BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION NO. 16 of 2019

K. Gemini

... Applicant

Vs

1. **Union of India**
   And others

.... Respondents

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Dated at Chennai on this. 15th Day of March 2021

Counsel for 4th Respondent

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

ORIGINAL APPLICATION NO. 16 of 2019

K. Gemini
Son of Kannupaiyan,
Aged about 53 years,
5/1-34 Rettaipuliyamaram,
Raman Nagar Post,
Mettur Dam, Salem District 636 403.

... Applicant

Vs

1. **Union of India** represented by
   The Secretary to Government,
   Ministry of Environment, Forests & Climate Change,
   III Floor, Pritvi Wing
   India Paryavaran Bhavan
   Jor Bagh, New Delhi 110003.
   Email: secy-moef@nic.in
   Phone No. 011 24695262 & 24695265

2. **The State of Tamil Nadu**, represented
   By the Secretary to Government,
   Environment and Forests Department,
   Fort St. George, Chennai 600 009.
   Email: forsec@tn.gov.in
   Phone No 044 25671511

3. **The District Environment Engineer**,
   Tamil Nadu Pollution Control Board,
   Siva Tower, Post Box No 457,
   No.1/276, Meyyanur Main Road,
   Salem 636 004.
   Email: deetnpcbslm@gmail.com
   Phone No.04257 2448526

4. **M/s Chemplast Sanmar Limited,**
   Rep by its Director S Ramkumar,
   Veerakalpudur Village,
   Raman Nagar Post,
   Mettur Dam, Salem District 636 403.
   Email: snn1@sanmargroup.com
   Phone No.04298 230381

.... Respondents

RESPONSE/OBJECTIONS OF THE 4th RESPONDENT TO THE ADDITIONAL JOINT COMMITTEE'S REPORT FILED ON 2nd FEBRUARY 2021 AND REFERRED TO IN THE ORDER DATED 22nd FEBRUARY 2021 OF THIS HON'BLE TRIBUNAL

I, K. Sethuraman, s/o Mr. K. Kalyanasundaram, Executive Vice President Legal, Chemplast Sanmar Ltd, the 4th Respondent herein, having office at No. 9, Cathedral Road, Chennai 600086 do hereby solemnly affirm and sincerely state on oath as follows:

For CHEMPLAST SANMAR LIMITED

Authorised Signatory

1. At the outset, it is submitted that this Respondent has filed its counter to the main application and uploaded the same on 11th May 2020. On 19th August 2020, the Response/Objections to the Joint Committee Report has also been filed and uploaded on 19th August 2020. The averments in the counter and the Response/Objections may be treated as part and parcel of these Response /Objections filed to the Joint Committee Report.

2. The following are this Respondent's response and objections to the Joint Committee Report filed with the Hon'ble Tribunal and referred to in its Order dated 22nd February 2021.

3. **Response to the Recommendations at Paragraph 6 of the Report of the Additional Joint Committee post the inspection by the Joint Committee Members on 21st December 2020 at Mettur:**

S. No	Recommendation of the committee	Response of the 4th Respondent
1.	Plant-I shall complete the STP works before January -2021 as reported	**COMPLETED** Plant-I STP has been commissioned in the month of January 2021. Currently, it is operational. The photographs of the commissioned STP are attached herewith. **(Annexure-R4-1)**. Upon commissioning, TNPCB officials have taken sewage water sample for regular monitoring cum analysis.
2.	Plant-IV shall be required to provide a detailed analytical report of Alumina waste to decide the suitable disposal path way.	**In Progress** The 4th Respondent has systematically followed the disposal of the waste as per the waste management hierarchy. The waste generated from Plant-IV is: 36.2 Spent carbon or filter medium (which has Alumina predominantly). For the disposal of this waste, the 4th Respondent has approached cement manufacturers for co-processing as well as the common disposal facility (TSDF) for the disposal at the landfill. After carrying out comprehensive analysis by the approved TSDF facility, it has been found that the waste is suitable for the landfill. Further the 4th Respondent has also received a feedback from a cement manufacturing facility that the waste is suitable for co-processing at their facility. In order to utilize the waste beneficially as per the waste management hierarchy principle, 4th Respondent has decided to go for co-processing of the waste at Cement manufacturing facilities and accordingly the 4th Respondent has entered into agreements with the cement manufacturing facilities & obtained Authorization and approval for the disposal of waste (through Hazardous Waste Authorization) from TNPCB. Copy is attached as **Annexure-R4-9**. Similarly, the waste co-processing facility viz., M/s. Dalmia Cement plant, has also obtained hazardous waste authorization for co-processing of this waste. As on date, around 140 MT of the

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		waste is successfully co-processed at the cement plant. Hence, it is clear that the said waste from Plant-IV is getting disposed with valid authorization from TNPCB, to the co-processing facility, which is also having the valid authorization clearly spelt out to co-process at M/s Dalmia Cements facility for this waste category. The sample for the comprehensive analysis of the Alumina waste as per this specific requirement as spelt out by the Additional Joint Committee has been analysed by an external lab viz., GLens Innovation Labs Pvt Ltd and the detailed analytical report is attached herewith as **Annexure R4- 10**.
3	The unit shall make provision to collect ground water seepage at Plant-IV and to treat the same if required	**COMPLIED** 4th Respondent has established 2 Nos of 8 inch PVC pipeline for transporting the water coming from the northern side of the Plant to outside of the Plant – IV. This was also seen by the Committee during their visit to the plant. A Collection sump at the end of the storm water drain will be established as a provision for collection of seepage water, if any, during the rainy season. The collected seepage water thereafter will be treated & reused in the Plant.
4	The unit shall take effective steps to avoid oozing of high TDS water in the southern side of Plant-II in future as it is done at present	**COMPLIED** We seek this Hon'ble Tribunal to refer to our Response/Objections filed earlier. It was clearly brought to the notice of the Joint Committee that the oozing of water from outside boundary wall side and stagnant water was only a temporary phenomenon due to torrential rain in November 2019 just before the visit of the Members of the Joint Committee. There has been no incident of water ooze since then. However as a matter of abundant caution, this is being monitored periodically by the 4th Respondent. It is submitted that the oozing of water has not recurred during the moderate rain after November 2019. This has been witnessed by DEE, TNPCB, Salem as well. 4th Respondent has instituted a system for monitoring the surrounding areas of the plant on periodical basis for any oozing or similar phenomena at the periphery of the Plants.
5	Unit shall collect the run-off water during heavy monsoon and store the same in the earthen reservoir/seepage pond to reduce the TDS level in the ground water in that area.	**COMPLIED** The 4th Respondent has provided the explanation as to this aspect in its Counter which may be read as part and parcel of this Response/Objections. This recommendation is brought up for the first time in the Additional Joint Committee Report. Tamil Nadu State covers an area of 130,058 KM², of which 73% is occupied by weathered crystalline basement rocks. Abundant Mineral deposits like bauxite, limestone, and magnesite are present in Salem District in the Tamil Nadu Mineral Map. Salem is the only District in the whole of State of Tamil Nadu, where all the Three Minerals are

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		abundantly present. It is well-established fact that the abundance of Bauxite Ore (mostly alumina and oxides of iron), limestone (mainly salts of calcium and magnesium) and Magnesite (mainly magnesium carbonate) increases the soluble mineral content in the ground water. The general topography of Mettur is hilly terrain in nature and it is evident from the fact that many houses are built at different elevations. Many lime stone quarries are being operated in this region. The Plants of the 4th Respondent at Mettur are located in a hilly terrain with the lowest elevation of the complex at the western end of Plant-II from where all the storm water in the whole area goes out to a lower gradient. Hence, the establishment of large size earthen reservoir/ pond to collect the storm water during heavy monsoon is a huge challenging task, possesses inherent safety risks such as breaching, continuous seepage to next lower gradient area etc. Continuous seepage or leaching of water is an undesirable feature to the habitants at the lower gradient area. Based on this context, the 4th Respondent has established all the large water storages facilities above ground level and only smaller sumps with pumping arrangements are at ground level. Hence the establishment of large size earthen reservoir to capture the rain water during heavy rain is not practically effective & viable one in this regard.
6	The unit shall provide online continuous monitoring in the upstream and downstream side as agreed during the meeting with the committee in consultation with TNPCB. The remaining two directions shall be covered in due course of time.	**In Progress** 4th Respondent is in the process of carrying out the ground level concentration of the pollutants as per the predominant wind direction of the Mettur Plant using an external competent agency, which is the first step to identify the location for positioning of the continuous air quality monitors. After carrying out this study, the assessment will be made on the specific location of the monitors and data connectivity aspects and requirement of the supporting system. As agreed during the meeting with the committee, 4th Respondent will provide 2 Nos of online continuous Ambient Air Quality Monitors (One at upstream & another at downstream as per the predominant wind direction). The 4th Respondent anticipates around 2 months for the dispersion modeling of ground level concentration & another 4-6 months for procurement & commissioning of the CAAQ monitors.
7	Unit shall provide chiller to control the VOC emission as required	**COMPLIED** An additional chiller unit has already been commissioned to improve the recovery of the solvent at the upstream of the unit. This will facilitate the reduction of organic load to the adsorber unit. **(Annexure-R4-12)**

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8.	The additional adsorbent bed requirement for VOC emission control & also additional safety measures will be decided by conducting emission audit by the committee for two days through a suitable accredited agency after installation of chiller since the residences are located in the near-by area. During audit time, the unit shall operate the plant with the consented quantity	**COMPLIED** By the installation and commissioning of the new chiller with operating temperature of 5 Deg C, the organic load has dropped from the present 3.2 kg/hr (280 ppm) to 2.7 Kg/hr (236 ppm). i.e., 16% reduction of load. The carbon beds are designed for 75 kg/hr organic load with an Operating load of 45 kg/hr. Even though the existing chiller itself is adequate, the introduction of new chiller (5 Deg C) and with sufficiently over designed adsorber capacity will acts as additional protection & for any abnormal process excursions. The existing water cooled condenser has been provided with chiller at its outlet. This outlet is connected with a water seal. This ensures containment of VOC within the condenser itself. The 4th Respondent will conduct a performance evaluation of VOC emission by the committee through a suitable accredited agency once the operation of chiller unit is getting streamlined.
9	The additional Safety measure such as RTO requirement for VOC emission control and also additional safety measures will be decided by conducting emission audit by the committee for 2 days through suitable accredited agency after installation of chiller since the residences are located in the near-by area.	**COMPLIED** 4th Respondent has validated the adequacy of the existing chiller & adsorber efficiency through third party study & the results were presented to the Joint Committee. **(Annexure-R4-2)**. Technologically, RTO's function with exit threshold limits similar to the adsorption bed (Solvent recovery System). i.e., RTO is an alternative technology to adsorption bed system and not for use sequentially. However, this Respondent will conduct a performance evaluation of VOC emission by the committee through a suitable accredited agency once the operation of chiller unit is getting streamlined.
10	Effective steps to conduct NGRI study needs to be undertaken for the allegation of ground water pollution in the vicinity of Chemplast Sanmar group of units and safety of the SLF located in the Plant-I, II, III & V.	The Hon'ble NGT has already directed TNPCB to conduct such study by NGRI vide its order dated 06/10/2020 attached **(Annexure-R4-8)**
11	The Director of Industrial Safety and Health (OSD), Directorate of Industrial Safety and Health, Chennai recommended to carry out the following measures:	
(i)	For Hydrogenator, temperature and pressure gauges shall be fixed at upper middle and lower level for physical measurement and maximum permissible level	**COMPLIED** The photographs are attached as **Annexure R4-11.**

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	marking in colour is necessary. Hence temperature and pressure gauges shall be fixed at upper, middle and lower level for physical measurement and maximum permissible level marking in colour	
(ii)	The electrical cable tray & hydrogen storage tank shall be separated by a fire resistant barrier	**COMPLIED** All the electrical cables, cable trays adjacent to the Hydrant buffer vessel are separated by providing fire resistant cladding for the cables & cable trays. Additionally, a fire resistant painting has been done over the cladding as well. **(Annexure-R4-3)**
(iii)	The purity of hydrogen before entering Hydrogenator shall be checked for impurities (i.e.,) to avoid carbon steel waste particles	**COMPLIED** Hydrogen Purity is being checked on regular basis and recorded in Plant-IV. To avoid carbon steel waste particles entering into the process, filters are provided to capture the particles before entering into the process located in AO1 & AO2. The materials of construction of the filters are SS 316. It may be pertinent to note that all the pipe lines and equipment at the downstream of the filters are either Aluminium (AO1) or SS 316 (AO2).
(iv)	VOC (Volatile Organic Compounds) monitor shall be provided near the final product outlet or process completion area	**COMPLIED** VOC Monitor is installed at close to final product storage tank. **(Annexure- R4-4)**
(v)	As the compatible raw materials are stored in the ground floor, in case of fire / explosion, the buildings, the structures including the roof sheet will collapse. Hence, such storages shall be shifted to safe place. Also, Electrical connections shall be removed (or) made flame proof. Smoke detectors shall be provided.	**COMPLIED** One of the safety measures suggested by DISH under Point 23 was" incompatible chemicals shall not be stored in a small room" and not compatible chemicals as described by the Additional Joint Committee Report at Paragraph 6.11 (v). We believe that there has been a typographical error of the Additional Joint Committee report and what was meant was that incompatible chemicals should not be stored together and not otherwise. It may be noted that even in our Response/Objections filed in August 2020 to the Joint Committee report, we have clearly stated that the chemicals stored in the small room are Solvesso and Sextate. Both are compatible with each other. Therefore it is in correct to recommend that compatible chemicals are stored as from a safety perspective, it is the recommendation that incompatible chemicals are not stored.

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		Further the Chemicals stored in the room (Solvesso & Sextate – hydrocarbon and ester) are not explosive in nature and are compatible. The boiling point & auto ignition temperature for these materials are very high. The building is well ventilated. Fire detection and fire fighting system are readily available in the / close to storage room. The building roof is RCC and not sheets. This storage is falling under "Restricted Entry" category. As an abundant precaution, the electrical connection/system was made as flame proof and two number of smoke detectors have been installed. Also these chemicals are placed on Self containing pallets to avoid spillage **(Annexure – R4-5)**

4. This 4th Respondent also in this Response/Objections wishes to clarify a few remarks of the Joint Committee at Paragraph 4 of the Additional Joint Committee as under:

Sl. No as per Para 4	**Joint Committee Remarks**	**4th Respondents Response**
2	The unit submitted a third party report "Assessment of Water Management". The report comprises and highlight the water data of Chemplast Mettur for a period of 5 years (2014-2019) and gauges the adequacy of the ZLD, however does not show the water balance	It may be noted that the following is the remark made by the Joint Committee on this point vide its Report dated 01.06.2020: "***The unit has installed adequate number of flow meter and web camera for monitoring but no water auditing report made available to committee to verify the adequacy***" Based on the above remark, the water audit was conducted by Chennai Testing Laboratory Pvt Ltd., an agency accredited by QCI/NABL and a copy of the report titled "Assessment of Water Management" was submitted. The report covers the following aspects on the water audit related to Mettur Plants of the 4th Respondent: - Water drawal details of the last 5 years (water inventory) - Water intake of individual plants - Facilities available to capture the water flow data of each plant - Water quantum that goes along with product(s) For CHEMPLAST SANMAR LIMITED Authorised Signatory

		- Water loss due to cooling tower evaporation, steam generation, by-product and drying of PVC slurry etc., - Water balance of the individual plants in terms of process usage, cooling tower make-up, domestic usage, green belt and village supply (Page# 16) - Quantum of water recycled back to the process - Treatment at ZLD & adequacy of ZLD system - Robustness of the water treatment system during maintenance We strongly believe that the above contents of the water audit duly address all the points of water audit including the water balance (Page#16) of each plant, which is raised as the remark by the committee.
4 (bullet point 1)	In Plant-II, the unit has proposed 5 roof top water collection schemes & 3 schemes were completed and works for the remaining two schemes were in progress.	**COMPLIED** Currently, all the 5 roof top water collection schemes related to Plant-II Mettur have been completed. Photos of the remaining two schemes which have since been completed are attached herewith. **(Annexure- R4-6)**
4 (bullet point 2)	In Plant-III , out of 5 schemes, 4 schemes have been completed & the remaining one was in progress	**COMPLIED** Currently, all the 5 roof top water collection schemes related to Plant-III, Mettur have been completed. Photos of the one scheme which has since been completed are attached herewith. **(Annexure- R4-7)**

5. This 4th Respondent also wishes to bring to the attention of the Hon'ble Tribunal with regard to the observations of the Additional Joint Committee under Paragraph 4 sub paragraphs 17, 18, 19, 20, 23, 24 and 25 viz.,

   a. No Investigation has been carried out with respect to type of soil/permeability of soil **(17)**;

   b. Single liner of 1.5 mm thickness is provided. Liner system was not provided as per CPCB criteria **(18)**;

   c. The trench network is not provided and no Leachate collections system exists in any closed SLF **(19)**;

For CHEMPLAST SANMAR LIMITED

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d. No phased operation of SLF **(20)**;

e. No closure plan was observed in all 30 closed SLFs **(23)**;

f. No gas collection system provided to extract gas if any from SLF **(24)**; and

g. No monitoring carried out as per the post closure criteria **(25)**;

In all of the above observations, the Additional Joint Committee has not considered the response along with objective evidence produced by this Respondent with documents. The issue regarding SLFs has been covered extensively in the response and the Additional Joint Committee has not addressed any of the responses and as a matter of routine and without any application of mind has proposed to this Hon'ble Tribunal to include all of the above to be brought under the scope of the NGRI study which is per se to be rejected. In addition, there is no abnormality in terms of TDS, Chloride, Mercury or any other active ingredients in the 25 piezometric samples taken during the exercise of assessing the integrity / impact of the captive landfills of all the Units in January 2020 by the Joint Committee. Hence the assessment of integrity of landfills cannot become once again the integral part / scope in the NGRI study proposed. All the above issues relate to the Mettur Units inside the Plant and the measures taken by this Respondent have been clearly stated and therefore to suggest a totally different scope by the Additional Joint Committee without any valid reason and not taking into account the measures taken is unjustified, illegal and to be rejected by the Hon'ble Tribunal. It is therefore requested that this Hon'ble Tribunal may take into consideration all the submissions made by this Respondent and pass such orders as deemed appropriate with regard to inclusion or otherwise of these items relating to SLFs in the scope of NGRI study proposed to be undertaken and render justice.

6. This 4th Respondent reiterates that the Joint Committee initially appointed by this Tribunal (vide its orders dated 25th September 2019) has in no uncertain terms mentioned that none of the allegations mentioned by the Applicant is correct. This has been averred in the Response/Objections filed on 19th August 2020. It is further submitted that MoEF in its additional affidavit filed pursuant to the directions of this Hon'ble Tribunal has stated that no environmental clearance is required for the Hydrogen peroxide plant.

7. The 4th Respondent therefore prays that, in our respectful submission, the report of the Joint Committee and the recommendations are beyond the scope of the application filed by the Applicant and in the facts and circumstances of the case, it is prayed that this Hon'ble Tribunal may be pleased to record the submissions made by way of Counter, Response and Objections dated 19th August 2020 and the current Response and Objections detailed above and dismiss the original petition. This Respondent further prays that, in view of the submissions made above elaborately, this Tribunal may refrain from directing the TNPCB to go ahead with the proposed NGRI study and thus render justice.

For CHEMPLAST SANMAR LIMITED

Authorised Signatory

Solemnly affirmed at Chennai

on this 15th day of March, 2021

and signed his name in my presence.

Before Me,

K.L. Bhuvaneswaran 580/1985
Advocate, Chennai.
27 Law Chambers
High Court, Chennai.

For CHEMPLAST SANMAR LIMITED

Authorised Signatory

ANNEXURE-I : STP INSTALLATION & COMMISSIONING COMPLETED AND IT IS OPERATIONAL

GLENS INNOVATION LABS PVT. LTD.

TEST REPORT

Report No	:	EN20120028-01-03	Report Date	:	19 Dec 2020
SAMPLE DRAWN BY LABORATORY					
Customer Name	:	M/S. Chemplast Sanmar Limited, Plant-IV			
Customer Address	:	Raman Nagar, Mettur Dam, Salem, Tamil Nadu 636403			
Sample Description	:	Stack Emission	Sampling Date	:	14 Dec 2020
Sample No	:	EN20120028-01,02,03	Sample Received on	:	15 Dec 2020
Sample Condition	:	Fit for Analysis	Test Started on	:	15 Dec 2020
Sampling Procedure	:	GL/EN/SOP/111	Test Completed on	:	18 Dec 2020

Test Result

Parameter	Location of Sampling	Concentration, ppm	Concentration, mg/m3	Flow Rate, m3/Hr	Mass Flow Rate, Kg/Hr
TVOC	Inlet to the Condenser (EN20120028-01)	3166	7251	5010	36.33
TVOC	Outlet to the Condenser (EN20120028-02)	280	641	5010	3.21
TVOC	Outlet to the Adsorbent Bed (EN20120028-03)	0.2	0.5	5086	0.0025
AIR POLLUTION CONTROL DEVICE PERFORMANCE EFFICIENCY					
TVOC	Condenser TVOC Removal Efficiency	91.2%			
TVOC	Adsorbent Bed TVOC Removal Efficiency	99.92%			

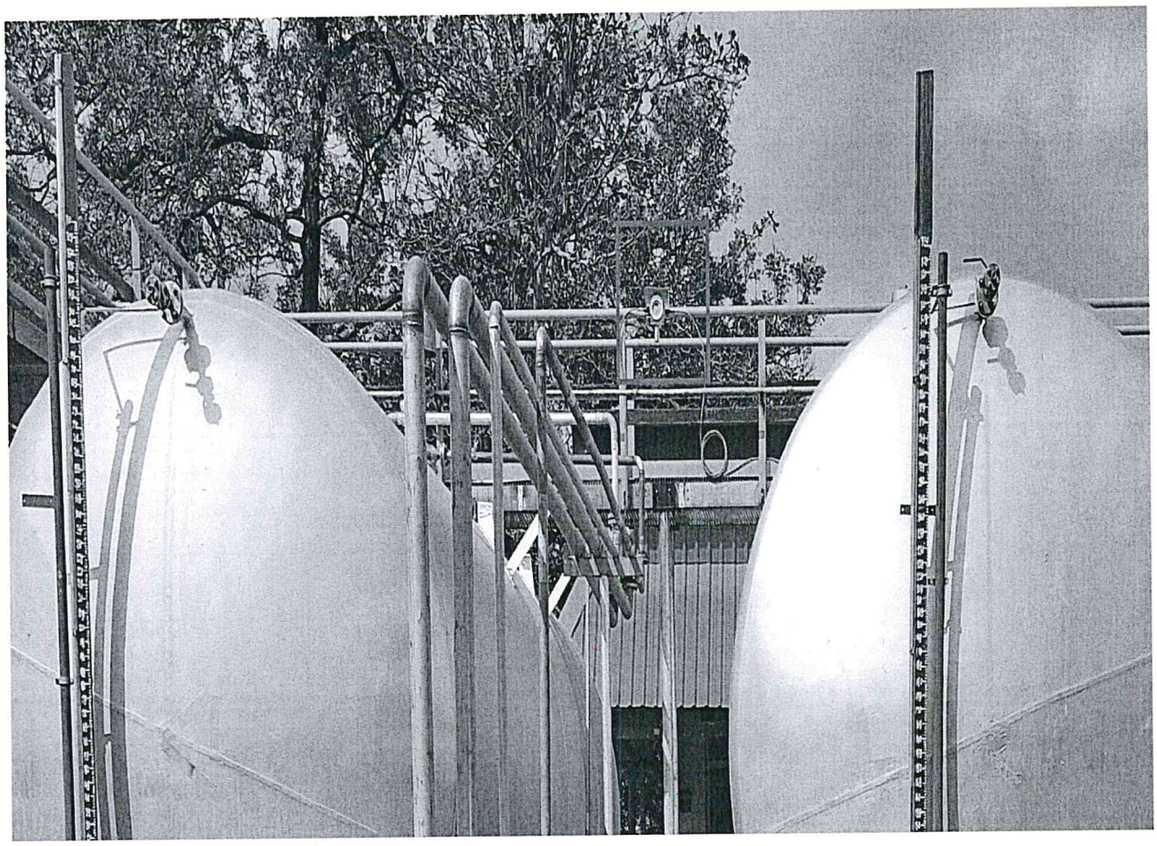
S.Suresh Kumar

Technical Director

ANNEXURE-3

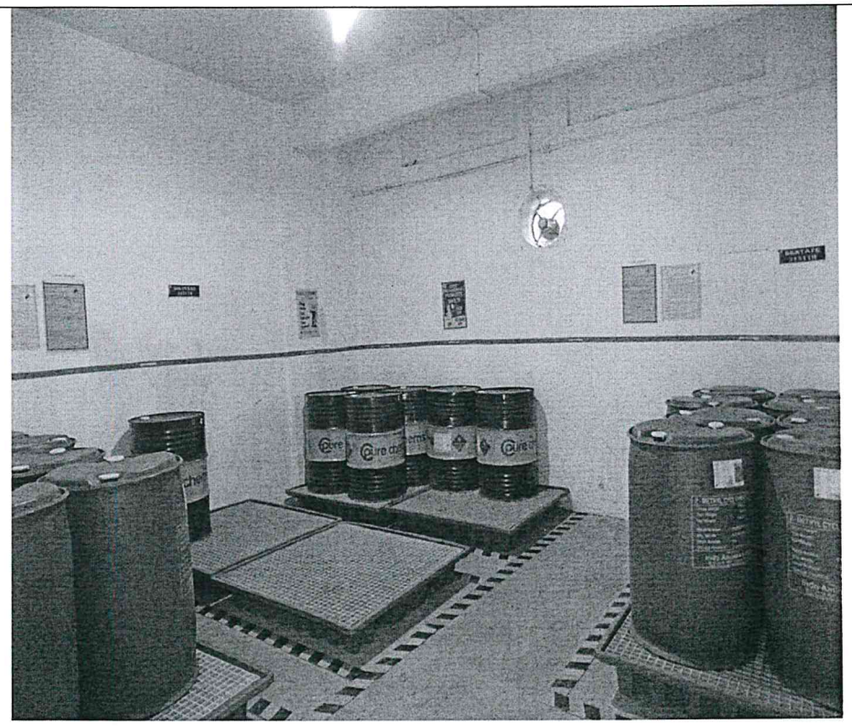
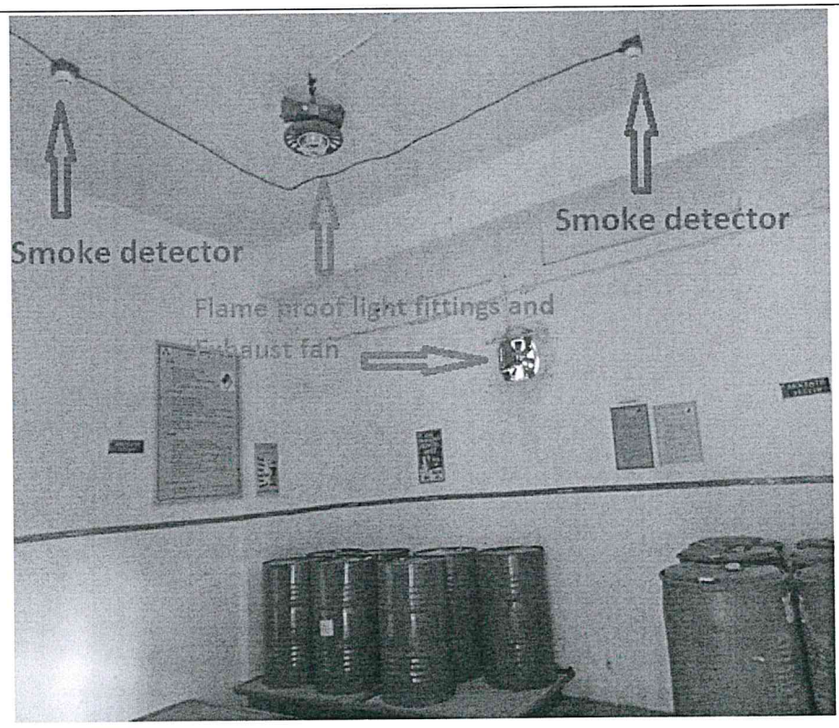
After Cable Cladding

ANNEXURE-4: VOC Monitor installed at the Final product Storage area

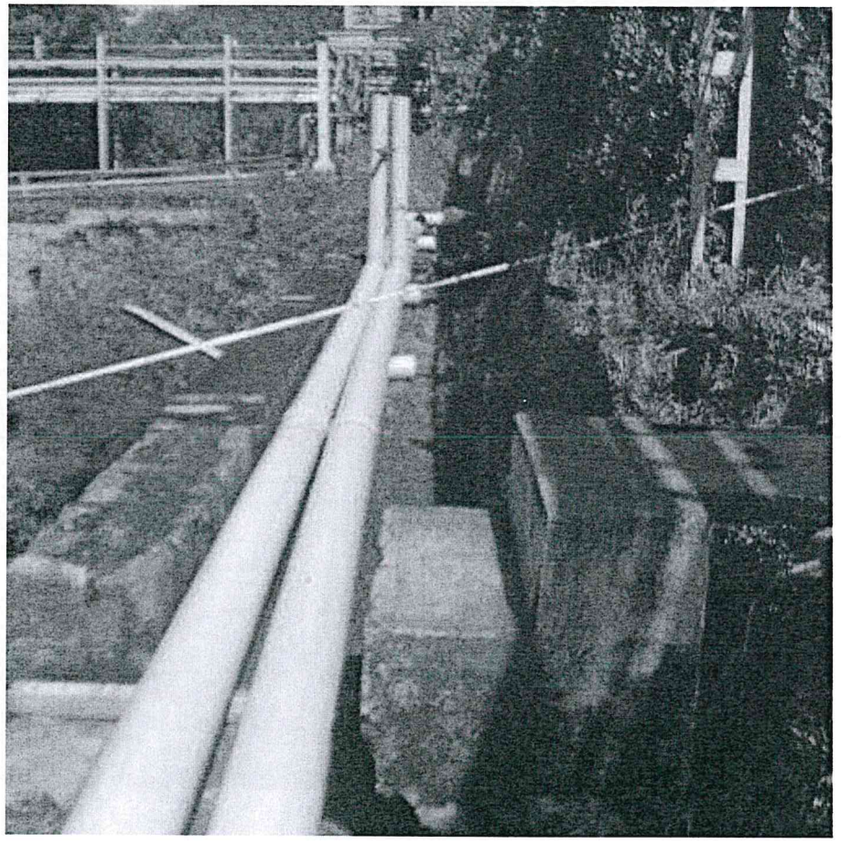


ANNEXURE-5: FLAME PROOF ELECTRICAL CONNECTION & SMOKE DETECTORS INSTALLATION

AT THE CHEMICAL STORAGE

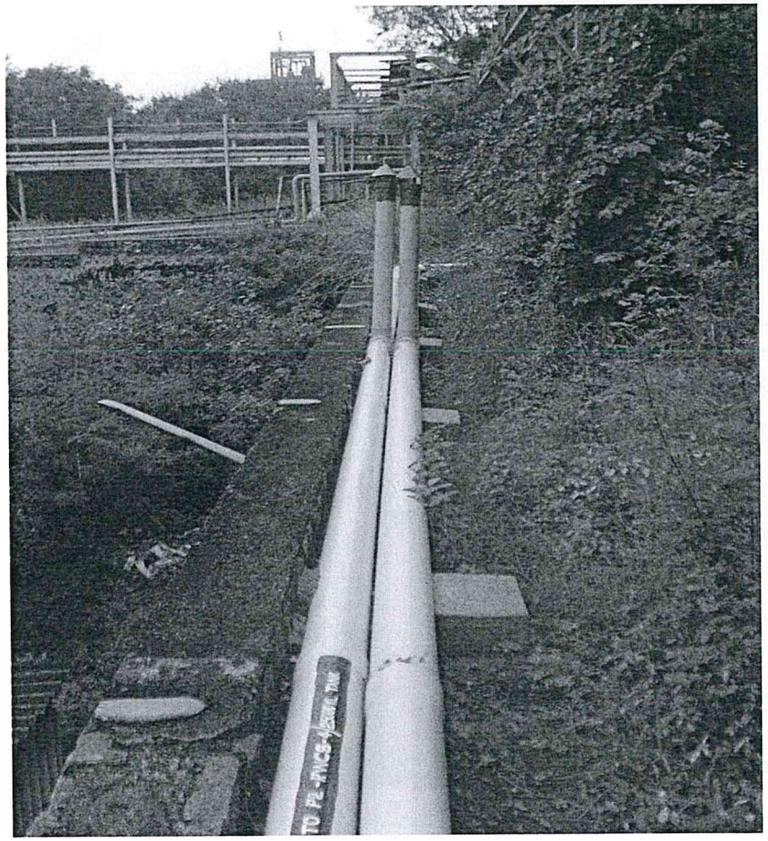
Before	After
	

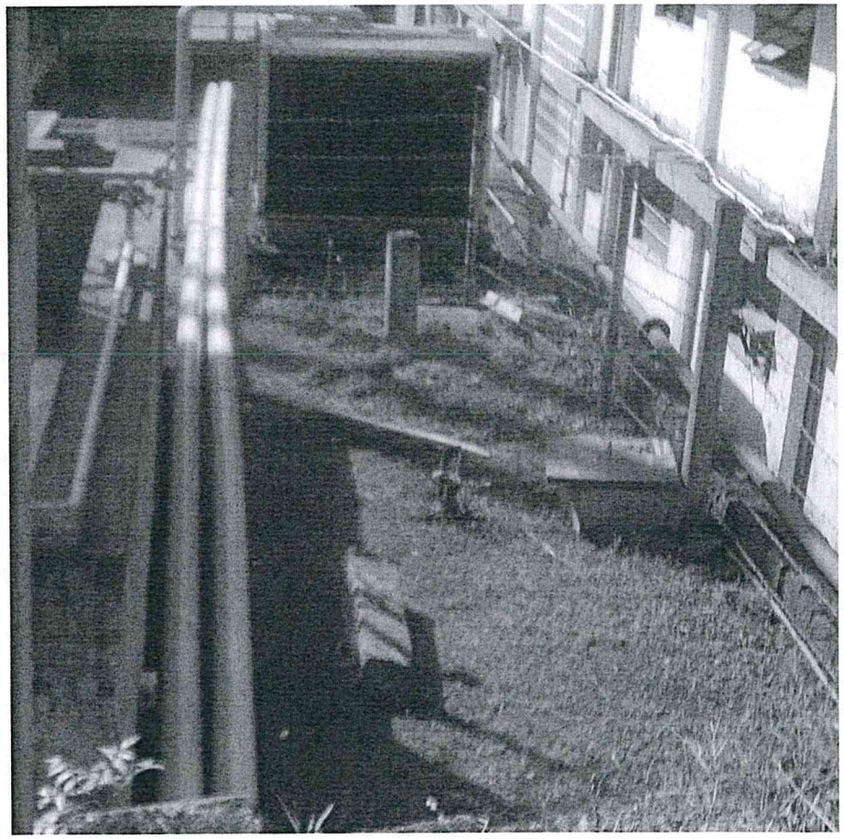
SCHEME 4 – STAGE WISE PROGRESS



Stores and raw material godown PVC line laying

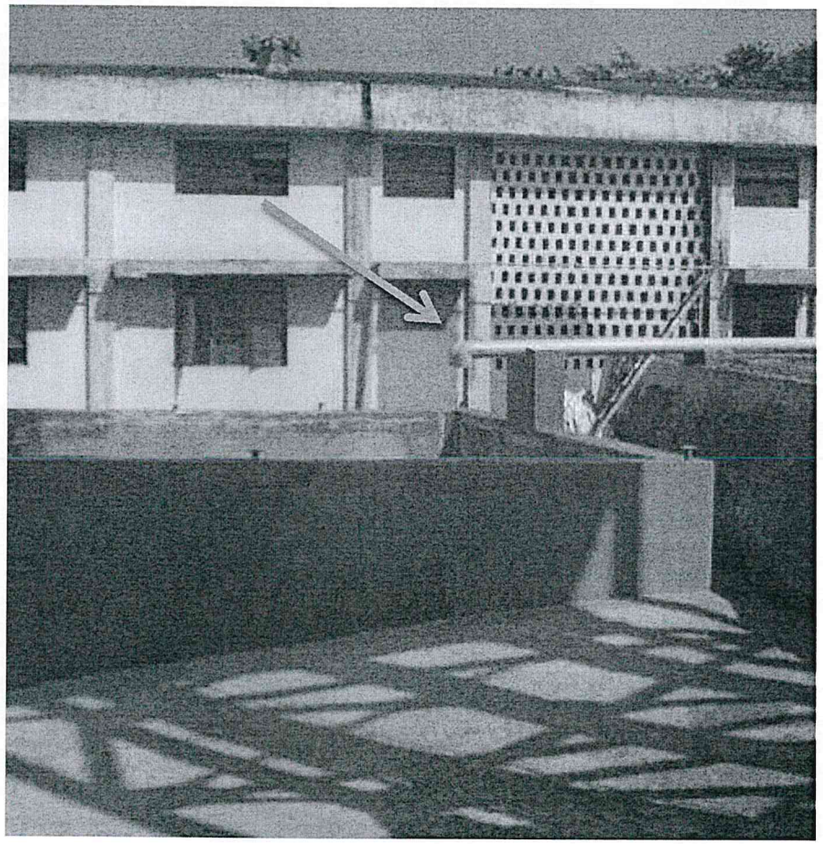
SCHEME 4 – STAGE WISE PROGRESS



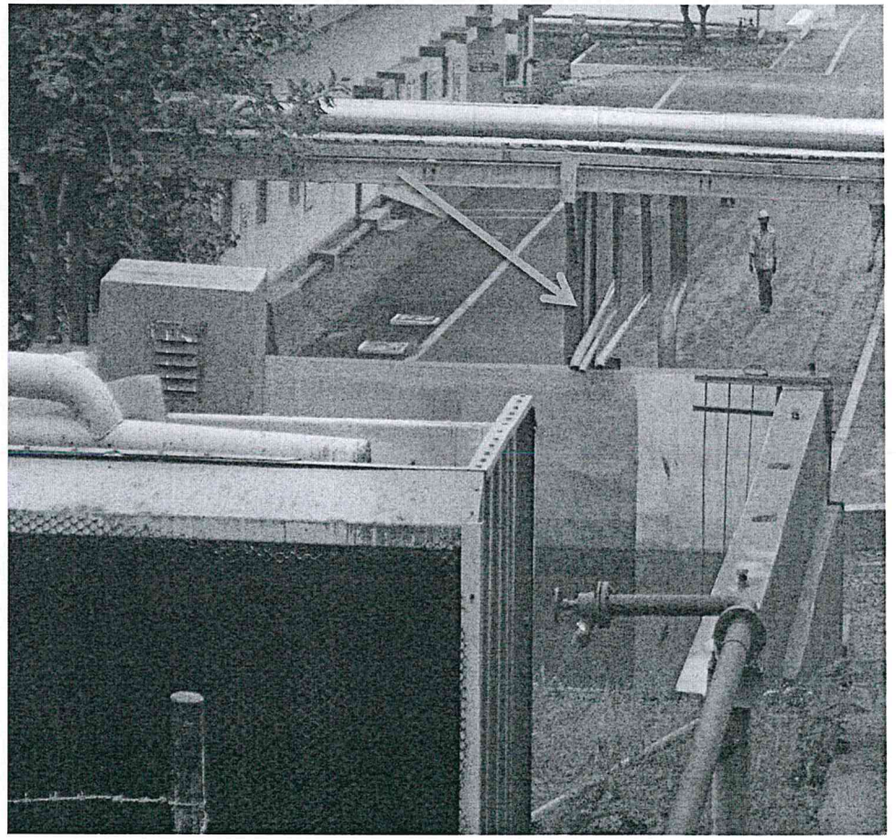


Stores and raw material godown PVC line to RWCS tank - 4

SCHEME 4 – STAGE WISE PROGRESS

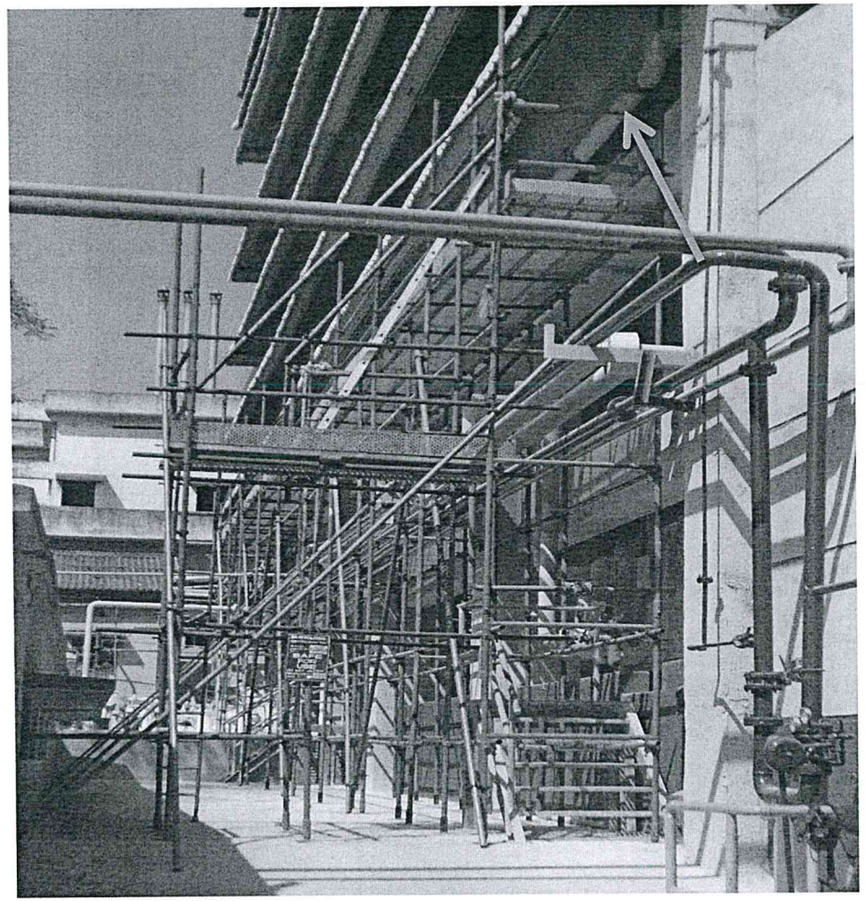


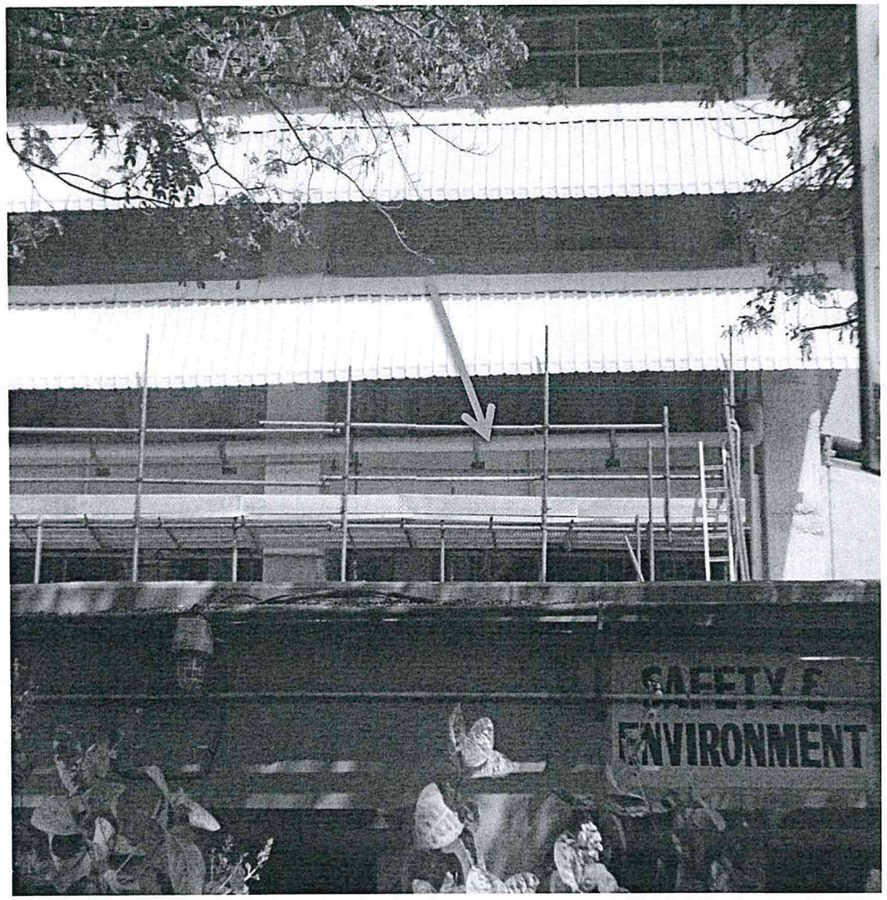
Stores and RM godown
water to RWCS tank - 4



Admin & QC lab, workshop , civil
building water to RWCS tank - 4

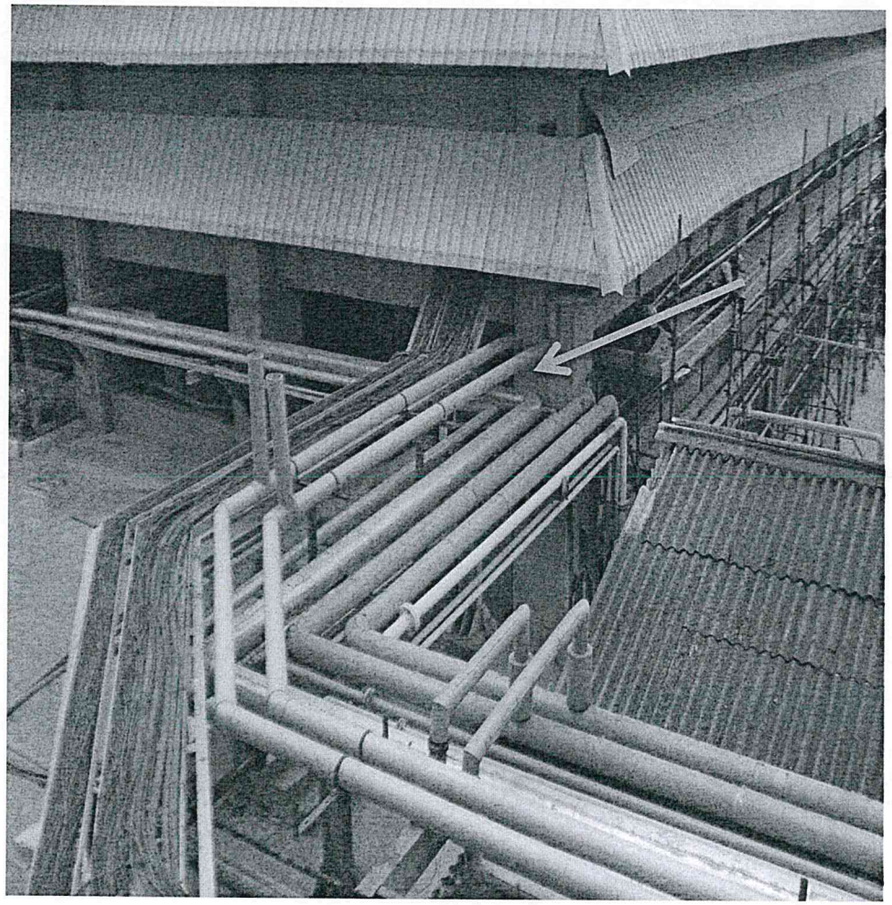
SCHEME 4 – STAGE WISE PROGRESS

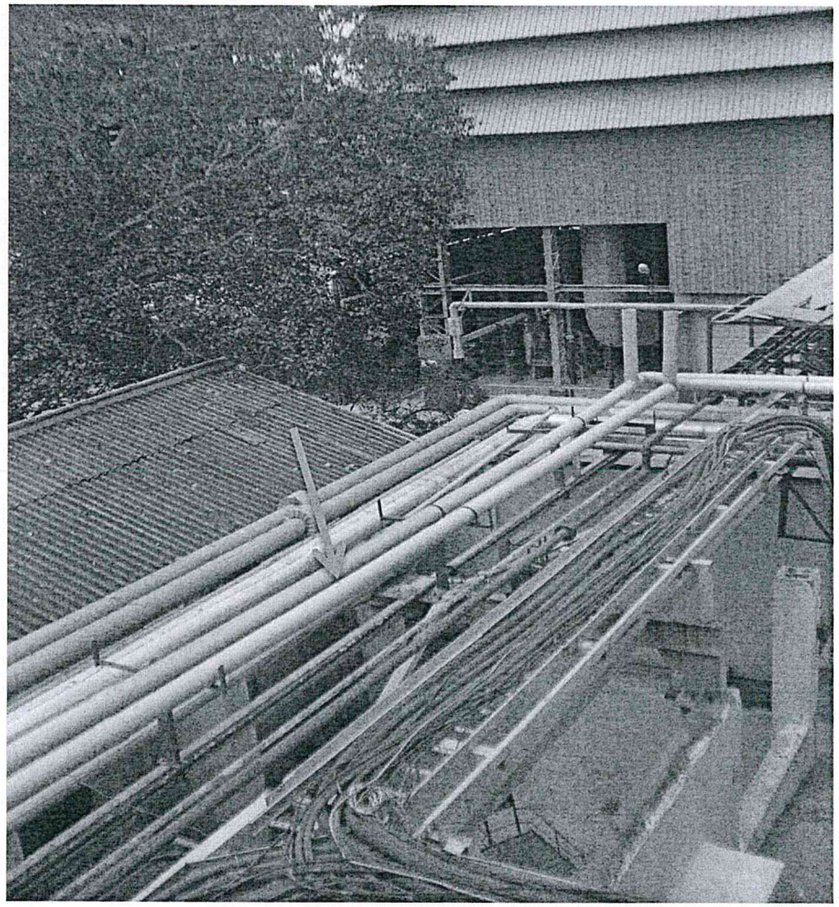




Niro -5 PVC line erection

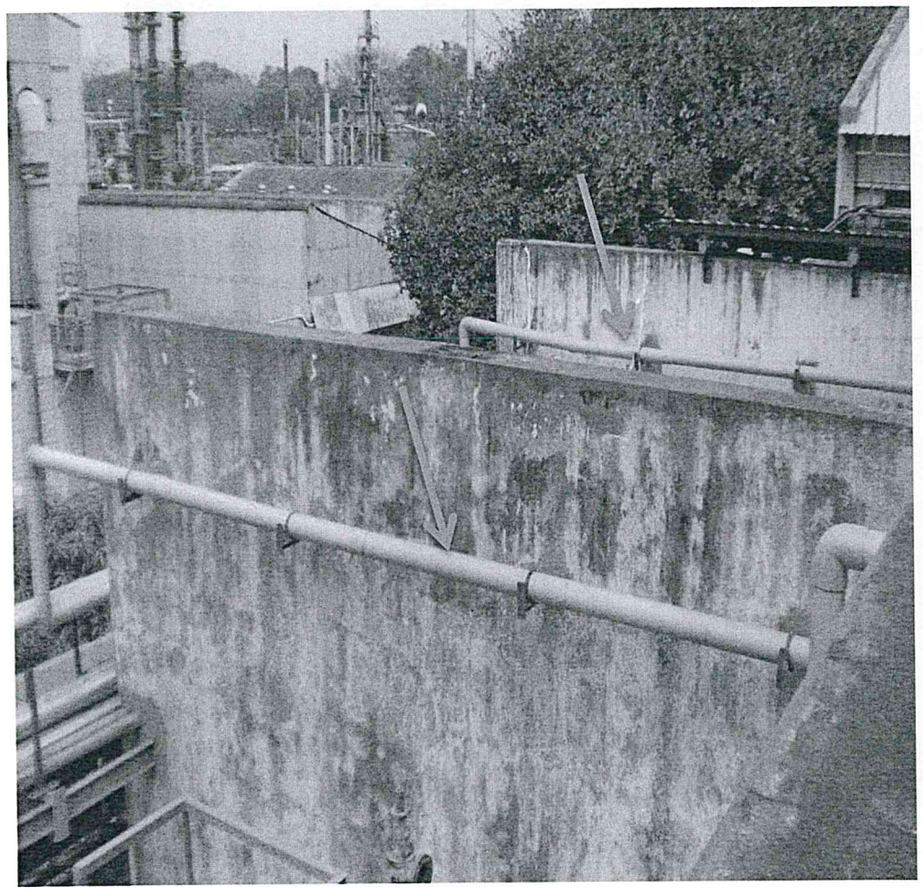
SCHEME 4 – STAGE WISE PROGRESS

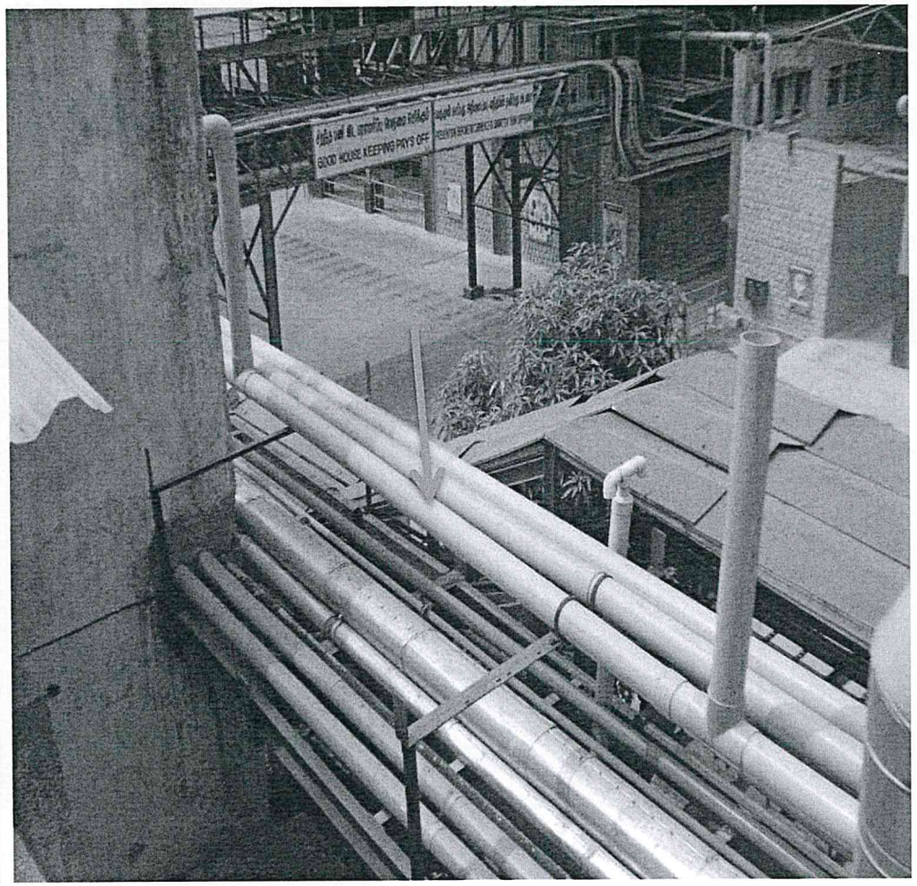




Niro -5 PVC lines to RWCS tank -4

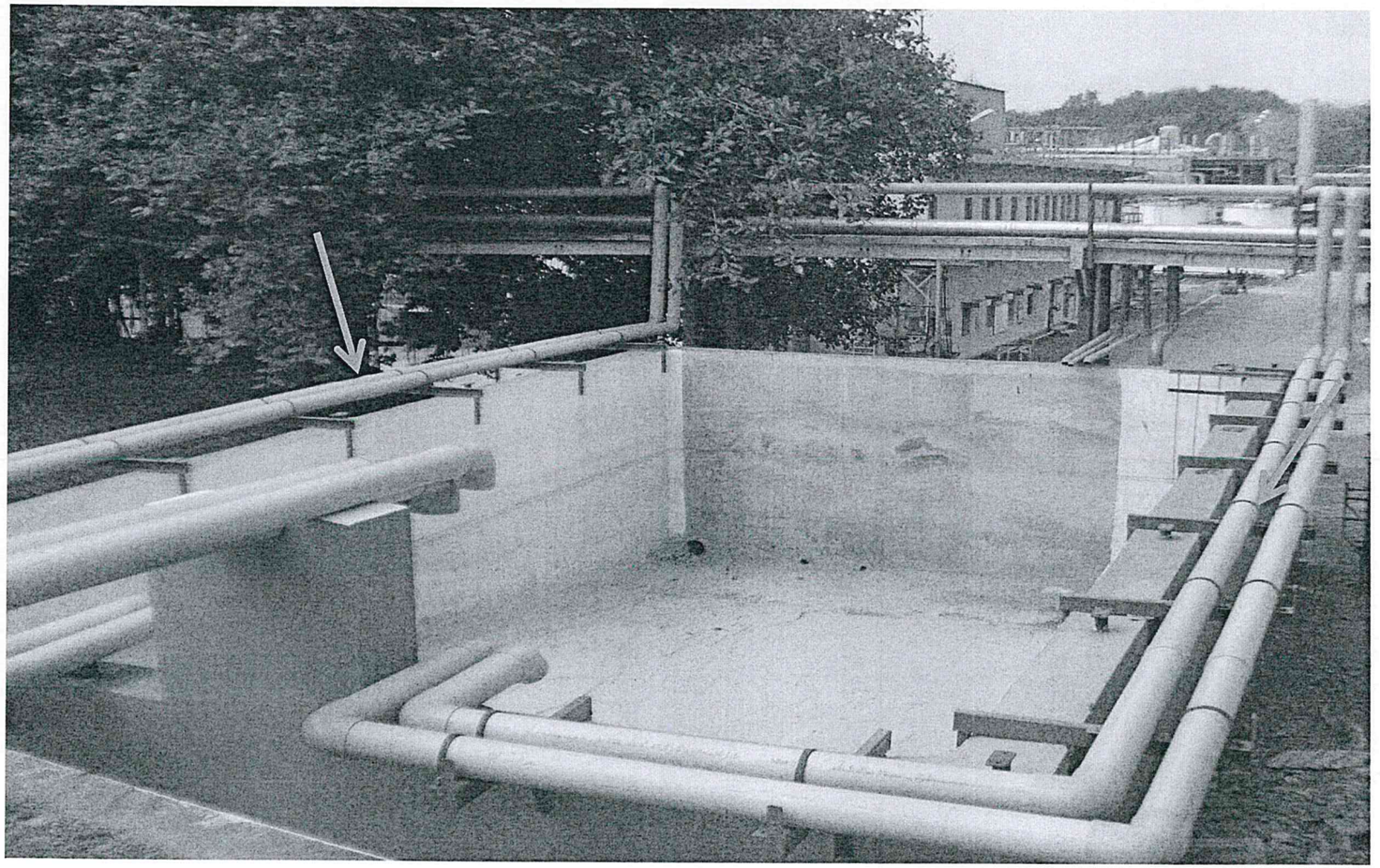
SCHEME 4 – STAGE WISE PROGRESS





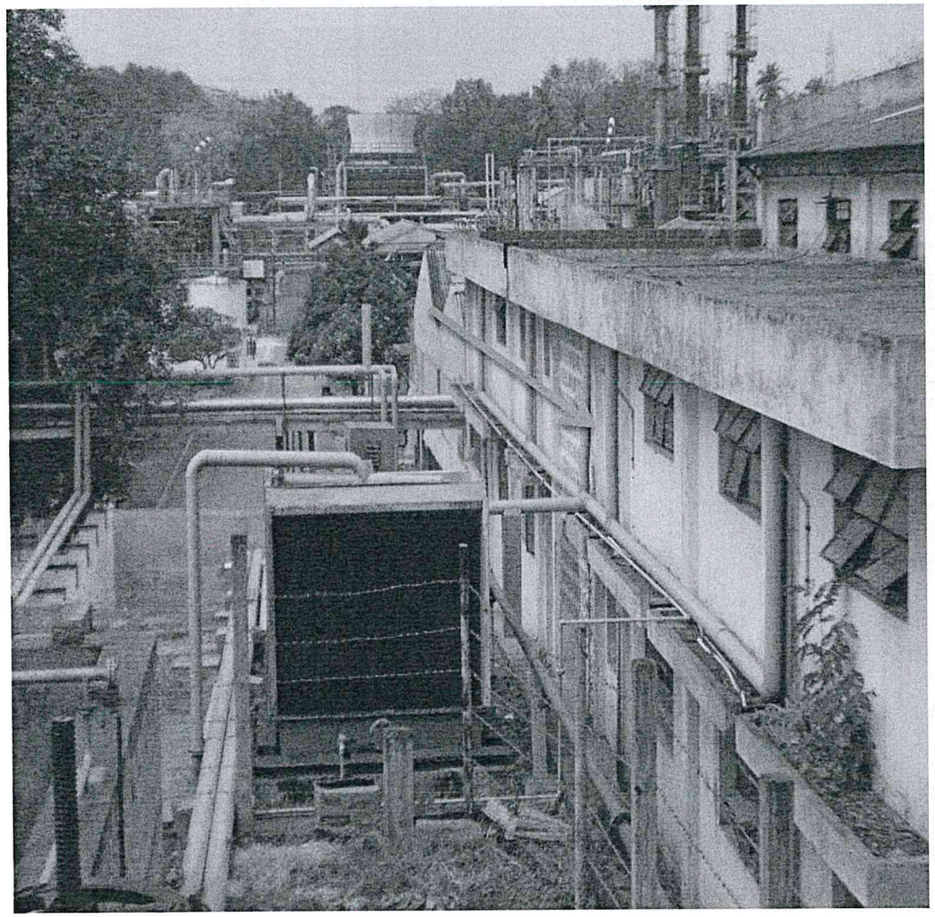
CPP PVC lines to RWCS tank -4

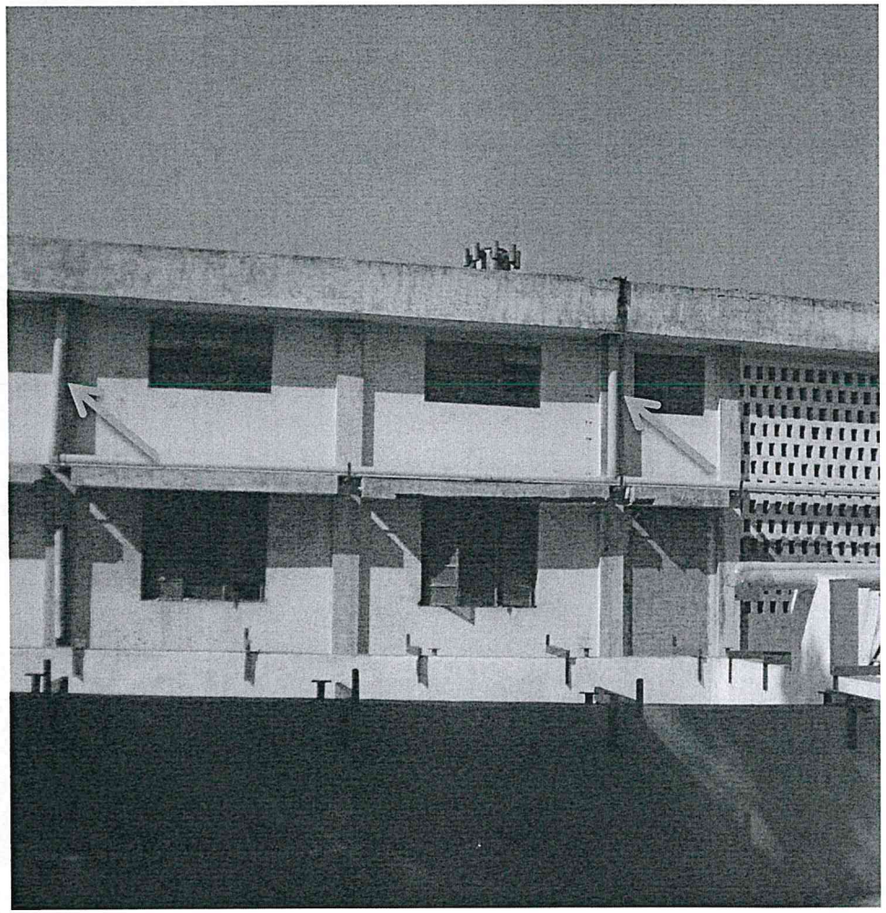
SCHEME 4 – STAGE WISE PROGRESS



Niro -5 & CPP water to RWCS tank -4

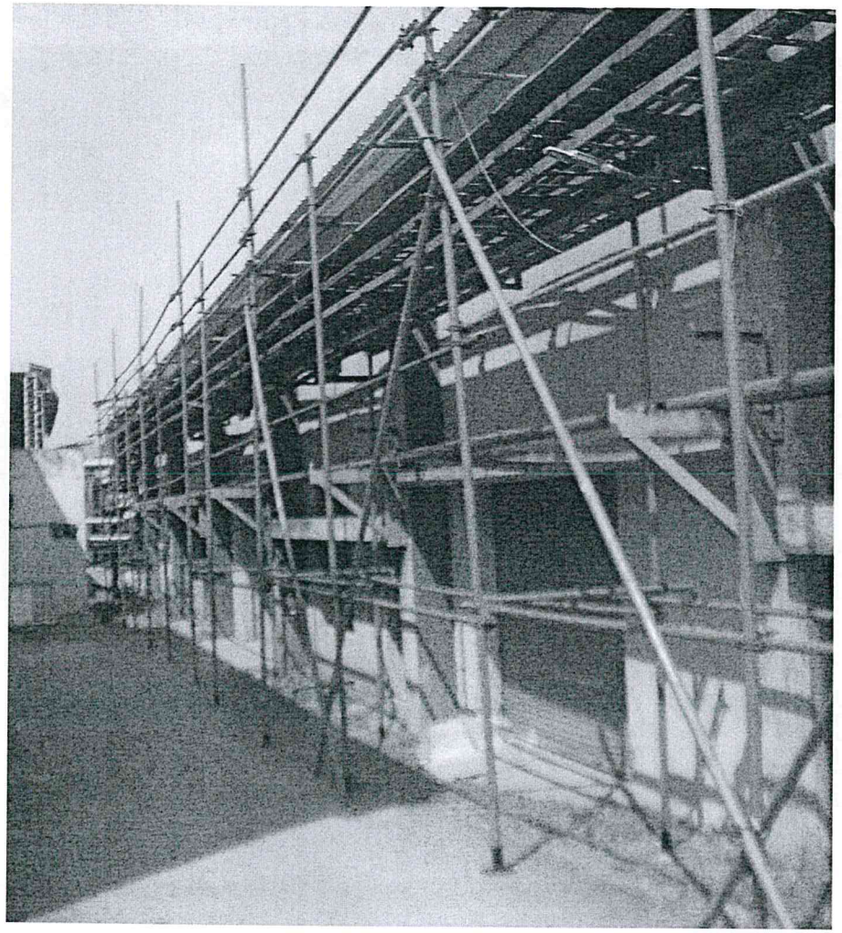
SCHEME 4 – STAGE WISE PROGRESS



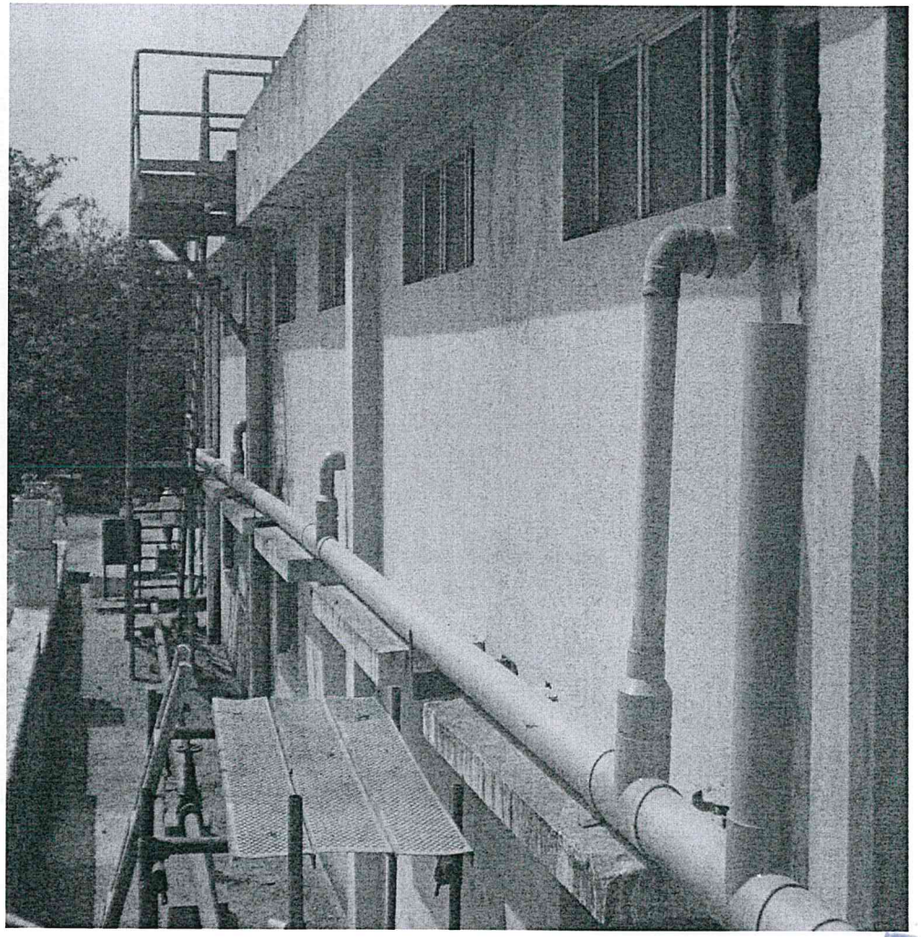


CCPP roof water to RWCS tank -4

SCHEME 4 – STAGE WISE PROGRESS

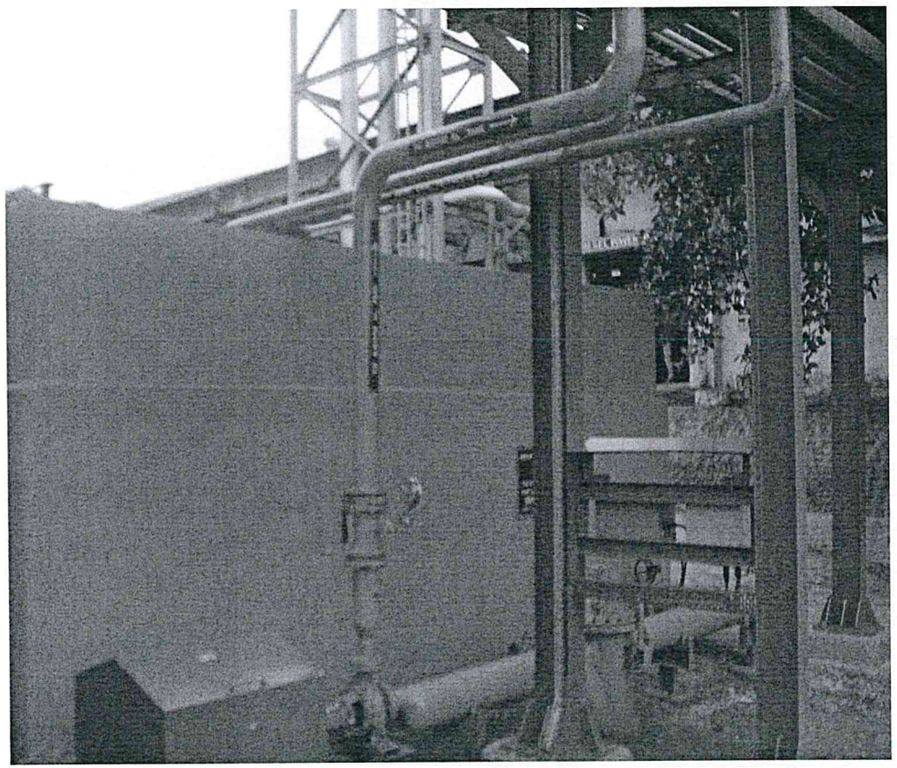


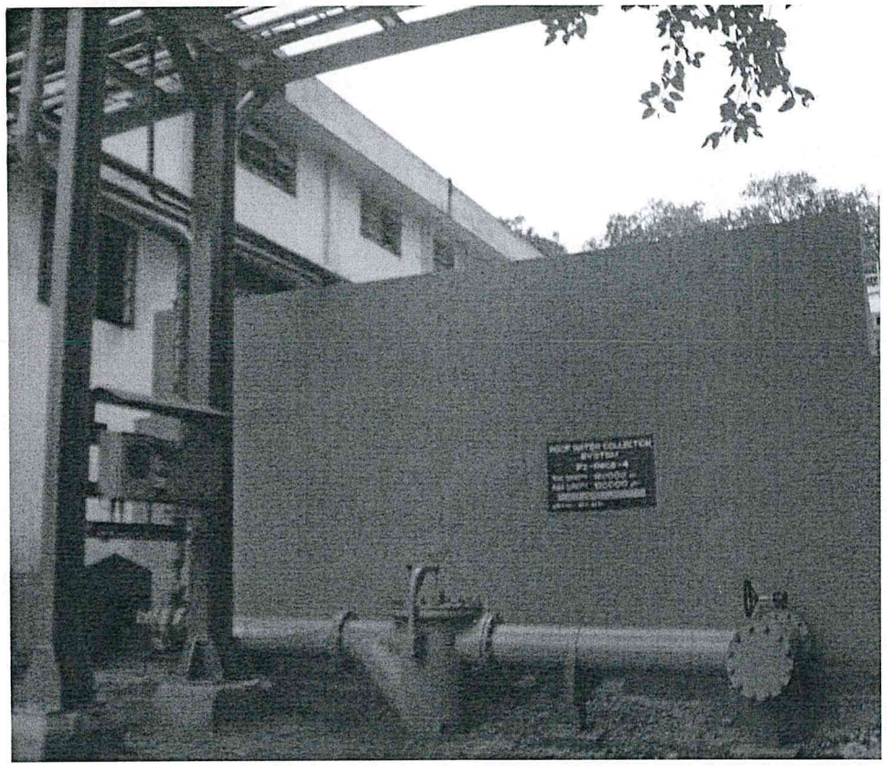
Scaffolding erection at DPH



CPP PVC line

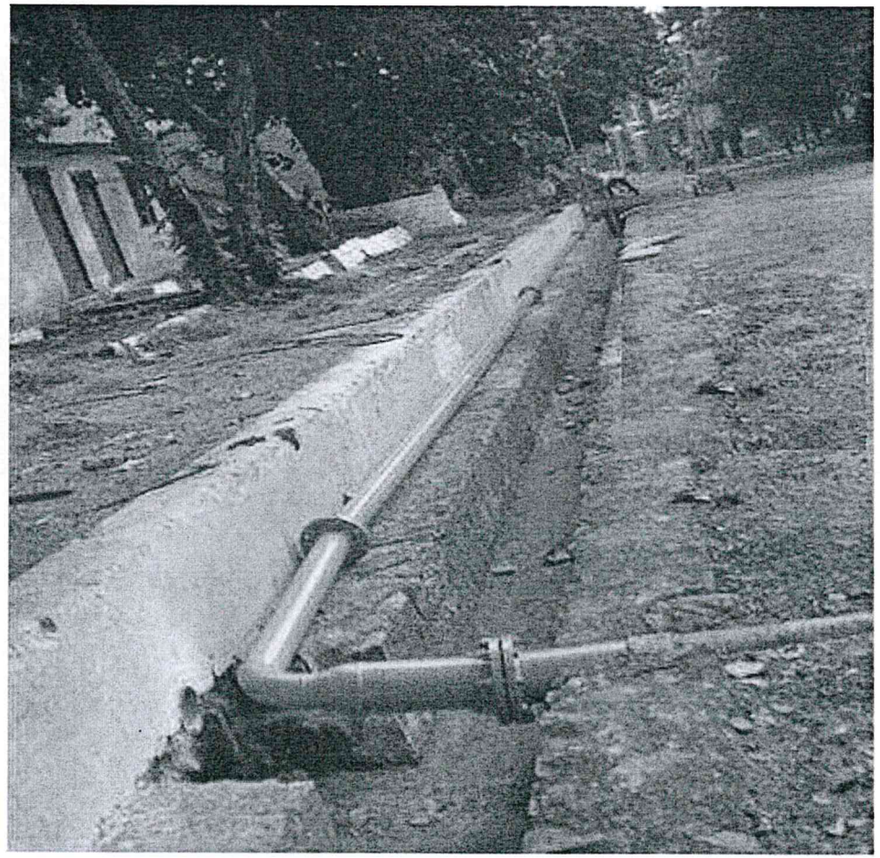
SCHEME 4 – STAGE WISE PROGRESS





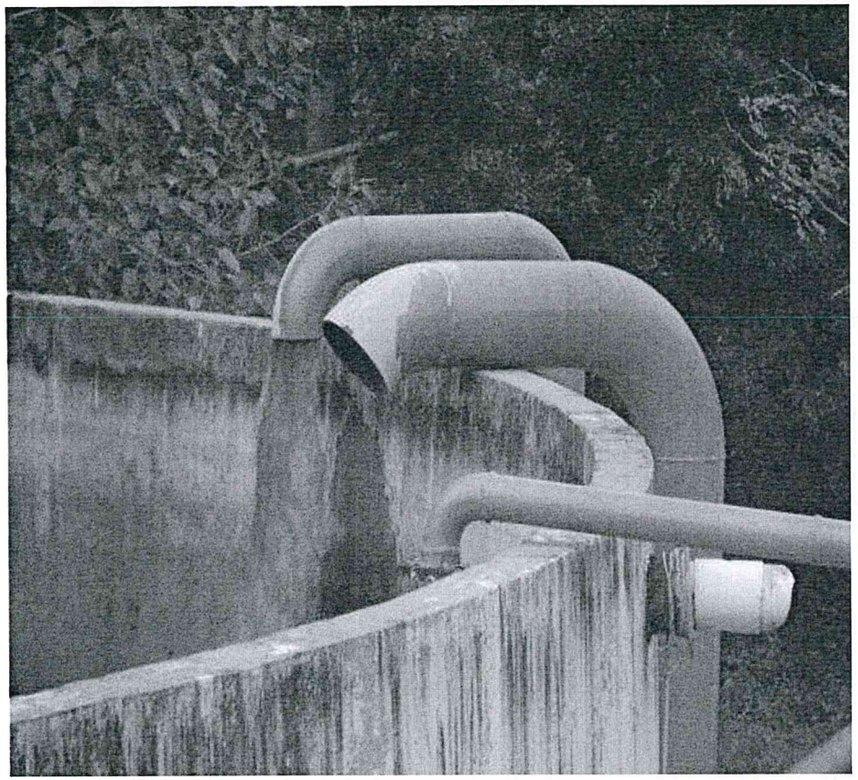
RWCS tank -4 with pump

SCHEME 4 – STAGE WISE PROGRESS

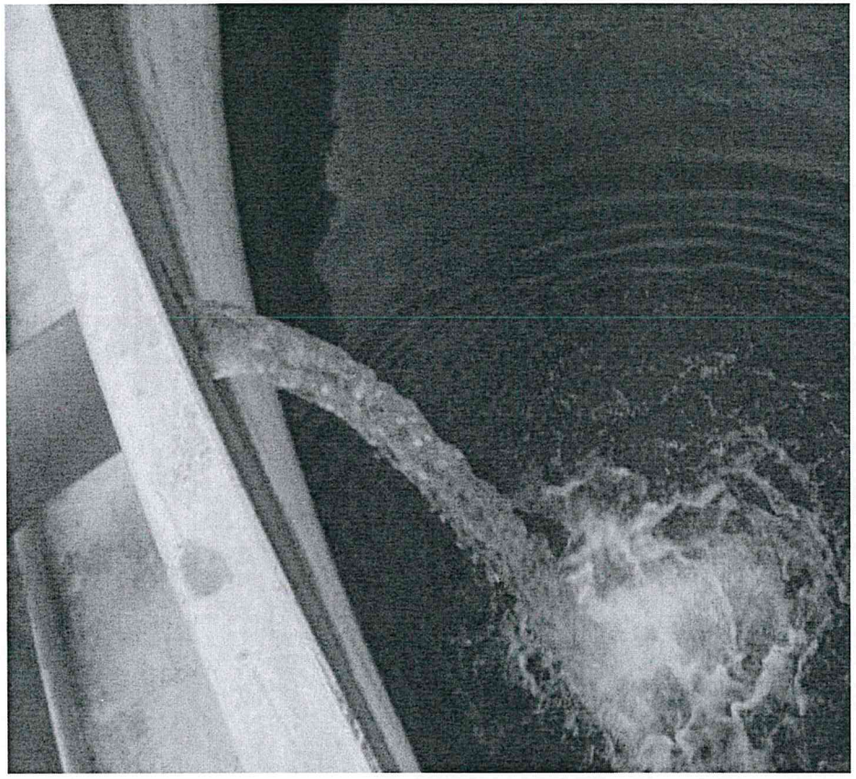


M-45 pump discharge to 25000KL tank & Industrial water tank

SCHEME 4 – STAGE WISE PROGRESS

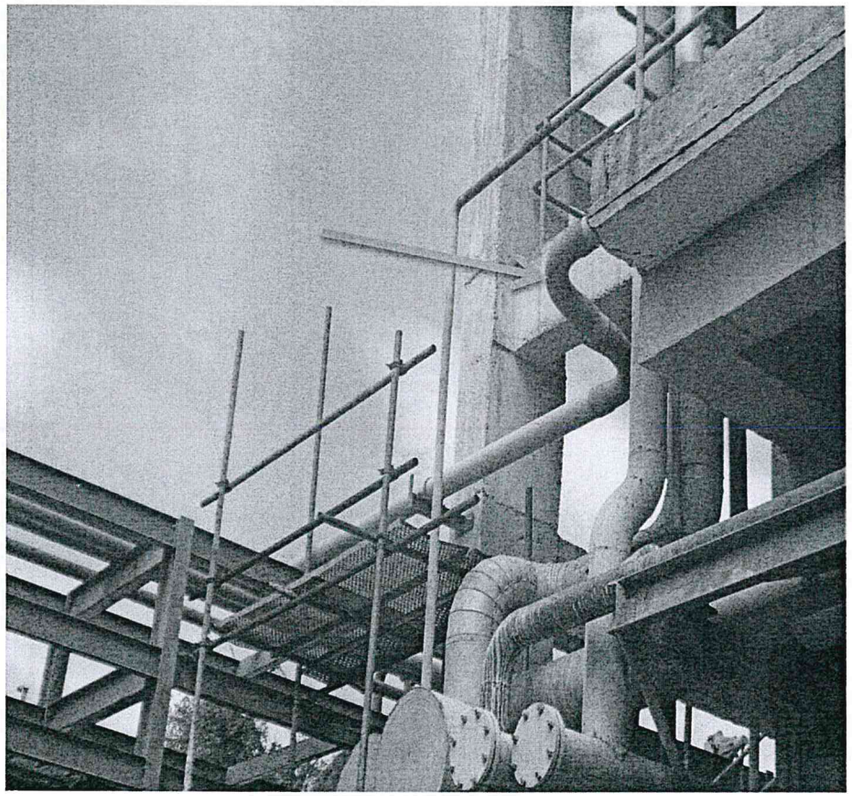


Industrial tank inlet

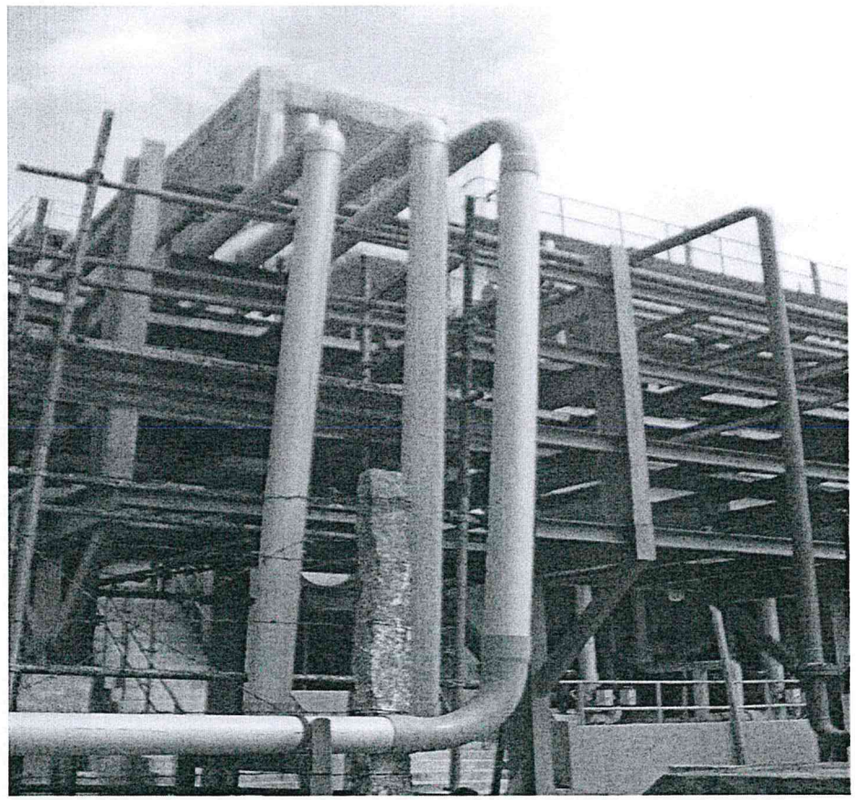


25000KL tank inlet

SCHEME 5 – STAGE WISE PROGRESS

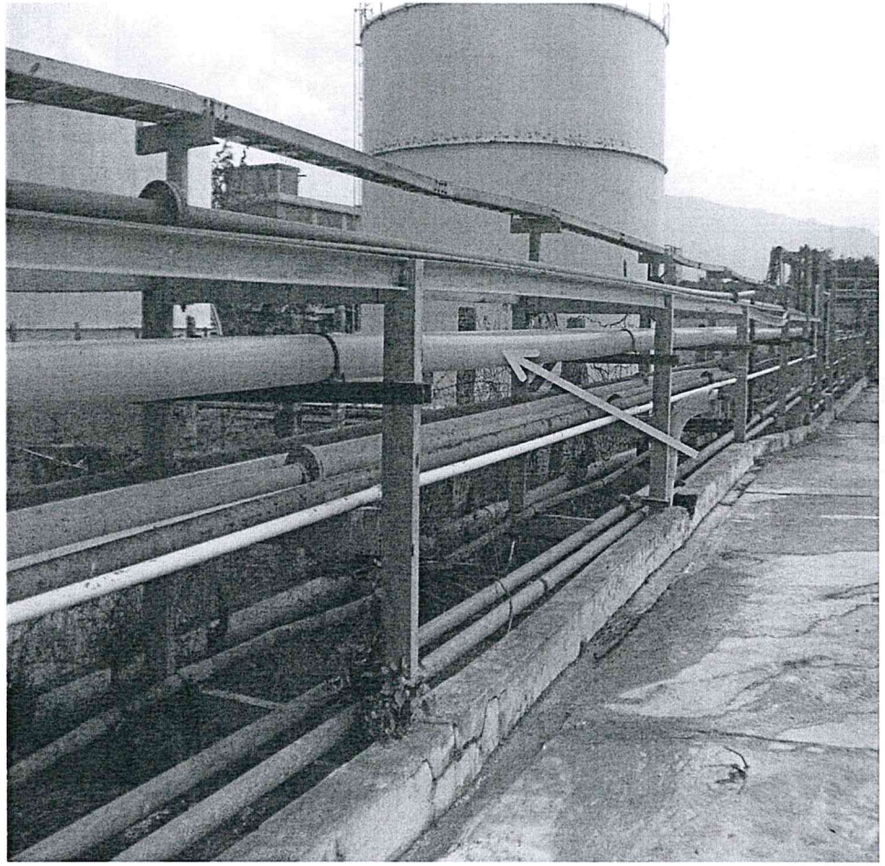


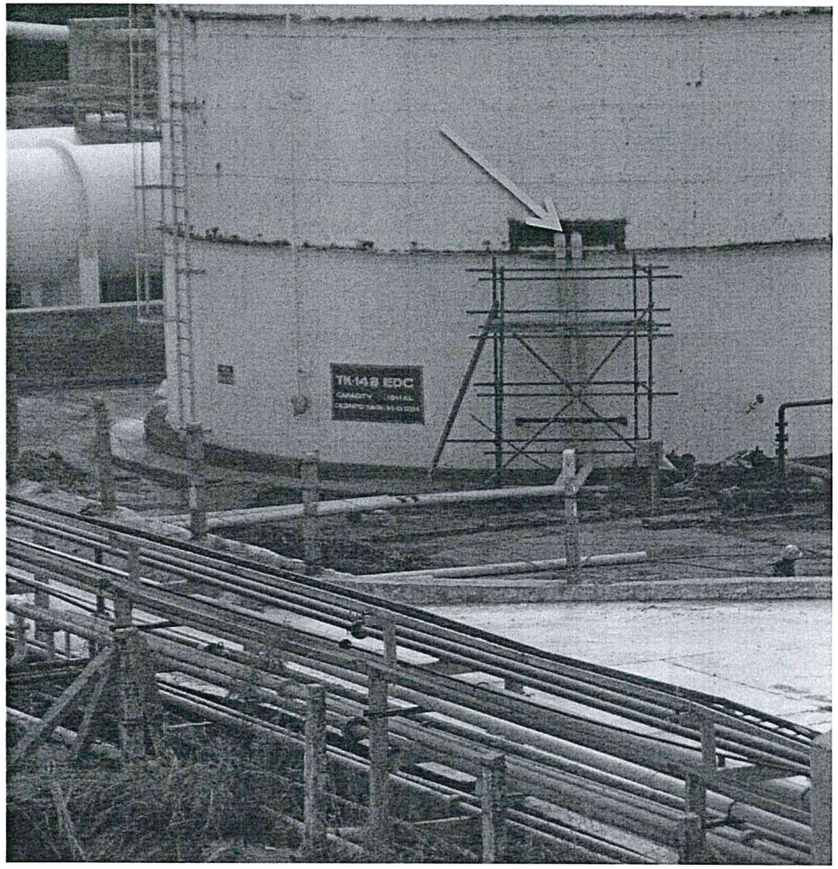
New poly PVC line erection



Old & new poly PVC line to RWCS tank -5

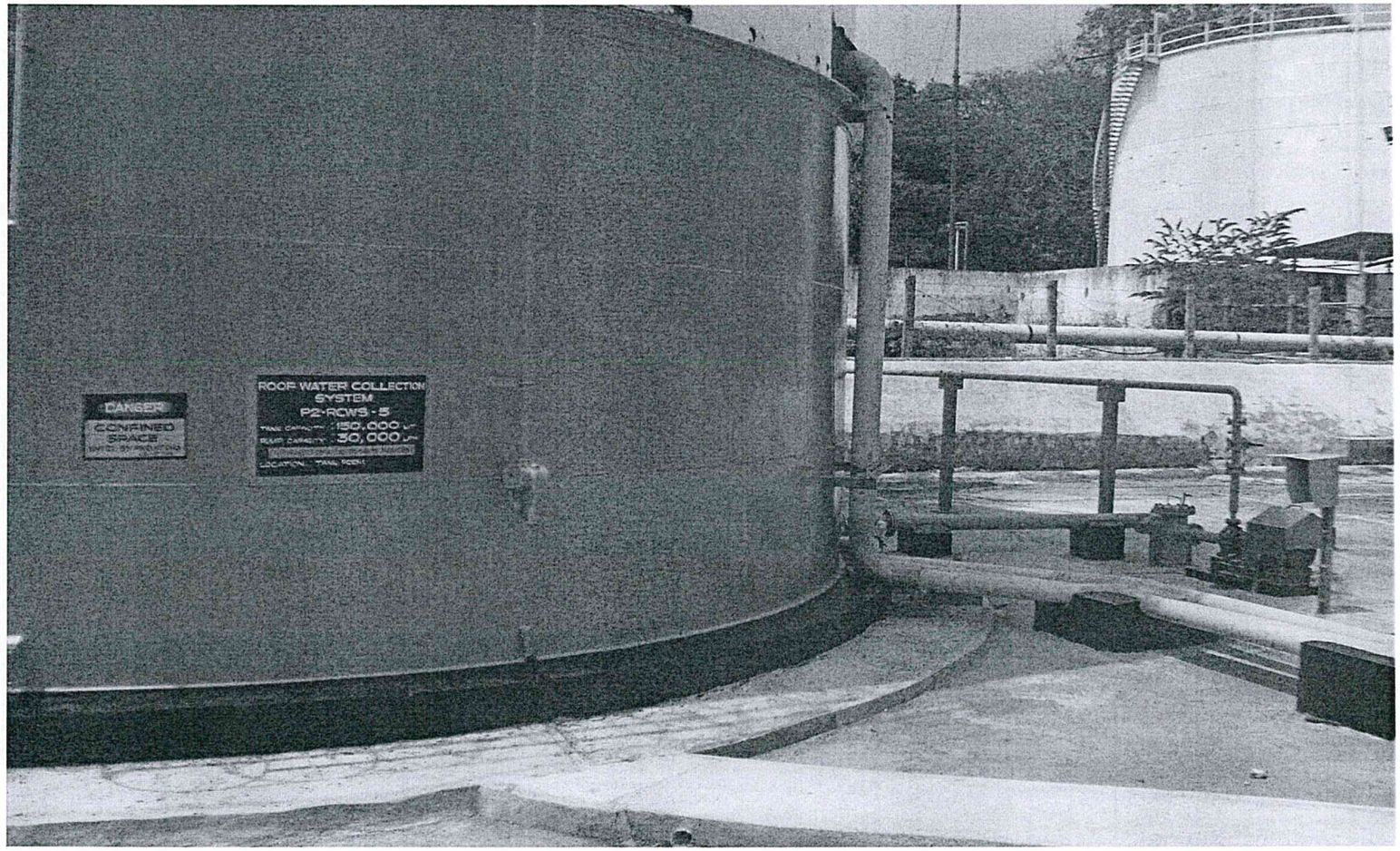
SCHEME 5 – STAGE WISE PROGRESS





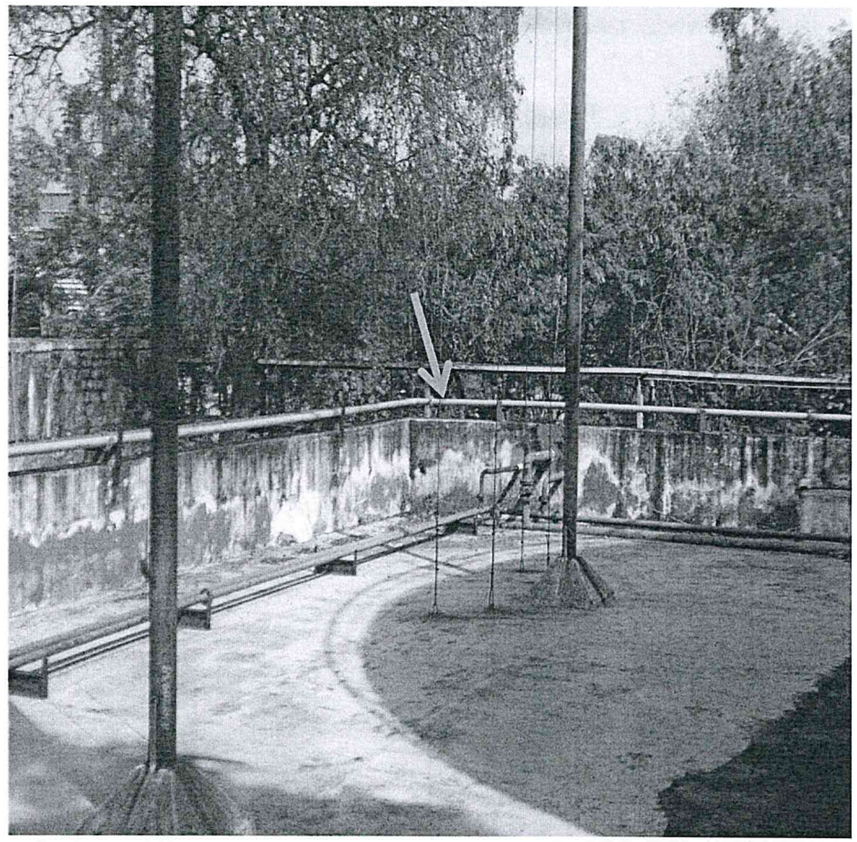
Old & new poly PVC line to RWCS tank - 5

SCHEME 5 – STAGE WISE PROGRESS



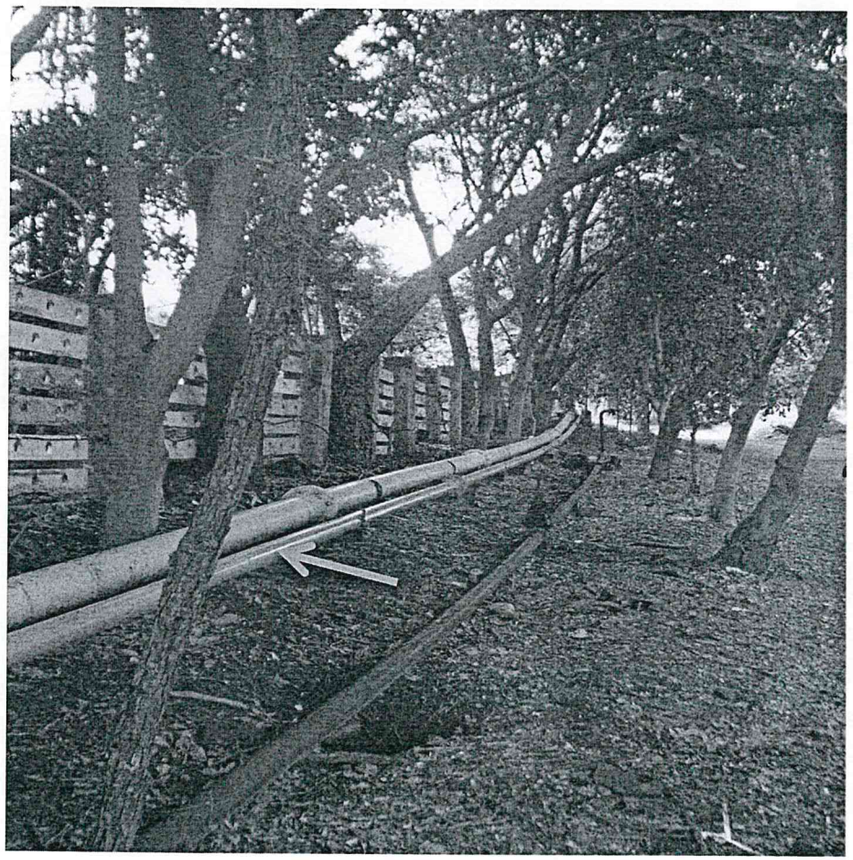
RWCS tank -5 with pump

SCHEME 5 – STAGE WISE PROGRESS



M-46 pump discharge to RWCS tank - 6

SCHEME 5 – STAGE WISE PROGRESS

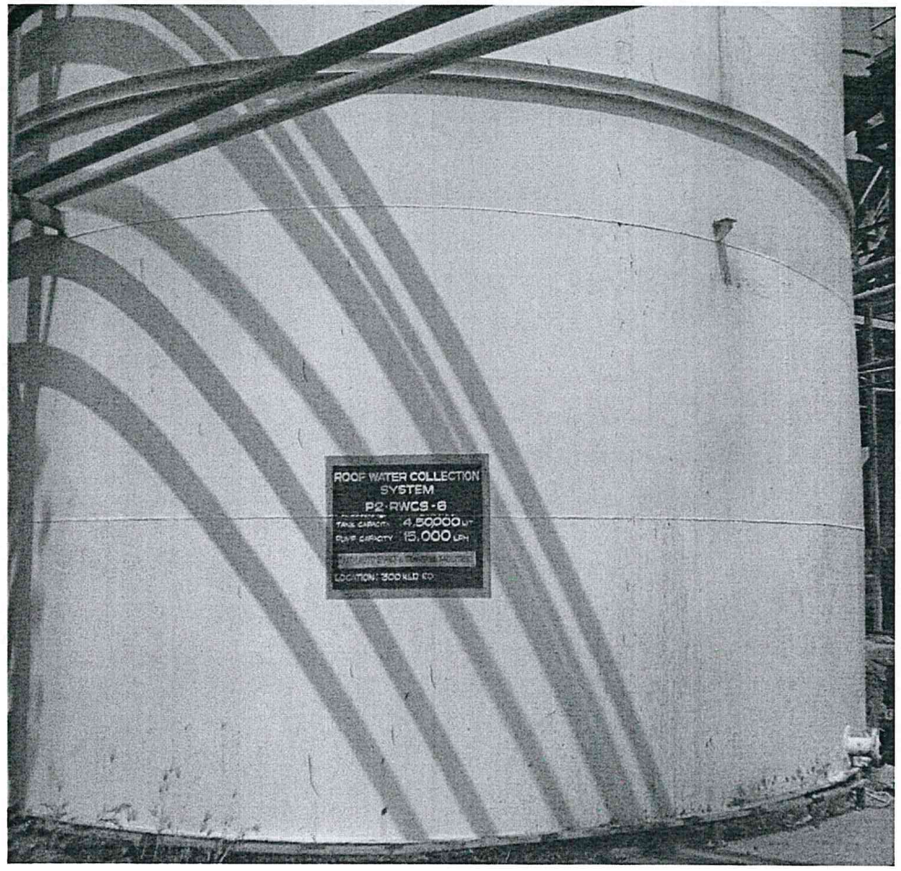


M-46 pump discharge
to RWCS tank -6

Inlet to RWCS tank -6
(450KL tank)

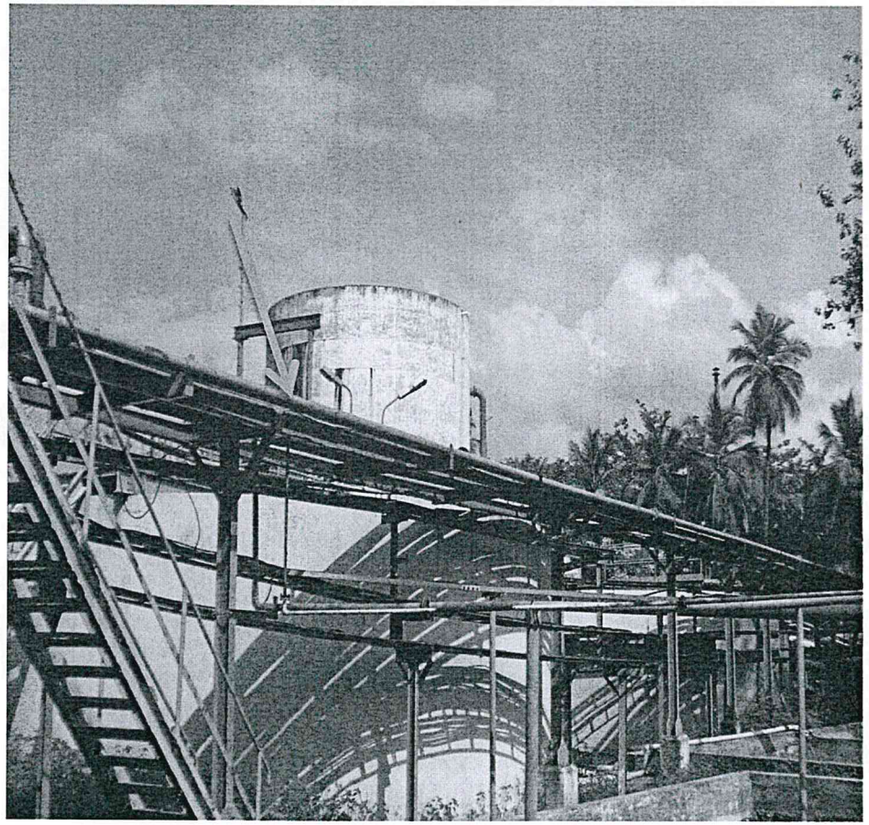
SCHEME 6 – STAGE WISE PROGRESS

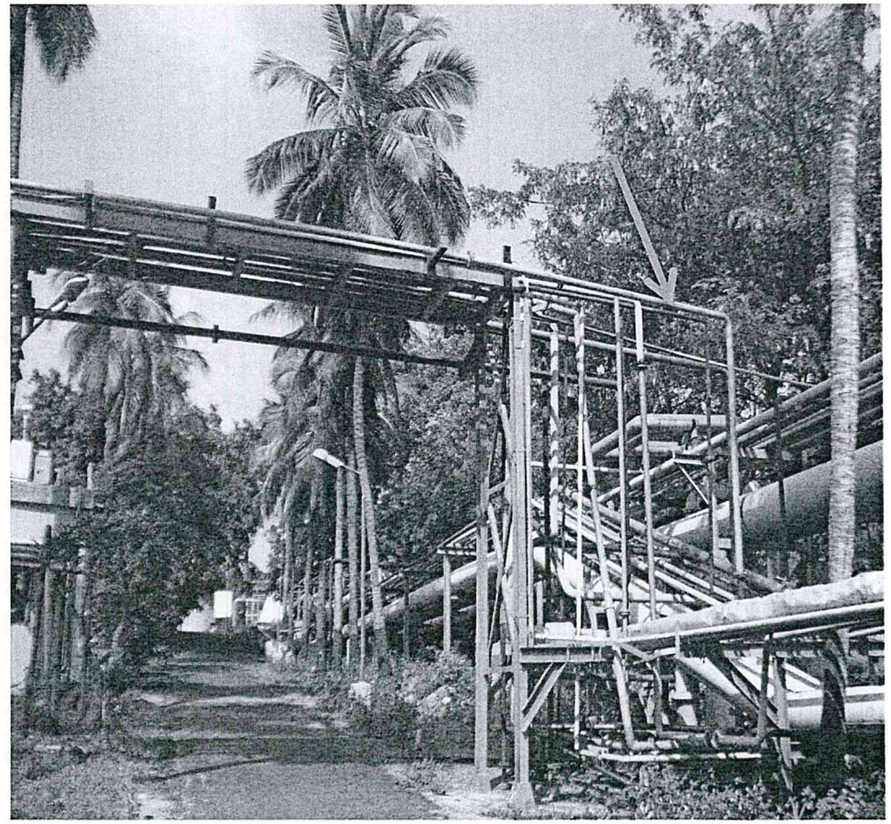
RO plant treated water discharge



RWCS tank 6 (RO 450KL tank)

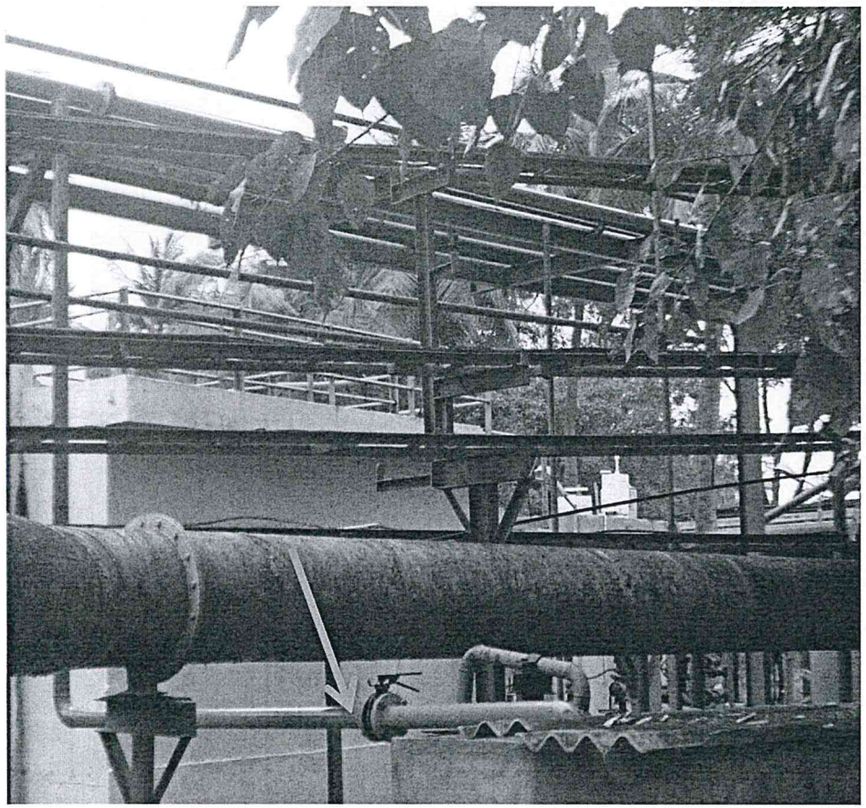
SCHEME 6 – STAGE WISE PROGRESS



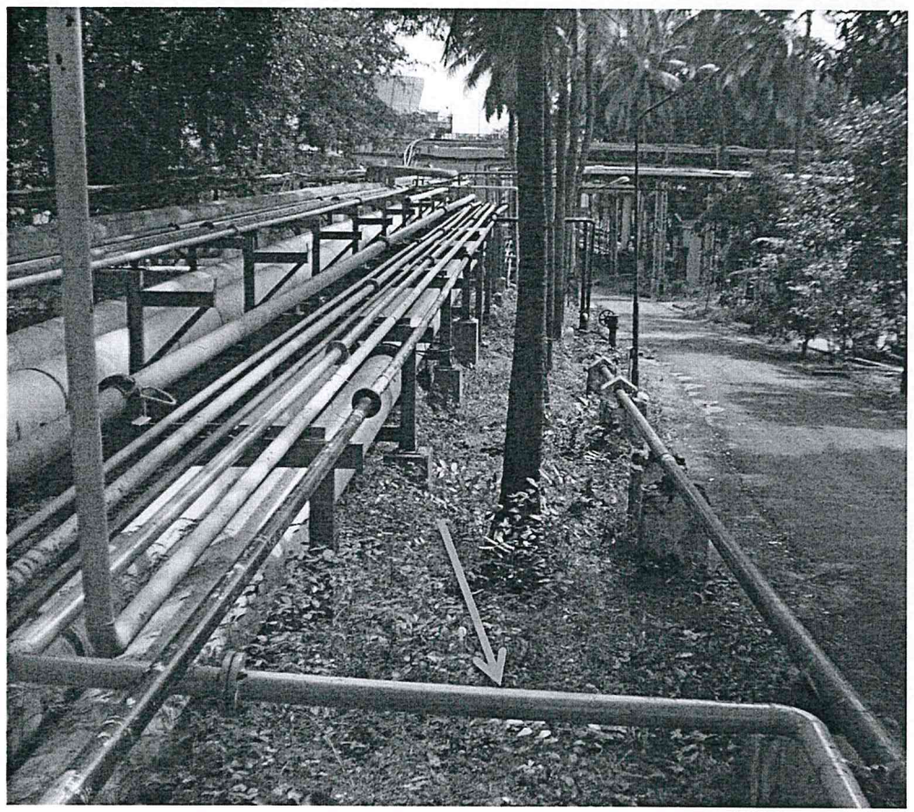


RO discharge / RWCS tank -6 bypass to cooling tower makeup,
Industrial tank and 25000KL tank

SCHEME 6 – STAGE WISE PROGRESS



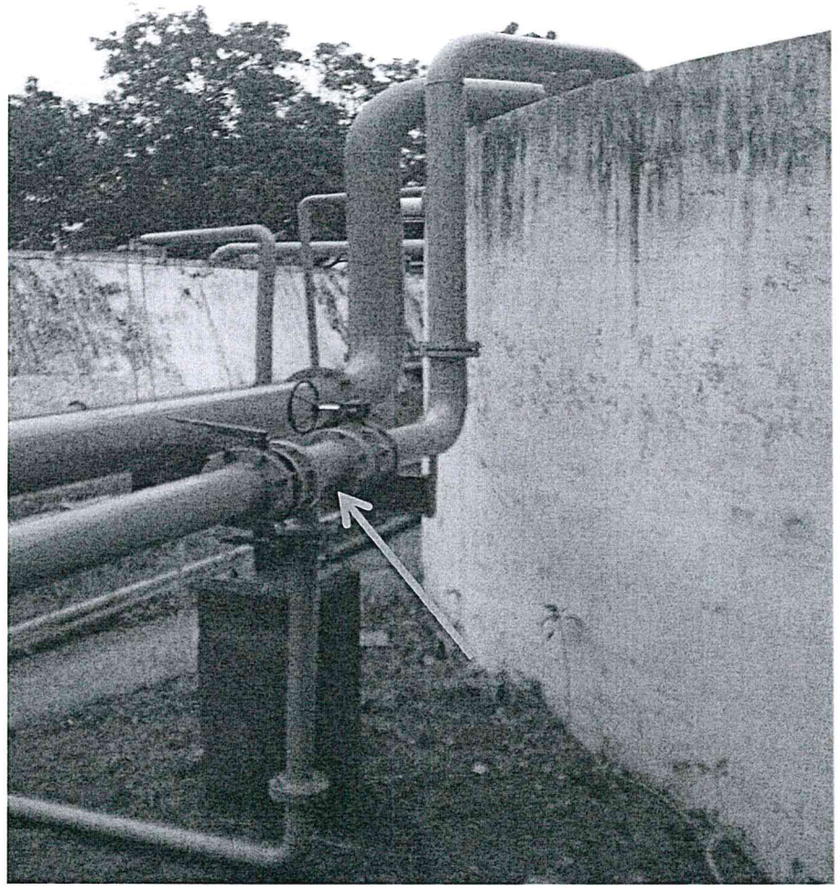
Cooling tower Makeup



To Industrial tank & 25000KL tank

SCHEME 6 – STAGE WISE PROGRESS

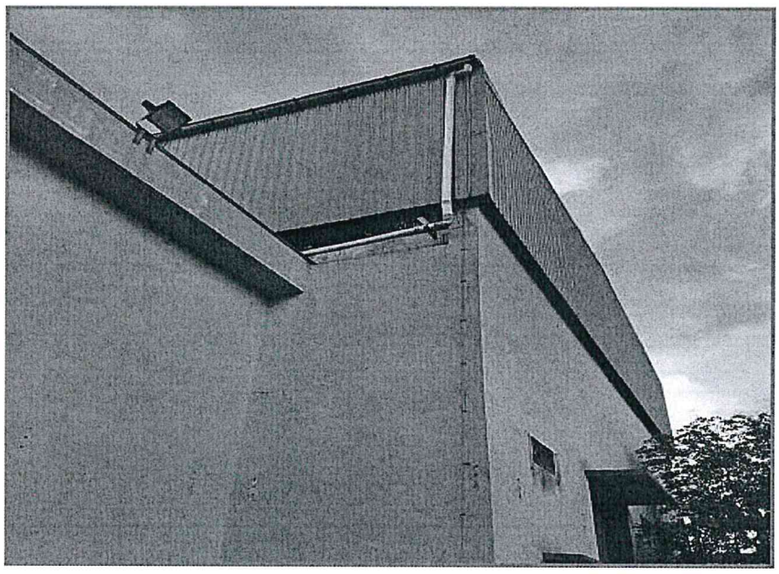
Industrial tank inlet

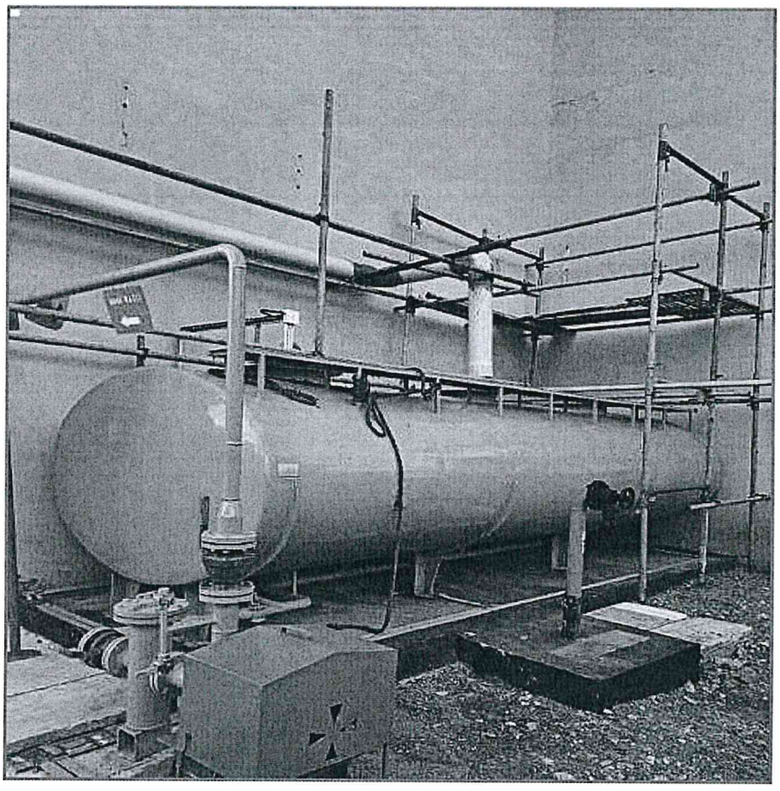


25000KL tank interconnection

Roof Water Collection Scheme- Plant-III

MEMBRANE PROCESS BUILDING:





Item No.13 BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI

Application No. 16 of 2019 (SZ)

(Through Video Conference)

IN THE MATTER OF:

K. Gemini ... Applicant

Vs.

Union of India & ors .Respondents

Date of hearing:- 6-10-2020

CORAM:
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER

For Applicant(s) : Mr. T. Sai Krishnan
For Respondent(s Mr. G.M. Syed Nurullah Sheriff for R1

Mr. M. Mani Gopi for R2

Mr. C. Kasirajan and
MR. AJITH KUMAR for R3
Mr. N.L. Raja, Sr. Advocate and
Mr. T. Ravichandran for R4

O R D E R

As per order dated 1.6.2020, this Tribunal had considered the report of the committee constituted by us and directed the committee to seek the assistance of NGRI to conduct the study by themselves by appointing them and submit a further report and posted the case to 21.8.2020 for that purpose. The case was advanced to consider I.A.No.55 of 2020 filed by the project proponent viz., M/s Chemplast Samkar Ltd., in respect of the direction given by the Pollution Control Board, insisting for payment of Rs.82,50,000/- (Rupees Eighty Two Lakhs and Fifty Thousand only) for conducting the study

by the National Geophysical Research Institute (NGRI) and this Tribunal had considered the same and directed that enforcement of that notice shall not be proceeded with till this Tribunal consider the objection and also directed the Pollution Control Board as well as M/s Chemplast Samkar Ltd unit to consider the question as to whether the amount can be either appropriated from the environmental compensation deposited and lying in the Pollution Control Board or by the unit, invoking the Corporate Social Responsibility Fund as this is required for general study to improve the water quality in that area, if it is contaminated and submit a response regarding the same and posted to case to the original date viz., 21.8.2020. On 21.8.2020, this Tribunal had adjourned the case to 15.9.2020, as the objection said to have been filed has not been received. On 15.9.2020, it was adjourned to today for consideration of the report by notification.

2. When the matter came up for hearing today through Video Conference, Mr. T. Sai Krishnan through Mr. Lakshminarasimhan represented the applicant. Mr. G.M. Syed Nurullah Sheriff represented the first respondent, Mr. Mani Gopi represented the second respondent, Mr. Kasirajan through Mr. Ajith Kumar represented the third respondent and Mr. N.L. Rajah, Senior Counsel along with Mr. T. Ravichandran represented the fourth respondent.

3. The fourth respondent has filed their objection to the report of the committee. Further, they have expressed their inability to spend this amount from the Corporate Social Responsibility Fund, as it was intended for several

other projects already launched by them detailed in the objection filed and the same cannot be diverted.

4. So under these circumstances, since it is a general study to be conducted to assess the water quality in that area for the benefit of the local people, we direct the Pollution Control Board to appropriate this amount from the environmental compensation lying with them and thereafter when they are assessing the environmental compensation from the persons to be recovered in proportion to the level of pollution contributed by the units, including the fourth respondent, if any and recover this portion of the amount also from those persons, as part of the environmental compensation fixed or assessed, so that the necessary study to be conducted for the benefit of the people can be proceeded with. The committee is also directed to consider the reply/objection filed by the fourth respondent and compliance of the recommendations made by the committee which the fourth respondent is expected to carry out and if there is any deficiency, they are directed to mention the same also in the further report to be filed.

5. We are not satisfied with the manner in which MoEF & CC has given their response regarding the applicability or otherwise of the Environment Clearance for the unit in question launched by fourth respondent - M/s Chemplast Samkar Ltd and when this was pointed out, learned counsel appearing for the MoEF & CC submitted that he will file a fresh additional reply, clarifying that aspect, on the basis of the nature of activity that is being done by the fourth respondent - M/s Chemplast Samkar Ltd unit. They are

directed to submit additional reply, as mentioned above before the next hearing date.

6. The learned counsel appearing for the applicant submitted that objection or reply have not been served on them. The respective counsel are directed to serve the copy of the objections/reply/compliance report submitted by them to the counsel for the applicant as well as other counsel appearing for other parties.

7. The committee is directed to complete the study and submit the report on or before **6.1.2021**to this Tribunal by e-filing at ngtszfiling@gmail.com .

The Registry is directed to communicate this order to the members of the committee by e-mail immediately so as to enable them to comply with the direction.

For consideration of further report, post on **6.1.2021**.

.....J.M.
(Justice K. Ramakrishnan)

.....E.M.
(Shri. Saibal Dasgupta)

O.A.16/2019
6.10.2020
Kkr

TAMILNADU POLLUTION CONTROL BOARD

AUTHORISATION No. 20HFC18310223 dated 25/08/2020

Proceeding No. T2/TNPCB/F.0007SLM/HWA/RL/SLM/2020 dated 25/08/2020

Sub: Tamil Nadu Pollution Control Board – Hazardous Waste Authorization-Fresh- M/s. CHEMPLAST SANMAR LIMITED -PLANT-IV, S.F.No. 59/8 (part), 60 (part), 61/2 (part), 61/3(part) , 64/1B (part), 64/2 (part), 64/3 (part), 64/4 (part), VEERAKKALPUDUR Village, METTUR Taluk, Salem District - Authorization under Rule 6 (2) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 enacted under Environment (Protection) Act, 1986 – Issued-Reg.

Ref: 1. Unit's application for Authorization vide No.18310223 dated 03/11/2018
2. HWA-IR.No.0007SLM/HWA/RL/DEE/SLM/2020 dated 14/07/2020

FORM 2

[See rule 6 (2)]

FORM FOR GRANT OR RENEWAL OF AUTHORISATION TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

1. Number of authorization: 20HFC18310223 and dated : 25/08/2020

2. The Chairman of M/s. CHEMPLAST SANMAR LIMITED -PLANT-IV is hereby granted an Authorisation based on the enclosed signed Inspection report for Generation, Collection, Storage, Transportation, Co-processing, Disposal of hazardous or other wastes or both on the premises situated at S.F.No. 59/8 (part), 60 (part), 61/2 (part), 61/3(part) , 64/1B (part), 64/2 (part), 64/3 (part), 64/4 (part), VEERAKKALPUDUR Village, METTUR Taluk, Salem District.

Sl No	Schedule / Name of the Processes	Name of Hazardous Waste (with category No)	Quantity	Activities for which Authorization is issued
1	Schedule I /5. Industrial operations using mineral or synthetic oil as lubricant in hydraulic systems or other applications	5.1-Used or spent oil	5 T/Annum	GenerationCollection, Storage, Transportation, Co-processing,Disposal to Authorized recyclers
2	Schedule I /5. Industrial operations using mineral or synthetic oil as lubricant in hydraulic systems or other applications	5.2-Wastes or residues containing oil	2 T/Annum	GenerationCollection, Storage, Transportation, Co-processing,Disposal to Authorized recyclers
3	Schedule I /33. Handling of hazardous chemicals and wastes	33.1-Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	100 T/Annum	GenerationCollection, Storage, Transportation, Co-processing,Disposal to Authorized recyclers
4	Schedule I /36. Purification process for organic compounds/solvents	36.2-Spent carbon or filter medium	265 T/Annum	GenerationCollection, Storage, Transport, Disposal for Co-processing in cement kilns [M/s. Dalmia cement (Bharat) Ltd, Ariyalur]

3. This authorization shall be valid for a period upto 31/03/2025.

The Authorization is issued subject to the following general and special conditions annexed.

R. Kannan Digitally signed by R. Kannan Date: 2020.08.26 18:39:55 +05'30'

For Member Secretary
Tamil Nadu Pollution Control Board
Chennai

42

தமிழ்நாடு

TAMILNADU POLLUTION CONTROL BOARD

A. GENERAL CONDITIONS OF AUTHORIZATION

1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by Tamil Nadu Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this Authorisation.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorised shall implement Emergency Response procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire ,etc and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorised shall comply with the provisions outlined in the CPCB guidelines on "Implementing Liabilities for Environmental damages due to Handling and Disposal of Hazardous Wastes and Penalty".
7. It is the duty of the authorized person to take prior permission of Tamil Nadu Pollution Control Board to close down the facility.
8. The imported Hazardous and other wastes shall be fully insured for transit as well as the accidental occurrences and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The Hazardous and other wastes which gets generated during recycling or reuse or recovery or pre-processing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of Authorisation.
11. The importer or Exporter shall bear the cost of import or export or mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the MoEF and CC or CPCB from time to time.
14. Annual returns shall be filed by June 30th for the period ending 31st March of the previous financial year.

B. SPECIFIC CONDITIONS - HW Generator

1. The occupier/generator shall be responsible for safe and environmentally sound management of hazardous and other wastes.
2. The occupier shall follow the following steps for the management of hazardous and other wastes. (a) prevention (b) minimization (c) reuse (d) recycling (e) recovery, utilisation including co-processing and (f) safe disposal
3. The occupier shall take all the steps while managing hazardous and other wastes - (a) To contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and (b) To provide persons working in the site with appropriate training, equipment and the information necessary to ensure their safety.
4. The occupier shall store the hazardous and other wastes for a period not exceeding ninety days and shall maintain a record of sale, transfer, storage, recycling, recovery, pre-processing, co-processing and utilisation of such wastes and make these records available for inspection:
5. The hazardous and other wastes shall be stored temporally in an isolated area earmarked for the purpose within the occupier's premises (it shall not be accessible to rain water) till scientific disposal. The storage area shall be fenced properly and a sign of danger shall be placed at the storage site.
6. The containers holding the hazardous and other wastes shall be kept in good condition and made of materials which can withstand the physical and environmental conditions during storage and transportation. Only properly cleaned containers shall be used for storage of hazardous and other wastes.
7. The occupier handling hazardous or other wastes shall maintain records of such operations of generation, handling, storage and disposal as per Form 3.
8. The hazardous and other wastes generated in the establishment of the occupier shall be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility.

TAMILNADU POLLUTION CONTROL BOARD

9. The occupier handling hazardous or other wastes shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time

10. The labelling of package of hazardous or other wastes shall be done as per Form 8. The label shall be of non-washable material, weather proof and easily visible.

11. The hazardous and other wastes shall be transported from the occupier's establishment to an authorised actual user or to an authorised disposal facility in accordance with the provisions of these rules.

12. The transport of the hazardous and other wastes shall be in accordance with the provisions of these rules and the rules made by the Central Government under the Motor Vehicles Act, 1988 and the guidelines issued by the Central Pollution Control Board from time to time in this regard..

13. The occupier shall provide the transporter with the relevant information in Form 9, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per Form 8

14. The authorisation for transport shall be obtained either by the sender or the receiver on whose behalf the transport is being arranged.

15. The transporter/sender of the hazardous and other wastes shall prepare and maintain manifest in Form 10.

16. The occupier or the operator or the transporter shall immediately intimate TNPCB through telephone, e-mail about the accident and subsequently send a report in Form 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation

17. The occupier who intends to get its hazardous and other wastes treated and disposed of by the operator of a treatment, storage and disposal facility shall give to the operator of that facility, such specific information as may be needed for safe storage and disposal.

18. The occupier shall be liable for all damages caused to the environment due to improper handling and management of the hazardous and other wastes.

19. The occupier handling hazardous and other wastes shall submit annual returns containing the details specified in Form 4 to TNPCB on or before the 30th day of June of every year for the preceding period April to March.

20. Any increase in quantity of handling of hazardous and other wastes, any change in category of hazardous and other wastes and any change in method of handling operations shall be brought to the notice of the TNPCB and fresh authorization shall be obtained.

ADDITIONAL SPECIFIC CONDITIONS

1.The unit shall ensure that all provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended are complied.

2. The hazardous wastes shall be stored in a compatible container on an impervious platform in closed shed, which shall be provided with requisite fire protection system, personal protective equipment and safety system.

3. The unit shall maintain Form 3 and Form 4 prescribed under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended.

4. The Hazardous wastes shall be disposed only with manifest that shall be maintained Form –10 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

5. The manifest shall be endorsed by the despatcher, transporter and receiver of Hazardous wastes. The endorsed copy of the manifest shall be furnished to TNPCB as and when such disposal is made.

6. The unit shall dispose the used oil to the units having valid authorization of the board and registrations certificates as recyclers. Necessary endorsement shall be made in respect of the quantity transacted in the original letter of registration issued to the recycling unit lifting used oil.

7. The unit shall ensure that the HW categorized under 36.1 Spent carbon or filter medium is disposed in the cement kilns as reported.

TAMILNADU POLLUTION CONTROL BOARD

8. The unit shall comply with the direction issued by Hon'ble NGT in the case filed in O.A.no.16/2019 by Gemini Vs Union of India and others.

R. Kannan Digitally signed by R. Kannan Date: 2020.08.26 18:40:15 +05'30'

For Member Secretary
Tamil Nadu Pollution Control Board
Chennai

To
The Chairman
CHEMPLAST SANMAR LIMITED -PLANT-IV
9, Cathedral Road
Chennai-86
Pin:600086

Copy to:

1. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Salem.
2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, SALEM.

GLens Innovation Labs Pvt Ltd.

NABL ACCREDITED AS PER ISO/IEC 17025 : 2017, CERTIFIED AS PER ISO 9001:2015 & ISO 45001 : 2018

TEST REPORT

Report No : EN21020045-01 **Report Date** : 02 Mar 2021

SAMPLE DRAWN BY LABORATORY

Customer Name : M/S. Chemplast Sanmar Limited,Plant-IV

Customer Address : Raman Nagar PO, Mettur Dam-636403

Sample Name : Hazardous waste

Sample Description Spent Alumina

Sample No : EN21020045-01

Sample Identification : NA **Sample Received on** : 22 Feb 2021

Sample Condition : Fit for Analysis **Test Started on** : 22 Feb 2021

Sample Quantity : 2 kg **Test Completed on** : 01 Mar 2021

Test result

S.No	Test Name	Test Method	Results	Units
1	Antimony as Sb	GL/EN-INS/SOP/22	BLQ(LOQ:2.0)	mg/kg
2	Arsenic as As	GL/EN-INS/SOP/22	BLQ(LOQ:2.0)	mg/kg
3	Cadmium as Cd	GL/EN-INS/SOP/22	BLQ(LOQ:2.0)	mg/kg
4	Calcium as Ca	GL/EN/SOP/100	BDL(DL:0.2)	mg/kg
5	Chromium as Cr	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
6	Iron as Fe	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
7	Lead as Pb	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
8	Mercury as Hg	GL/EN-INS/SOP/22	BLQ(LOQ:2.0)	mg/kg
9	Nickel as Ni	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
10	Selenium as Se	GL/EN-INS/SOP/22	BLQ(LOQ:2.0)	mg/kg
11	Tin as Sn	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
12	Total Organic Carbon	GL/EN/SOP/86	0.24	%
13	Cobalt as Co	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
14	Vanadium as V	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
15	Chloride as Cl	GL/EN/SOP/097	BDL(DL:10.0)	mg/kg
16	Silica as SiO2	GL/EN/SOP/087	22.80	%

Authorized Signature
E. Prithivirajan
Manager - Lab

#.6/1, Ist Floor, Sri Jothi Complex, Murugesan Street, Balavinayagar Nagar, Arumbakkam, Chennai – 600 106.

WARNING: Attention is drawn to the limitations of the Liability, indemnification and jurisdictional issues established there in any holder of this document is advised that information contained hereon reflex the company's findings at the time of its intervention only and within the limits of client's instructions, if any. The company's sole responsibility is to its client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction document

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GLens Innovation Labs Pvt Ltd.

NABL ACCREDITED AS PER ISO/IEC 17025 : 2017, CERTIFIED AS PER ISO 9001:2015 & ISO 45001 : 2018

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Report No : EN21020045-01 **Report Date** : 02 Mar 2021

S.No	Test Name	Test Method	Results	Units
17	Sulphur as SO3	GL/EN/SOP/087	55	mg/kg
18	Aluminium as Al	GL/EN-INS/SOP/21	66799	mg/kg
19	Thallium as Tl	GL/EN-INS/SOP/22	BDL(DL:0.2)	mg/kg
20	PCB/PCT	GL/EN-INS/SOP/34	BDL(DL:0.2)	µg/kg
21	Tellurium as Te	EPA Method 29	BDL(DL:2.0)	mg/kg
22	Volatile Organic Hydrocarbon	GL/EN-INS/SOP/31	BDL(DL:0.1)	mg/kg

Compound Detected: Screening

Cyclohexanol,2-Methyl,Acetate (1R Trans)
Benzene,2-ethyl-1,3-dimethyl-
Benzene,1,2,4,5-Tetramethyl
Benzene,1,2,3,5-Tetramethyl
1H-Indene,2,3-dihydro-4-methyl
Benzene,1,2,3,4-Tetramethyl
Naphthalene,1,2,3,4-Tetrahydro-
Urea,tetrabutyl-
Benzene,1,3,5-triethenyl-2,4,6-triethyl-
1H-Indene,2,3-dihydro-4-methyl
Benzene,1,3-diethyl-5-methyl
Benzene,(1,1-dimethylpropyl
Benzene 1,3-dimethyl-5-(-methylethyl)-

Note: BLQ-Below Limit of Quantification, LOQ-Limit of Quantification. NA-Not Applicable

.....End of Report.....

Authorized Signature
E. Prithivirajan
Manager - Lab

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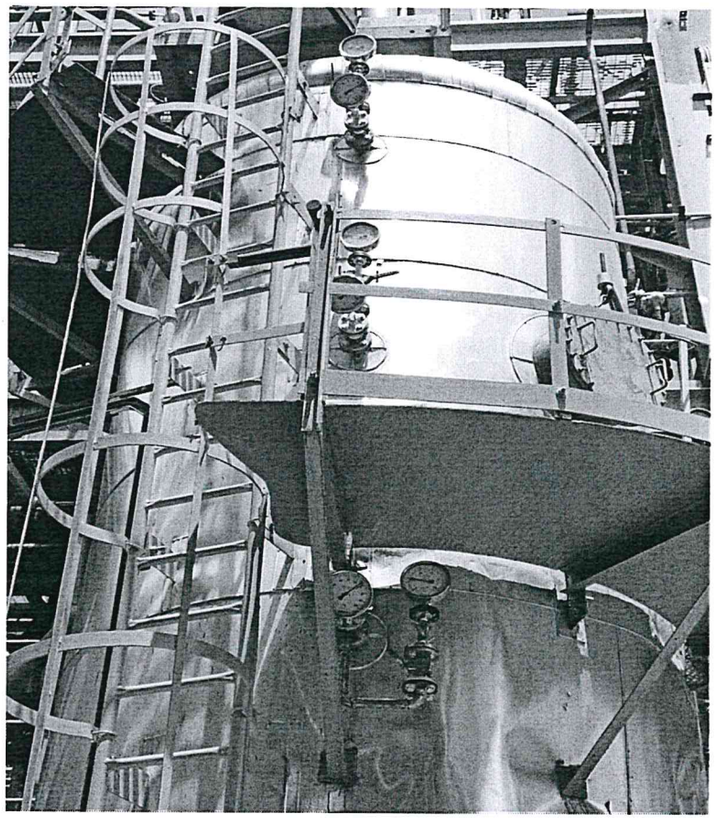
The Director of Industrial Safety and Health (OSD), Directorate of Industrial Safety and Health , Chennai recommended to carry out the following measures:

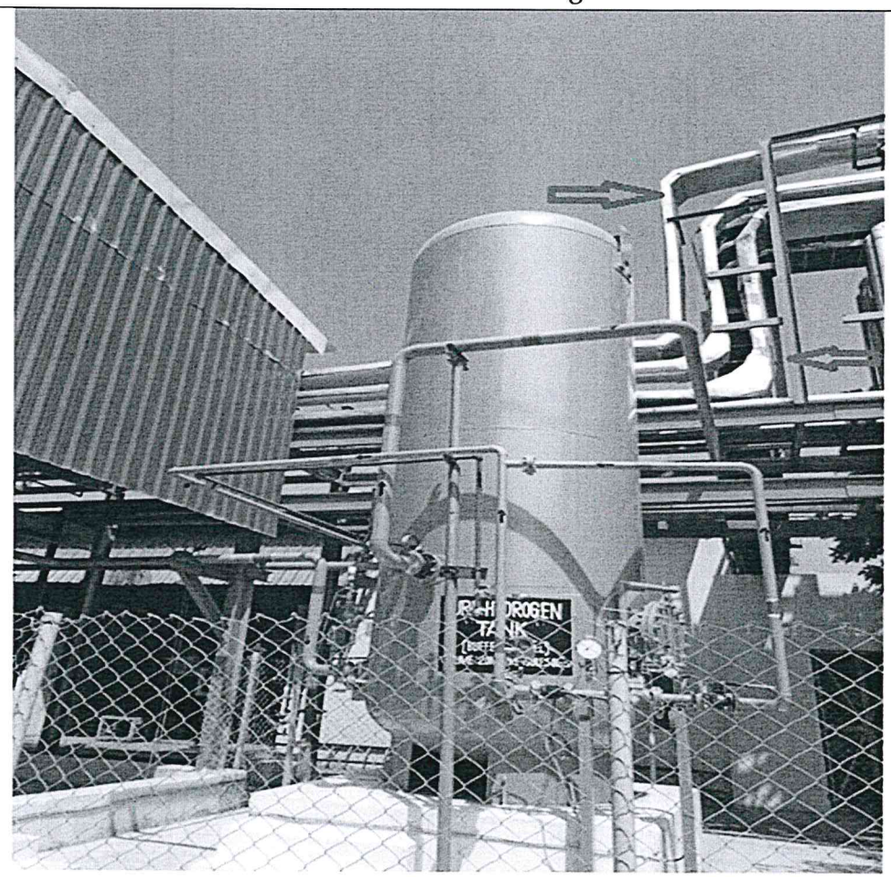
Ss.NO	Description	Remarks
01	For Hydrogenator, temperature and pressure gauges shall be fixed at upper middle and lower level for physical measurement and maximum permissible level marking in color is necessary. Hence temperature and pressure gauges shall be fixed at upper, middle and lower level for physical measurement and maximum permissible level marking in color.	For Hydrogenator, temperature and pressure gauges fixed at upper, middle and lower level for physical measurement and maximum permissible level marked in colour.

Hydrogenator after installation of temperature & pressure gauges



02	The electrical cable tray & hydrogen storage tank shall be separated by a fire resistant barrier	All the cables, cable trays adjacent to the Hydrant buffer vessel are separated by providing fire resistant cladding for the cables, cable trays. Additionally a fire resistant painting has been done over the cladding.

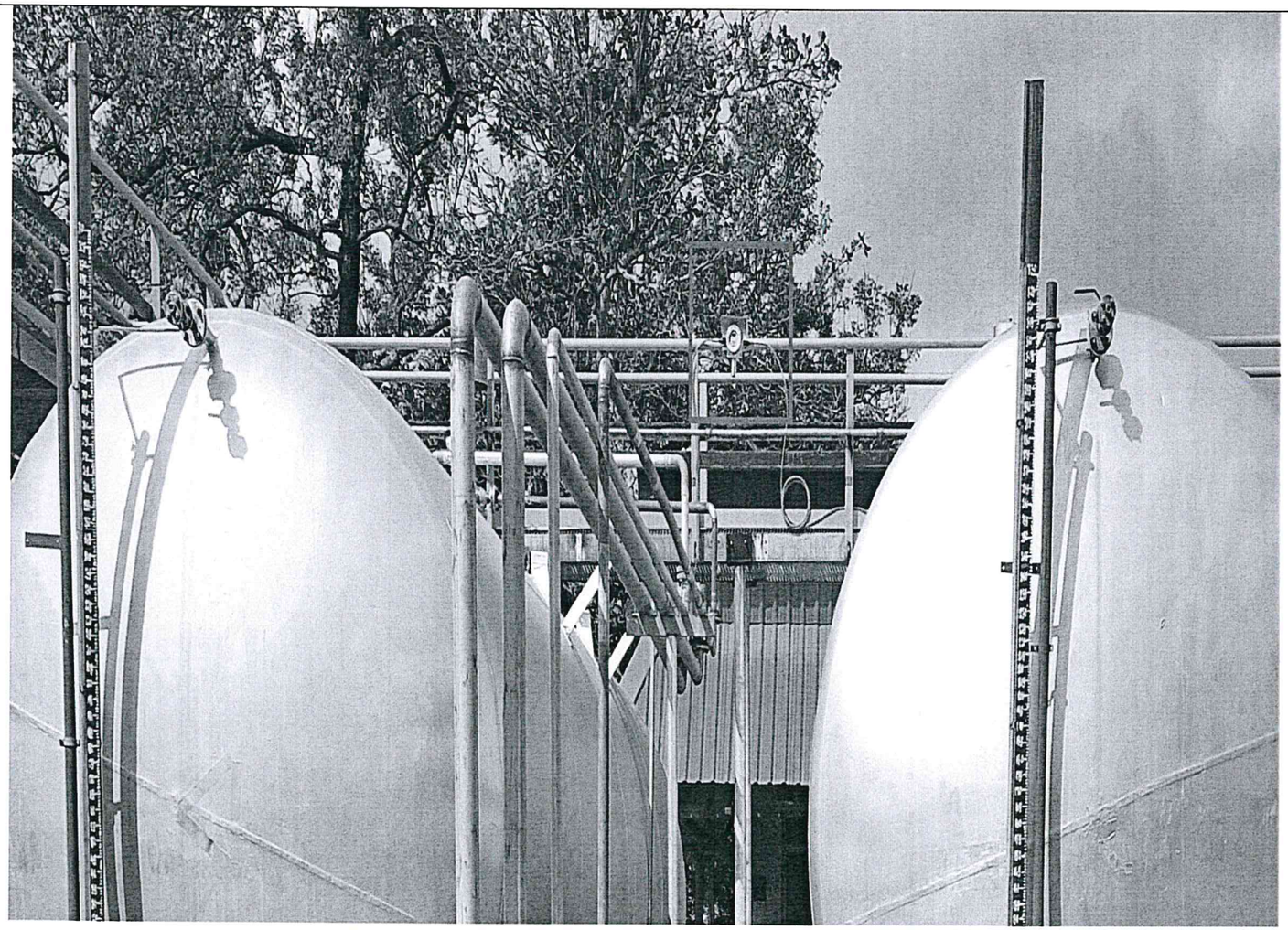
After Cable Cladding



03	The purity of hydrogen before entering Hydrogenator shall be checked for impurities (ie.,) to avoid carbon steel waste particles	Hydrogen Purity is being monitored regularly and recorded in Plant-IV. To avoid carbon steel waste particles entering in to the process, filters are available to capture the particles before entering in to the process located in AO1 & AO2. The materials of construction of the filters are SS 316. Also all the pipe lines and equipment at the downstream of the filters are either Aluminum (AO1) or SS 316 (AO2).

04	VOC (Volatile Organic Compounds) monitor shall be provided near the final product outlet or process completion area	VOC monitor provided in the final product storage tank area.

VOC Meter installed picture for reference



05	As the compatible raw materials are stored in the ground floor in case of fire/explosion the buildings, the structures including the roof sheet will collapse. Hence, such storages shall be shifted to safe place. Also, Electrical connections shall be removed (or) made flame proof. Smoke detectors shall be provided.	All the Electrical connections like light fittings & exhaust fan are made flame proof. Two numbers Smoke/ fire detectors are provided.
Before		After