, subject to conditions.”</p> <p>4) NEERI shall be associated full-time in the Remediation work along with ERM on site.</p>	
December 7, 2007	<p>Lr No. T14/TNPCB/HWM/F.27566/HLL/DGL/2007/dated 07.12.07 from Dr. N. Sundaradevan, Chairman, TNPCB to Factory Manager, M/s HLL, Kodaikanal.</p> <p>The Board issues an “In-principle Clearance to M/s HLL, to carry out the preparatory works in respect of the remediation at site subject to the following conditions:</p>	
March 15, 2008	<p>Hindustan Unilever writes to MS, TNPCB, with progress of soil remediation project. Final DPR to be submitted by April 2008.</p> <p>“Draft monitoring framework <b>for remediation</b>” presented</p>	
May 19, 2008	<p>TNPCB Meeting laying out conditions for clean-up</p>	
June 19, 2008	<p>Letter No. T4/TNPCB/HWM/F-27566/DGL/2008/Dated: 19.6.2008</p> <p>Letter from R. Ramachandran, Member Secretary, TNPCB, to Factory Manager, Hindustan Unilever Ltd, Kodaikanal, to inform that “Permission is granted to the unit of M/s Hindustan Unilever Limited (Thermometer Factory), mentioned in the minutes of the meeting held on 19.5.2008 and any other conditional suggestions to be stipulated during course of remediation work.”</p>	

August 21, 2008	<p>Letter from Nityanand Jayaraman, petition in WP No. 4686 of 2006 in Madras High Court.</p> <p>Petitioner complained of finding out through RTI inspection that “Hindustan Unilever has been given in-principle agreement to do the soil remediation in their mercury contaminated site in Kodaikanal. According to High Court Order dated 22.02.2006 for the WP No. 4686 of 2006, the petitioner (myself) should receive constant updates on the decontamination process. But I find that the proceedings have been going without informing the concerned people.”</p>	Letter fails to elicit a response. Finally, information is collated using RTI over a period of more than a year.
April 21, 2009	<p>Letter No. DEE/DGL/F.DG.210016/2009/dt 21.4.2009</p> <p>Submission of report of Inspection conducted of Hindustan Lever on 17.04.2009 regarding soil remediation by Er. S. Arumugam, DEE, to Member Secretary, TNPCCB.</p> <p>Recommends that</p> <ol style="list-style-type: none"> <li>1) The unit shall apply for the consent of the Board under Water and the Air Acts for the operation of the decontamination process since it generates effluent, solid waste and emission.</li> <li>2) The unit shall apply under the Hazardous Waste (M&amp;H) Rules, 2008, as amended for the disposal of the hazardous waste.</li> </ol>	
July 15, 2009	<p>Letter from Shweta Narayan, Community Environmental Monitoring, Chennai and Nityanand Jayaraman, Researcher, Chennai to Chairperson, Tamilnadu Pollution Control Board requesting:</p> <ol style="list-style-type: none"> <li>1. Explain the basis for revising down the clean-up standards from 10 mg/kg to 20 mg/kg</li> <li>2. Set up a public oversight committee to ensure transparency in remediation.</li> </ol>	
October 8, 2009	<p>Public meeting held in Kodaikanal by Pond's HLL ex-Mercury Workers Welfare Association, Corporate Accountabilty Desk of The Other Media, Environmental Scientists Forum and Tamilnadu Environment Council.</p> <p>Gathering condemns collusion of TNPCCB, NEERI and HUL to downgrade clean-up standards, and urges TNPCCB to stop remediation work until a public oversight committee is set up, and standards rationalised.</p>	
October 13, 2009	<p>“Monitor Clean up process: Forum” Staff Reporter. The Hindu</p> <p>Article reporting on Public Meeting held in Kodaikanal on October 8, 2009</p>	
October 23, 2009	<p>Letter No. DEE/DGL/F.DG.210016/2009/dt 23.10.2009 regarding status of remediation work, complaint etc. from Er. P. Asokan, District Environmental Engineer, to Member Secretary, TNPCCB.</p> <p>Recommends that “The unit may be requested to apply under the Water Act, Air Acts and the Hazardous Waste</p>	

	<p>(M&amp;H) Rules as amended for obtaining consent orders and the authorisation for carrying out decontamination process since the unit will generate and dispose trade effluent, emission and the Hazardous waste.”</p> <p>Also, based on above mentioned newspaper report from The Hindu, the DEE submits that “the mercury content of 20 mg/kg of soil was fixed by the scientific team based on NEERI's Risk Assessment report. Hence, if it is required, the matter may be referred to the scientific team for further reduction of mercury from 20 mg/kg to 0.7 mg/kg in the decontaminated soil.”</p>	
January 9, 2010	<p>Minutes of meeting of Scientific Experts Committee (SEC) and TNPCB officials on Remediation of Mercury contaminated soil at M/s Hindustan Unilever Ltd, Thermometer Factory Premises, Kodaikanal</p> <p>Present: Members of Expert Committee, TNPCB, HUL and HUL consultant NEERI.</p> <p>This meeting decided that “The Scientific Expert Committee shall review studies mentioned under paras 1,4, 5 and 6, the updated analytical and field data and prepare a report for fixing the threshold limit of mercury for soil remediation and constantly monitor the soil remediation work and associated activities by HUL.”</p>	
March 8, 2010	<p>Release of “Double Standards: Unilever's Mercury Fever and Kodaikanal's Ecological Timebomb.”  <a href="http://www.sipcotcuddalore.com/downloads/double_standards_070310.pdf">http://www.sipcotcuddalore.com/downloads/double_standards_070310.pdf</a></p> <p>The report revealed that Hindustan Unilever had hired NEERI directly, and with NEERI playing judge, jury and executioner, the company was able to downgrade clean-up criteria from its originally declared 10 mg/kg to 20-25 mg/kg.</p>	
March 17, 2010	<p>Press conference and letter to Environment Minister by prominent city-based conservationists.</p> <p>Prominent city-based conservationists and wildlifers today slammed Hindustan Unilever for proposing a substandard clean-up of mercury pollution at the latter's now-closed thermometer factory site atop the eco-sensitive Pambar Shola Reserve Forest in Kodaikanal. Alphonse Roy, a wildlife filmmaker and cinematographer, Shekar Dattatri, a filmmaker and conservationist, and Nanditha Krishna, honorary director of CPR Environmental Education Centre urged the Tamilnadu Pollution Control Board to suspend all remediation work in Kodaikanal, and take steps to ensure world-class clean up of the mercury pollution in Kodaikanal.</p>	
March 15, 2010	<p>Letter from Nityanand Jayaraman to Mr. Jairam Ramesh, Minister of Environment &amp; Forests, enclosing “Double Standards” report, and seeking action.</p>	
March 20, 2010	<p>Lr No. T5/TNPCB/F.27566/HUL-DGL/10 dated: 20.03.2010</p>	



	<p>From Chairperson, TNPCB, to Mr. Rahul Bojja, Secretary to Hon'ble Union Minister, Environment &amp; Forests Department, New Delhi.</p> <p>Status note on remediation of hazardous waste contaminated site of M/s Hindustan Leter Ltd (Thermometer Factory) Kodaikanal.</p> <p>The status report states, among other things, that:</p> <p>a) SCMC dissolved the LAEC and an Expert Committee was formed.</p> <p>b) "In June 2007, HLL was permitted to take up sampling for pre-remediation at the rate of 20 mg/kg for 95 % of the samples, and 25 mg/kg for 5 % of the samples in order to assess the results of such a standard and to take a final view on standards based on the study results.</p> <p>c) At a meeting on 9.1.2010, the Scientific Expert Committee reviewed the pre-remediation sampling activities carried out by the unit, and decided that the basis for the standards should be scientifically validated and substantiated on the basis of fresh empirical data.</p> <p>d) The allegations and apprehensions of the NGO are, therefore, unfounded.</p>	
<p>July 6, 2010</p>	<p>Meeting with Environment Secretary, TN, Mr. Debendranath Sarangi. He was briefed on the key issues in the manner in which the TNPCB was approaching the entire clean-up. The demands presented at the meeting were:</p> <ol style="list-style-type: none"> <li>1. Reactivate the Local Area Environment Committee and Working Committee to fulfill their mandate of overseeing all activities related to remediation of mercury contamination in and around the Hindustan Unilever Ltd's mercury thermometer factory in Kodaikanal. This action will bring the remediation exercise in line with the Supreme Court's order of 14.10.2003 mandating public participation in matters related to hazardous wastes.</li> <li>2. Instruct the TNPCB to follow the SCMC's orders and directly engage a consultant to conduct a fresh assessment of extent and nature of contamination, and a fresh risk assessment study based on risk to ecosystem integrity, paying particular attention to Pambar Shola Reserve Forest, and health of water users and fish-consumers in areas likely to be affected by mercury dispersal from HUL's contamination.</li> <li>3. As per SCMC's orders, directly engage a project management consultant to oversee the entire remediation process.</li> <li>4. Intimate and involve all relevant Government</li> </ol>	

	<p>departments, particularly the Revenue Department and the Forest Department.</p> <p>5. Stop all remediation related work until above actions are taken.</p>	
September 16, 2010	<p>Letter from CPCB to TNPCB recommending:</p> <ol style="list-style-type: none"> <li>1. Clean up criteria of mercury levels in soil ranging from 5 to 25 mg/kg i.e, 5, 10, 15,20 or 25 mg/kg needs to be arrived before taking up remedial measures;</li> <li>2. The Expert Committee along with TNPCB may involve other Local Committees; such as Local Area Environment Committee, Municipalities, Forest Department, Agricultural Department, Revenue Department etc. to solve the issue with confidence of Local Community; and</li> <li>3. The remedial operation may be monitored by the Committee comprising TNPCB, Expert Members and other relevant stake holders including Local Committee.</li> </ol>	
September 24, 2010	<p>Note from CPCB to Ministry of Environment and Forests agreeing with the memo prepared by Dr. Mark Chernaik that a “ much lower Site-Specific Target Level may be necessary to protect critical ecological resources and public health.” The note also mention – “Revalidation of a Risk Analysis Report whose basis is flawed (residential and recreational purposes vs ecological effects to Pambar Shola) is meaningless. A fresh Risk Analysis Report is required that arrives at Site Specific Target Level based on risk to eco system integrity rather than risk to human health alone.”</p>	
December 22, 2010	<p>Meeting with Environment Secretary, TN, Mr. Irai Anbu to bring him up to speed on the issues that were raised with his predecessor. The demands were reiterated and action was promised</p>	<p>It was in this meeting that Mr. Anbu informed that he had signed a new TOR for the clean-up. After being informed on the concerns about the clean-up he put a hold on the TOR and suggested that representation be given to the Member Secretary TNPCB for further action.</p>
December 22, 2010	<p>Meeting with Member Secretary TNPCB. Key issues highlighted in the meeting were:</p> <ol style="list-style-type: none"> <li>1. That citizens, environmental groups and residents were the ones that alerted the TNPCB of the illegal dumping of hazardous wastes by HUL in Kodaikanal in 2001, and that citizens and public interest groups are interested in speedy, transparent and thorough clean-up of the factory by HUL.</li> </ol>	

	<p>2. That local residents and environmental groups have consistently insisted that clean-up standards should be decided based on the most stringent criteria of risk to ecosystem given the fact that the contaminated factory grounds are located within the biogeography of and contiguous with the Pambar Shola Reserve Forest, and that the earlier agreed upon standard of 10 mg/kg may not be sufficiently protective of the ecosystem.</p> <p>3. That the SCMC had directed the setting up of a Local Area Environment Committee and Working Committee with participation of local people, and for remediation to be conducted under the oversight of such committees.</p> <p>4. That SCMC had directed the TNPCB to directly engage a consultant to assess contamination and verify HUL's consultant's report, and to directly engage a project management consultant to oversee remediation.</p> <p>5. That such committees as directed by SCMC were formed with local representatives, and that meetings of the same held until mid-2005.</p> <p>6. That subsequently, despite repeated reminders by Committee members seeking convening of meetings, no meetings were held and no responses were provided by the TNPCB.</p> <p>7. That between 2005 and 2007, HUL had been allowed to engage its own consultant -- NEERI -- in contravention of the SCMC order to TNPCB to directly engage a consultant.</p> <p>8. That NEERI recommended further dilution of clean-up standards from 10 mg/kg to 25 mg/kg based on various considerations including minimising cost of clean-up for its client Hindustan Unilever.</p> <p>9. That NEERI had based its conclusion of 25 mg/kg based on risk to resident's health rather than ecosystem risk.</p> <p>10. That citizens and environmental groups had resisted this, and requested independent verification and a fair and transparent process of finalising clean-up norms.</p> <p>11. That TNPCB had once again allowed HUL to engage its own consultants to revalidate the NEERI study, and that the consultants like IIT-Delhi admittedly have no experience in such matters.</p> <p>12. That NEERI/NGRI's assessment reports on Union Carbide's contamination in Bhopal were found by the Ministry of Environment &amp; Forests to be severely flawed and scientifically lacking owing to their inexperience in</p>	
--	---	--

	<p>such matters, and that other more experienced groups like GTZ, which has an ongoing partnership with the Union Ministry of Environment &amp; Forests and CPCB, should be approached for their advice with independent assessment and verification.</p> <p>13. That the TNPCB must re-convene the LAEC and Working Committees, and take citizens into confidence in the process of finalising standards and conducting remediation.</p> <p>14. That ex-workers, local citizens and environmental organisations are keen to work with the TNPCB to ensure that the Kodaikanal factory site is cleaned to world standards.</p>	
January 20, 2011	Letter from CPCB to Shweta Narayan providing all documents/ notes exchanged between TNPCB, CPCB and MoEF after residents and organisations raised concerns in the manner in which the TNPCB was proceeding with the proposed clean-up of the site	
February 18, 2011	Meeting Chairperson TNPCB, Mr. Vishwanath Shengaonkar who had recently taken charge of the office. The meeting was to bring him up to speed on the matter of clean up and the concerns raised by groups on the manner in which the matter was handled by the TNPCB.	
March 24, 2011	Reminder letter Environment Secretary, TN, on any progress or action taken by the Board since the meeting with him in December 2010.	