Report of Fact-Finding Team's Enquiry into Alleged Environmental and Human Rights Violations Arising from Construction and Operation of 100 MLD Nemmeli Desalination Plant in Kanchipuram, Tamil Nadu

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Background

At past midnight on 28-29 August, 2013, a posse of between 300 and 400 policemen conducted a door-to-door raid in the fishing hamlet of Sulerikattukuppam adjacent the 100 million litres/day Nemmeli desalination plant. The police claim it was a routine search for six people named as accused by a Metrowater engineer who alleged that the accused persons disrupted maintenance work being carried out by Metrowater near the point of their seawater intake about 500 metres offshore, and threatened to attack them while at sea.

At the time of the midnight raid, none of the menfolk were around. The women and children were terrified. The only four adult men, and two children, were rounded up and taken to the police station at night. The two children were released early next morning after lawyers acting on behalf of the village intervened. According to villagers, the remaining four men were released in the evening after being detained in police custody for around 17 hours, and paying a bribe of Rs. 5000 to a Sub Inspector.

At midnight of 29-30 August, the raid was repeated, although no one was picked up or taken to the Police Station. The women swear this raid happened. The police deny this raid happened.

The police action has been more aggressive than earlier since Metrowater commissioned the desalination plant in February 2013. Villagers have accused Metrowater's desalination plant of eroding their coastline, turning the groundwater saline, polluting their beaches and endangering their safety at sea. They say that when these issues are raised, the police threatens them, jails them and intimidates the villagers in many ways.

Villagers contacted the Chennai Solidarity Group on 29 August, 2013, requesting them to visit the area, speak to relevant people and issue a fact-finding report.

The team comprises of:

Louis Menezes, I.A.S (Retd), and former head of the Chennai Metropolitan Development Authority

Prof R. Saraswathy, President, PUCL (Tamil Nadu-Pondicherry), and Head (Retd) of Sociology Department, Queen Mary's College, Chennai

P. Sundararajan, Advocate, Madras High Court, and member of Poovulagin Nanbargal

The team was assisted by Nityanand Jayaraman, writer and environmental researcher, of the Chennai Solidarity Group.

The team was tasked with the following Terms of Reference:

- 1. History of the plant, people's reactions and reactions of Metrowater and the State.
- 2. Effects of the Desalination Plant on lives and livelihoods of local residents.
- 3. Attitude of the Police towards villagers
- 4. Events of August 27-30, and legal basis (or lack thereof) of Police's actions.
- 5. Environmental compliance of the plant

The team visited Sulerikattukuppam between 9 a.m. and 12 noon on 1 September, 2013. During the visit, team members interacted with:

Mr. Sarathy, Inspector, Mahabalipuram Police Station.

Mr. Sabarinathan, Engineer, Chennai Metro Water Supply and Sewerage Board Villagers (men, women and children) from Sulerikattukuppam.

They visited the eastern seaward side of the desalination plant, walked the entire length of the beach from the plant to the temple at the Northern end of the fishing village. They also visited homes and interacted with residents.

Chronology of Plant Operations:

Date	Particulars
December 2007	Completion of Environmental Impact Assessment by Mecon Ltd
23 December, 2008	Grant of Environmental Clearance under CRZ Notification, 1991.
03 January, 2009	The project was approved for 100 percent Government of India funding by the Cabinet Committee on Economic Affairs
30 March, 2009	Construction contract was awarded to VATECH Wabag and IDE Technologies, Israel
23 February, 2010	Actual construction began with the laying of the foundation stone by the then Deputy Minister M. K. Stalin
April 2012	Marine works completed
22 February, 2013	Plant commissioned by Chief Minister J. Jayalalithaa
24 May, 2013	Metrowater discharges effluents on beach washing away the fishing boats triggering a protest in front of the plant gate by fisherfolk. 50 people taken in police custody. 19 people remanded and sent to Puzhal jail.
22 June, 2013	19 fisherfolk released on conditional bail.

27 September, 2013	Metrowater reportedly files complaint at Mamallapuram Police Station against Sulerikattukuppam fisherfolk.
28 September, 2013	Between 300 and 400 police enter village and midnight and conduct door-to-door raid. Six people including two school students picked up and kept in police custody. Students were released in the morning. Others released in evening. No FIR registered.
29 September, 2013	Another midnight raid. Nobody picked up. Police deny this raid happened.

The Desalination Plant

The 100 million litres per day Nemmeli desalination plant is located in Sulerikattukuppam, a fishing village that is about 10 km North of the tourist and temple town of Mammallapuram (aka Mahabalipuram) on the road to Chennai. The plant is a Seawater Reverse Osmosis plant. Construction was executed by VATECH Wabag in collaboration with IDE Technologies, Israel, as per detailed design and and engineering specifications provided by MECON.

The plant is constructed on 40 acres of land taken on lease from the Alavanthan Trust. The plant is bound on the Eastern side by the beach and the sea, on the west by East Coast Road, on the South by empty lands, and on the North by the Sulerikattukuppam fisher hamlet.

According to the Environmental Clearance granted by the Ministry of Environment & Forests, the project is located at Nemmeli and Krishnankaranai village, Kanchipuram District. The major components include:

- a) Offshore seawater intake structure (1600 mm pipeline that ought to be laid at a distance of 1000 metres at approximate water depth of 10 metres.)
- b) Brine reject outfall that ought to be at 600 metres distance from shore at a depth of 8 metres.
- c) Onshore pumping station
- d) Pretreatment works sedimentation cum disc filters and Ultra Filtration Membrane
- e) Reverse Osmosis and Pressure Exchangers
- f) Intermediate storage tanks
- g) Chemical dosing system
- h) Recarbonation and remineralisation system
- i) Power distribution, electrical and instrumentation systems
- j) Service and auxillary facilities

The plant consumes 20MW of power, and was budgeted to cost Rs. 840.17 crores. Varying estimates place the cost of produced water at between Rs. 21 to Rs. 31 per 1000 litres, not inclusive of distribution costs. Raw seawater is drawn in

at a rate of 11,060 m3/hour (265440 m3/day or 265 million litres/day). About 164 million litres/day of highly saline brine rejects will be released back to sea.

A press note by Mecon Ltd celebrating the commissioning of the plant states that the wastewater is disposed through a 1200 mm pipe at a distance of 740 metres and a depth of 8 metres.

Facts about Sulerikattuppam

Sulerikattukuppam seems to be an old village, that has existed at the current location for more than 100 years. The team was told by Mr. B. Pandurangan, aged 70, that he was born here, and so was his father and paternal grandfather. "We have stayed here, and stuck on through good times and bad. In 1966, there was a terrible cyclone. We didn't leave because our livelihood tied us to this land and the sea," he said.

The village has a population of 1500 persons, including children. Post-tsunami, Rotary Clubs of Madras and Bombay supported the construction of 165 houses, and several community structures on the beach. The village is settled on 4.35 acres of land, which includes 2.35 acres of Meenava Natham Poromboke, and 2 acres of land belonging to the Alavanthan Trust. Mr. Alavanthan was reportedly given vast tracts of coastal land in Kanchipuram by the British. He died heirless, and entrusted his estate to the Government.

Before Cyclone Thane struck in 2011, the village had 45 fibre boats and 15 kattumarams. At present, there are only 30 fibre-reinforced plastic (Fibre) boats, 10 fibre kattumarams, and 15 traditional kattumarams. The village has eight shore-seine nets called *Peria Valai* or *Karai Madi*, a communal fishing net that can employ more than 30 people for shore-based hauling of shoal fish, like anchovies, sardines or shrimp, during the relatively calm season immediately post monsoon between January and April. Deploying this gear requires a wide expanse of beach as the fishermen that haul the net stretch from sea to shore in a long line that can run up to 30 metres long.

Sea-based fishing is done using beach-launched, beach-landing boats. Ideally, the boats are parked above the High Tide Line mark for the season, with nets being stored further away from the sea. But when beach space becomes scarce, the boats are parked cheek-by-jowl with each other, with nets kept much closer. This increases the risk of loss of assets during extreme weather events.

Team's Observations

a) Physical and visual inspections by the team

The village is pleasingly laid out with streets running east-west and north-

south, and houses are maintained well. The easternmost street ends abruptly with the shore falling steeply toward the sea with a narrow strip of beach.

Boats were parked above the High Tide Line, and the sea had cut a steep berm making it difficult to transport boats to and fro during parking and launching.

The team first visited the beach separating the eastern boundary of the plant from the sea. A black pipeline was seen running from the wall towards the sea, and buried in the sand near the High Tide Line. A fisherman who accompanied us said this pipeline was earlier used to discharge brine rejects on the beach. It was now reportedly buried, clogged and not in use. Two separate pools of stagnant discoloured water were observed; one was along the compound wall, and another about 10 metres east of the first pool. The team witnessed copious discharge of water onto the beach from an opening on the compound wall. The discharge had visibly altered the shoreline as it ran like a river into the sea. The stream flowed east as it exited the plant premises and quickly swung North and ran parallel to the wall and sea for a distance of about 40 metres before joining the sea. The channel cut by the stream into the beach was more than 1.5 metres at the steepest point where the stream turned North.

Villagers said that this was the brine rejects that ought to lawfully be discharged at a distance of 600 metres into the sea at a depth of 8 metres. They said the stream ran Northwards because that is the direction of the prevalent current in this season.

Across the stream, a tent had been erected to accommodate several tens of police personnel. Work was reportedly in progress to run an air pipeline to declog the intake pipeline.

Villagers showed the team photographs of two "roads" constructed into the sea, each measuring about 30 feet wide and 200 metres long. The roads were constructed using massive boulders and earth dumped into the sea. The roads were used to transport material and equipment brought in by barges during the construction phase of the plant. According to the villagers, those roads had blocked the movement of sand by the nearshore currents and led to erosion in the Northern side where the village lay.

The team walked along the village's easternmost street, observing post-tsunami community structures that had been damaged by the sea. One community structure had entirely collapsed. Boulders were seen dumped just east of the damaged structures to keep the sea out. A thin strip of beach was visible separating between the boulders and the sea. Villagers said that this strip is recent, and that the sea was closer to the structures even a few months ago. Some attributed it to the seasonal change in pattern of silt deposition by the currents. Some said that the removal, albeit partial, of the boulder-filled "road" jutting

into the sea had facilitated sand movement and nourished the beach. Sometime last year, Metrowater partially removed the boulders and dismantled the road. Fisherfolk say that many boulders still remain buried in the water. According to them, these buried boulders are an invisible navigational hazard that create turbulence in areas they least expect.

Saline Groundwater

The team visited the home of Shanthi, w/o Vijayan, aged about 25, who showed us the handpump installed in her backyard. Team members tasted the water and found it to be saline and unpotable. Shanthi says that the taste changed only recently. "It has only been a few months now that we can't use this water. Even this Pongal (January 2013), we used this water," she said.

The team was also taken to the Northern boundary of the plant abutting the village. Mr. P. Parthasarathy, aged around 46, showed us the compound wall which had drain pipes at a height of about 1.5 metres. According to Mr. Parthasarathy and other residents, this was the base level of the plant at that point, indicating that the area had been landfilled to make the plant site level. Mr. Parthasarathy said effluents are discharged even through the wall at this point, and that these effluents stagnate as a knee deep pool. He pointed to some visibly charred vegetation and said that while earlier discharges were highly saline, the last discharge resulted in charring of the vegetation. He said that the groundwater in the streets closest to the plant have become unpotable, and unfit even for washing clothes.

The team visited Mr. Parthasarathy's house at I/2 Nethaji Street. The borewater was saltier than the water at Mrs. Shanthi's house, and close in taste to seawater. He said he had spent nearly Rs. 20,000 in installing the bore, pipeline and overhead tank. "I used to enjoy my shower after a hard day's work at sea. Now this water is not fit even for washing clothes, and my investment is wasted," he said.

Interview with Mr. Sarathy, Inspector, Mamallapuram Police Station

Mr. Sarathy was on duty on the beach along the eastern boundary of Metrowater separated from the team by the flowing stream of wastewater. The team introduced itself and requested his time. Two members of the team, Adv. Sundararajan and Nityanand Jayaraman crossed over to the other side along with several fishermen to seek Mr. Sarathy's views.

Mr. Sarathy said that two separate cases had been filed against villagers. According to him, on 27 September, villagers armed with crowbars and sticks on several boats surrounded a launch boat that was being used by Metrowater for some maintenance work. He said that the fisherfolk then set the net around the launch. "It is not as if they were fishing there, and the launch went later. They came to the spot and surrounded the boat with their nets and threatened the

people on the launch. They disrupted their work," he said. He said that they did this despite seeing policemen on the launch boat.

When asked about the midnight raid on the night of 28-29 August, Mr. Sarathy acknowledged that that the midnight visit had happened. But he said the "visit" was conducted without disturbing anyone. "Yarukkum endha thondhoruvum illai," he said. ("Without causing any trouble to anybody.")

He said he has nothing against the villagers, and that he concedes that they may have legitimate concerns and demands. "But, this kind of lawlessness cannot be tolerated. They should have gone and requested the Collector to do something. He would have done something," he said.

When asked for details about the FIR, he said he is not in a position to reveal it. When asked for reasons, he gave a half-smile and said "The minute we give this information, they will rush and file AB (anticipatory bail). We know."

Mr. Sarathy did finally share the sections under which the FIR against the fishermen were made out on 27 August. The sections of Indian Penal Code are:

Section 147

Section 148

Section 294B

Section 342

Section 506/Part I

The team enquired about the kattumaram fisherman, Mr. Balakrishnan, who drowned after his boat capsized over the rocks dumped by Metrowater, and whether the Police had registered an FIR. To this, Mr. Sarathy said that a "CSR" receipt was given. Asked why no FIR was registered, he said that we enquired and found that there was no basis or proof for the cause of death. "We can't just register an FIR. We have to verify. We made our enquiries," he said.

Asked why he had registered an FIR promptly when Metrowater complained on 27 August, he said that we know it was true, and there were policemen on board the complainant's boat.

The team then asked him if he would register an FIR against Metrowater for dumping toxic effluents on the beach. He said "That is an environmental violation. I cannot do anything about it. It is something I do not know anything about." The team persisted that dumping of toxic effluents on the beach, altering the beach profile and turning groundwater saline is a criminal offence invoking several sections of the Indian Penal Code including criminal nuisance, fouling public water bodies and springs, damage to public property and negligent handling of noxious substances. Mr. Sarathy suggested that we approach the Collector and get his directions on the matter.

Interview with Mr. Sabarinathan, Engineer, Metrowater

Mr. Sabarinathan was in the company of Inspector Sarathy throughout the interview. At one point, the team asked him when the complaint was made. He said he did not know. The team persisted and asked him if he weren't the person who made the complaint. He was surprised how the team knew that he had filed the complaint, and said so, but replied that he couldn't remember when the complaint was filed.

TOR-wise Observations

- TOR 1. History of the plant, people's reactions and reactions of Metrowater and the State.
- TOR 3. Attitude of the Police towards villagers
- TOR 4. Events of August 27-30, and legal basis (or lack thereof) of Police's actions.

To understand the history of people's relations with Metrowater and district authorities on the matter of the desalination plant, the team had a meeting with a gathering of about 70 men. About 8 women were seated towards the back of the gathering. The gathering was held under the canopy of a banyan tree near the village temple at the Northern end of the village.

Several villagers spoke, including:

- D. Pandurangan, aged 70;
- C.D. Chandran, aged 61 (Panchayat leader)
- P. Damodaran, aged 45 (Ward member)
- J. Palani, aged 45 (Ward member)
- S. Thilagavathi, aged 40
- G. Vijayamoorthy, aged 33
- R. Masilamani, aged 50
- R. Chittibabu, aged 25
- V. Madhavan, aged 43
- J. Sasikumar, aged 36
- P. Parthasarathy, aged 46

The following is a summary of their collective responses.

"The tsunami damaged nearly a 100 houses. After that, some voluntary organisations came and built us 165 houses. They gave us 54 boats, engines and nets. The houses were completed in 2007. Around the same time was when the company first came. Even when they were considering this area, we told them that this is a fishing area. We were apprehensive that their work will require laying pipelines into the sea and that that would interfere with our fishing. We were worried the highly saline wastewater that they discharge will form salt

reefs on our ocean floor. We shared our apprehensions with them.

"At that time, there was Bhaskar at the Metrowater and Mr. Ramanujam who was DGM with Wabag. All of them told us that this plant was absolutely safe, that the pipes will not even be on the ocean floor but buried below the ocean bottom. They said that one person in every household will be given a job in the company. Even the AD Fisheries, Mr. Kathavarayan, from the Neelangarai office spoke on behalf of Metrowater. None of this was in writing. They gave us assurances. They said that Metrowater was totally with us. They told us that even if, by any chance, the effluents hurt fisheries or our livelihood is hurt, they will take care of us as their own. If our houses were affected, we would be relocated. We conceded. After all it was our Government that is asking us. We also felt that if the seawater from our sea were being used to quench the parched throats in Chennai, then we should feel proud of that. We felt our village will become famous for that good deed.

"They began digging the sand for the foundation. When they did this, they pumped out sweet groundwater and let it flow into the sea for months. Then they began dropping boulders into the sea to make these two roads that ran for 200 metres into the sea. This is when trouble began. Within weeks, the beach started eroding. The water they were pumping out of the ground and dumping on the beach changed the beach profile. This was worsened by the erosion caused by the roads. We began losing the beach where we park our boats. We went and told them what was happening and requested them to do something about it.

"Our requests and representations drew no response. Only then, we called all villages from Thiruvanmiyur to Alhambrai — all fishing villages in Kanchipuram district — for a vehicle awareness rally. We held a hunger strike at the company gate in 2011. The collector then came and assured us Rs. 2000 per month for every member of the fisheries cooperative society. They said they would give this as long as the road remained, and that they would dismantle the road into the sea after construction is complete. The Rs. 2000 payment continued for about two years, and was discontinued after they removed the boulders. But the boulders have not been completely removed. We found that only when two serious accidents happened.

"We find that no matter who we make representations to, it is the police that comes to our village. If we organise a meeting, the police is there. They have told us, if you want to ask us for concessions, go ahead. But don't try to stop the plant. We will then have to take action against you.

"Around May 14, 2013, we submitted an application at Mamallapuram P.S. seeking permission for a hunger strike. Mr. Sarathy told us that he would give us the permission but that we should first exhaust our other options. He advised us to meet all ministers and others. We respected his advice. So we went and met

everybody between 14 and 18 May. The Local Administration Minister, Mr. Munusamy, the Fisheries Minister Mr. Jayabalan, the Animal Husbandry Minister Mr. Chinnaiah, and the local MLA Mr. Thandarai Manoharan.

"Only Mr. Chinnaiah forwarded our letter to the District Collector asking him to act. We then submitted this letter along with our representations to the Collector, Inspector, DSP everybody.

"On May 24, 2013, the company seemed to have begun serious production. They began discharging their wastewater at the beach. Earlier, they had told us that they will be discharging it in sea. We were not happy, but we had conceded. But now, when they discharged it on the beach, the effluents swept away our boats. A few of us went to the beach and began shouting. Then we spontaneously moved to the gate and sat down near the gate. That is all we did. The police came. Two buses belonging to an engineering college came. About 50 people were loaded on to it, and taken to Chengelpet at around 10 a.m.. They were told that there would be a peace committee meeting there. Two key persons — P. Damodaran and R. Masilamani — weren't there at the time of the incident. Damodaran was in Tirupati. Damodaran was a known face in Metrowater, since he used to regularly visit the company to make representations on behalf of the village as part of his responsibilities.

"Mr. Masilamani had returned from a marriage in Koovathur and was resting beneath the Neem tree in front of the village at around 11 a.m.. Inspector Mr. Sarathy came and asked, "Why are you here?" Mr. Masilamani is an office bearer in the Thiruporur MGR Welfare Committee and AIADMK. He asked Mr. Masilamani to come to the station as there was a Peace Committee meeting. Mr. Masilamani felt obliged to go as he had held several positions of responsibility in both the village administration and the party. He accompanied the police to Thirukazhukundram and spent the day there waiting to find details about the peace committee. The police told him that the meeting was still being arranged, and that he could go eat lunch and return to the station. Since he was called on panchayat duties, he returned out of respect to the police and his responsibilities. At around 7 p.m., we were all produced before the magistrate and 19 of us were remanded to judicial custody. We spent 29 days in Puzhal jail. Bail was refused to us two times, and we finally came out on conditional bail on 23 June. We are still visiting to sign conditional bail papers.

"For 29 days, our families were without income or their main breadwinners. Our children have no money for fees. In their schools, they are shamed by the teachers who tell them that their parents have not paid up. They are made to stand up. They refuse to go to school for fear of being shamed.

"It took a lot of money and effort to get our men out of jail. It has been hard on us. After all these problems began, we lost our contract jobs inside the factory. Many people from our village were temporarily employed in mechanical works, pipe laying, etc. All that was stopped. The Rs. 2000 stopped. We were abandoned. In 2011, the Collector had come, taken us to a piece of land on the western side of the East Coast Road and told us that he could give us that land for group housing, but that he could not guarantee us jobs. We asked him if he could at least provide us 100 jobs. He said that even that would not possible. Land and housing were possible. But jobs, no. He was the only collector that visited us. After that, the Tahsildar came and asked us for a bribe of Rs. 50,000 to finish the deal for land. We paid Rs. 50,000 to him - his name was Srinivasan. We paid it in the Sai Baba temple. But nothing has happened."

27 August incident at sea, as told by Damodaran, J. Palani and S. Thilagavathi

"One cannot say where and when one can get Prawns. They come unannounced. When they come, the fishermen may be gone for whole days. They may leave at a.m. and not return till 7 p.m. if required. That day, on 27 August, we landed shrimp. At least 10 boats set out that day. We went to catch fish. We don't take crowbars and daggers when we go to fish. It is not as if we catch the fish and bang them with crowbars or hack them with knives. We went in and set our nets. At around 12.15 that afternoon, the launch boat arrived. They came and left. The previous day, there was a fibre boat from Mahabalipuram. But that boat did not return after we requested them not to cooperate with Metrowater. We fished the whole day. One boat, with four people, caught 14 kg of shrimp and one seer fish. They sold it for Rs. 5890 for the shrimp, and Rs. 1500 for the seer fish. The people in the boat were watching us when we caught the seer fish and were taking it out of the water. There were people catching shrimp all the way from 500 metres to 1.5 km. We have the receipts for that day. The shrimp was sent for export. It is absurd to allege that we were carrying arms. We left in the early hours to go fishing. What use is a crowbar for fishing? Are we going to attack the shrimp with crowbars and daggers?"

28 August Raid: As told by Mrs. Thilagavathi, aged 40

"That evening, we were tipped off that the police are hunting our men. We sent them off to wherever we could. At about 1215, after midnight, we heard loud and angry knocks on our door. We asked "Who is there?" And we heard them say "Come out and see for yourselves who has come." When we came out and we see 300-400 police, wouldn't we be scared? We were very scared. They began abusing us. They said words that I cannot repeat in front of you all because that would not be right. They taunted us. They said "Oh! So your menfolk have left you here alone for the night, have they?" That really hurt us. Just saying that we women have been left alone by our men. Oh, how many different meanings that can have? They really abused us and shamed us.

"They picked up the only four adult men that were there that night and took them to the police. Two young boys were also picked up and released in the

28 August Raid: As told by Mr. G. Vijayamoorthy, aged 33

"I'm an electrician. I go out to work. That day I had returned early because my 8-month son, Sharvan, was sick. I took him to the hospital and returned at around 11 p.m. Well past midnight, I heard loud knocks on my door. We opened the door and the police were there. My child was crying. The police wanted to take me away. I pleaded. I said my son was unwell. One of the policemen also said "Leave him be. The child is crying." But the other person said let's take him to the station, and I was taken away. They also took two boys. They went to Rajamuthu's house. But they couldn't catch him. The police was very upset and they took it out on his boys. Rajesh who is studying in 10th standard, and Rohit who is studying in 12th standard were picked up. They said, "If we pick you up, your father will come to get you." None of us were beaten. Only the two boys were beaten up. Next morning, our advocate went there, showed their school IDs and released the two boys. The T-shirt of one of the boys was torn. The others were released only in the evening, and that too only after we paid Rs. 5000 bribe to the Sub Inspector."

TOR 2. Effects of the Desalination Plant on lives and livelihoods of local residents.

According to villagers, the desalination plant has affected lives and livelihoods of local residents in the following ways:

- a) The discharge of effluents on the beach has cut a deep channel on the beach and altered the profile of the beach. This has made landing boats more hazardous, and parking of boats more difficult.
- b) The current of the discharged effluents washes away the boats.
- c) Rocks dumped at sea by Metrowater are interfering with fishing, and have caused erosion.
- d) Discharge of wastewater on the beach has caused severe pollution, and polluted the groundwater. This has affected drinking water supplies for the village.
- e) The rocks dumped in sea have created invisible areas of turbulence. Villagers say that the rocks have not been fully removed. Many boulders remain. Also, besides the road, boulders far bigger than those used for the road were dumped along the alignment of the intake pip eline to anchore the pipeline. Boats that go over these rocks are prone to being overturned. Two accidents in the month of July resulted in the injury of one young fisherman, Chittibabu, and the death of a kattumaram fisherman. The police refused to register a complaint in both cases. According to the villager, Mr. Sarathy taunted them asking if a case has to be filed, the accused would have to be the waves or the rock. He told them that complaints against the Government cannot be entertained.

TOR 5. Environmental compliance of the plant

The Environmental Clearance under CRZ Notification, 1991, stipulates the following conditions, among others:

- "A. Specific Conditions. . .
- (ii) The pipelines both intake and outlet shall not cause any hindrance to the movement of the local communities including the fishermen.
- (iv) It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.
- (xii) The pipelines shall not disturb the movement of fishing vessels or fishermen.

Team's Observation: The team was told by the fisherfolk that the intake pipeline was installed at 550 metres from shore at 10 metre depth. The Effluent discharge was at 300 metres from shore at 6 metres depth. However, the latter pipeline was not being used. The effluent was discharged at the beach causing pollution and shoreline changes that seriously affected fishing activities. The boulders dumped in sea caused hidden pockets of turbulence that made navigation hazardous. Sea erosion has reduced the beach space available for parking boats, storing gear and launching boats. The expensive shore-seine nets that require vast beach space to be deployed have been lying idle because the beach has disappeared.

Environmental Clearance Condition (xv) states: "It shall be ensured that due to the project, there is no adverse impact on the drainage of the area and recharge of groundwater. No groundwater shall be tapped in the project area falling in Coastal Regulation Zone."

Team's Observation: Groundwater was pumped out 24x7 for months on end during the construction phase. The team was shown photographs of this. Also, Nityanand Jayaraman who had visited the project site in June 2011 confirms having seen this. The pumping out of groundwater and discharging it to the beach caused changes in shoreline and was one of the first points of conflict between the villagers and Metrowater.

Environmental Condition (xix) states: "Markers shall be installed at every 30 m along the pipeline route to indicate the position of the line."

Team's Observation: No such markers have been placed. In fact, effluent is not even being discharged through pipeline. Rather it is being discharged on shore.

Conclusions

The process of setting up and running of the desalination has been one of false promises, betrayal, terrorising and unjust deprival of a vulnerable community by the police and Metrowater. The team does not wish to comment on the merits of desalination. However, it is our conclusion that Metro Water, the State Police

and the State Government have unnecessarily subjected the people of Sulerikattukuppam to hardships, indignity and violence. As villagers have clearly stated, they were not opposed to any scheme that did not disrupt their livelihoods or threaten their safety. In fact, they welcomed the prospect of being a village that was linked to the meritorious deed of providing drinking water to the city residents.

In this instance, it is clear that:

- a) The magnanimity shown and consent given by the villagers in accommodating the desalination plant has not been respectfully and gratefully recognised by the State Government and Metrowater.
- b) The authorities are not bothered about the safety of the people, their property or their livelihood resources. The apathy of the officials has made the lives of the local people miserable.
- c) The promises made to the villages have not been honoured. Not a single job has been given to local villagers.
- d) Metro Water's desalination plant is not only converting sea water into drinking water. It is also converting fresh water into saltwater. The act of discharging wastewater on to the beach, thereby polluting the drinking water source of the village, is highly condemnable. Metro Water has violated the provisions of the Environmental Protection Act, 1986, and the Water (Prevention and Control of Pollution) Act by discharging the effluents on the beach and the ecosensitive intertidal area.
- e) Metro Water has violated the Coastal Regulation Zone Notifications of 1991 and 2011 by pumping out freshwater from the CRZ area.
- f) Metro Water is guilty of crimes under the Indian Penal Code, including fouling public water supplies, negligent handling of a noxious substance, damaging public property, and endangering lives by causing sea erosion. Blasting and use of heavy equipment during construction have reportedly damaged residential structures, whose foundations have further been weakened by intrusion of sea water.
- g) The dumping of boulders, and the failure of Metro Water to remove them completely has caused very dangerous conditions at sea for the fisherfolk, and this has already led to one death and one serious injury.
- h) Elected representatives and officials such as the District Collector have failed to effectively intervene to address the legitimate grievances of the affected fisherfolk. Ignoring lawfully articulated demands would prompt people to resort to desperate measures.
- i) The Police have acted in a one-sided manner in accepting and acting with great promptness and viciousness on the complaints by Metro Water. They have failed to register FIRs in instances where the fisherfolk have come forward with complaints against Metro Water. Not registering an FIR is itself a violation of the rights of the complainant, and several orders of the Hon'ble Supreme Court have reiterated the same.
- j) The Police have acted in a malafide manner by conducting a door-to-door

midnight raid, by verbally abusing women and picking up and detaining innocent people for an entire day. Such abusive behaviour by the police towards women, particularly women from marginalised communities, has become habitual.

- k) The Police have acted illegally and mercilessly in beating and detaining two school students as part of their midnight raid.
- 1) The team has no reason to disbelieve the allegation of the villagers that they had to bribe the Sub-Inspector at Mamallapuram Police Station to secure the release of four innocent men picked up during the midnight raid of 28-29 August, 2013.
- m) The team finds that the FIRs registered against the fisherfolk are entirely baseless, and intended solely to harass them and threaten them into submission.

 n) The plight of school-going children, who are harassed by teachers in front of their classmates because of their inability to pay the fees, is pitiable. The
- team empathises with the agony of their parents, who are now unable to pay the fees because of their compromised livelihoods.

 n) The Ministry of Environment & Forests, the Tamil Nadu Pollution Control Board
- n) The Ministry of Environment & Forests, the Tamil Nadu Pollution Control Board and the State Coastal Zone Management Authority are missing in action. A blatant and visible violation of the law i.e. the discharge of saline effluents on the beach is not only being ignored, but the violators are being offered the protection of the State Police.

Recommendations

The recommendations flow from the serious transgressions of several agencies that have been described in the above report.

- 1. The Ministry of Environment & Forests and the Tamil Nadu Pollution Control Board should immediately institute an enquiry, with a sense of urgency, based on this report. The Environmental Clearance given to Chennai Metro Water Supply and Sewerage Board's should be suspended if they are found to have violated the conditions of clearance.
- 2. The Government of Tamil Nadu should direct the concerned state agencies to enquire into the veracity of the findings of this team and take appropriate action against officials who have exceeded their lawful powers, abused their official position, misbehaved with residents (especially women and children) of the hamlet, demanded and accepted bribes to release those detained.
- 3. The FIRs filed against the villagers should be immediately withdrawn.
- 4. The Government of Tamil Nadu must ask the Collector of Kancheepuram what role he/she played during the whole period during which the various serious episodes described in the report took place. The collector should also enquire about the bribe of Rs 50,000 alleged to have been demanded and paid to the Tahsildar (Retd) Srinivasan for helping to assign land to the people of the hamlet.
- 5. Government of Tamil Nadu should direct the Chairman and MD of CMWSSB to verify the facts brought in the Report and take urgent steps to set right the

serious violations, deficiencies, failures pointed out, and till such time to suspend operations. They must do so in close consultation with the fisher folk who are represented by their Cooperative/ Panchayat/Elders.

- 6. The Government of Tamil Nadu must appoint a committee to assess the damages to the hamlet and the seashore and consequently to the livelihood of the hamlet's residents and compensate them for the loss of income during the entire period involved.
- 7. Metro Water should ensure that the seashore is restored to its original width, and that the boulders dumped in front of the village removed.
- 8. Potable drinking water must be provided to each household free of cost by Metro Water until such time that Metro Water restores the groundwater by appropriate technological interventions.
- 9. The stipend of Rs. 2000 paid by Metro Water to every member of the Cooperative Society must be resumed, with back-payments for the months since the payment was stopped. This is justified because Metro Water's works has caused tremendousl interference in fishing activities.
- 10. Boulders dumped into the sea must be totally removed and the alignment of the intake and outfall pipelines clearly marked by lighted buoys as mandated in the Environmental Clearance.
- 11. Houses damaged by Metro Water's construction activities, and the community structures damaged by sea erosion must be repaired and rebuilt at Metro Water's cost.
- 12. School and college children whose fees have not been paid because of reduced fishery incomes should be given financial assistance by the State Government.
- 13. Members of the police force should be trained to interact with citizens, particularly women and children, in a civilised manner.