

Report on M/s UNICAST ALLOYS PRIVATE LIMITED located at S.F No. 98/1D, 100 & 101 Part, 78/1A, 78/3A, 98/3A, Kurumbapalayam Village, Pollachi Taluk, Coimbatore District and M/s HITECH DIE CAST PRIVATE LIMITED located at S.F No. 77/1, 77/2& 101 Part, Kurumbapalayam Village, Pollachi Taluk, Coimbatore District as per the orders of the Hon'ble National Green Tribunal (SZ), Chennai order in O.A No. 26 of 2016 Dated: 20.07.2020

1. Background:

The Hon'ble National Green Tribunal, Southern Zone, Chennai in the matter of O.A No. 26 of 2016 filed by Filed by Disha – A Life School and P.K.D College of Education & Others against the Member Secretary, Tamilnadu Pollution Control Board & others including the unit of M/s UNICAST ALLOYS PRIVATE LIMITED located at S.F No. 98/1D, 100 & 101 Part, 78/1A, 78/3A, 98/3A, Kurumbapalayam Village, Pollachi Taluk, Coimbatore District and M/s HITECH DIE CAST PRIVATE LIMITED located at S.F No. 77/1, 77/2& 101 Part, Kurumbapalayam Village, Pollachi Taluk, Coimbatore District, order dated 20.07.2020 inter alia as follows:

“It is seen from the recommendation portion that some directions have been given to the respondents 4 & 5 to implement the specific recommendations to mitigate the fugitive emission from the unit since the applicant's school premises and the respondent units are located in wind prone area.

So, the Pollution Control Board is directed to file a further report regarding the compliance of the recommendations made by them to avoid possible pollution that is likely to cause and they are also directed to assess environmental compensation if any, for the damage caused to the environment on account of the violation noted by them and the recommendations given by them for rectifying the same and submit a report to this Tribunal within a period of one month. In the meantime, the parties are also at liberty to file their objections to the report.

For considering of further report and also submission of further report and objection if any to be filed by the parties, post on 02.09.2020.”

2. Present Status of M/s Unicast Alloys Private Ltd:

The respondent unit and petitioner school premises were inspected on 27-08-2020 with the 4th and 5th respondent and the following were observed:

1. The unit was in operation.
2. The trade effluent generated from wet scrubber bleed off is disposed in the solar evaporation pan.
3. No seepage or overflow was observed in the SEP.
4. The air pollution control measures such as Venturi Wet scrubber with stack with interlocking system attached to the induction furnace, Bag filters with stack attached to the Shot Blasting Machine, Cyclone with pulse jet bag filter with stack attached to the Sand plant, Bag filters with stack attached to the fettling section were in operation.
5. The unit had installed the Interlocking system with limit switch to movable suction hood with stack as air pollution control measures attached to the Induction furnace and the same was in operation.
6. The unit had provided an extra hood cover for absorbing the gaseous emissions generated during transfer of molten metal from Furnace ladle to pouring ladle.
7. The unit has maintained necessary log book for the operation of the air pollution control measures with energy meter readings.
8. The western side (facing school premises) of the shot blasting, fettling section shed had been entirely covered by sheets to cover the entire vertical face with closing door.
9. The unit has provided water mist sprinklers along the vehicle movement area near the petitioners school boundary and the same was under operation. Further the unit has automated the water sprinkling system in the premises with auto on/off system with timer and the same was in operation (Photographs enclosed)
10. The unit is using Green sand for sand moulding process and the used sand is reused.
11. The unit has shifted the fresh mould sand storage towards the eastern side of the premises and the previous storage area was utilized for green belt development. (photos enclosed)
12. The trend graph for the stack online source monitoring obtained from the Care Air Centre, TNPC Board, Chennai for the period **01.01.2020 to 27.08.2020** reveals that the PM values are within the limits prescribed by the Board and no

exceedance was observed. (Copy of trend graph obtained from Care Air Centre, Chennai is enclosed).

3. Present Status of M/s Hi-tech Die Cast Private Ltd:

The respondent unit and petitioner school premises were inspected on 27-08-2020 with the 4th and 5th respondent and the following were observed:

1. The unit was in operation.
2. The trade effluent generated from wet scrubber bleed off is disposed in the solar evaporation pan.
3. No seepage or overflow was observed in the SEP.
4. The air pollution control measures such as Wet scrubber with stack with interlocking system attached to the induction furnace, Bag filters with stack attached to the Shot Blasting Machine, Cyclone with bag filter with stack attached to the Sand plant, Bag filters with stack attached to the fettling section were in operation.
5. The unit had installed the Interlocking system with limit switch to movable suction hood with stack as air pollution control measures attached to the Induction furnace and the same was in operation.
6. The unit had provided an extra hood cover for absorbing the gaseous emissions generated during transfer of molten metal from Furnace ladle to pouring ladle.
7. The unit has maintained necessary log book for the operation of the air pollution control measures with energy meter readings.
8. The unit is using Green sand for sand moulding process and the used sand is reused.
9. The trend graph for the stack online source monitoring obtained from the Care Air Centre, TNPC Board, Chennai for the period **01.01.2020 to 27.08.2020** reveals that the PM values are within the limits prescribed by the Board and no exceedance was observed. (Copy of trend graph obtained from Care Air Centre, Chennai is enclosed).

4. Observations made during the inspection of M/s Disha – A Life School & P.K.D College of Education:

The school premises were also inspected on 27-08-2020 and the following were observed which is submitted as follows:

1. The petitioner had developed a green belt of 10 rows of trees and to a width of approximately 38 meters and length of 230 meters adjacent to the premises of the unit M/s UNICAST ALLOYS PRIVATE LIMITED.
2. The unit's process of fettling and shot blasting section area of the 4th respondent unit M/s UNICAST ALLOYS PRIVATE LIMITED is located at a distance of about 18m from the petitioner's eastern boundary.
3. During physical verification of the green belt developed adjacent to the 4th respondent unit's boundary in the petitioner's premises, no dust (foundry waste mould sand) deposition was observed on the leaves and plants. (Photographs enclosed)

5. Compliance report for the Specific Recommendations as per order dated 20.07.2020:

i. M/s Unicast Alloys Private Limited:

S. No	Recommendations	Compliance status as on 27.08.2020
1.	The 4 th respondent unit shall relocate the shot Blasting and the Fettling section either outside the premises in some other locations or on the eastern side within the premises where the vacant land exists	Not complied. However, the unit vide its letter dated 19.08.2020 informed that "As per the sequence of operation and plant layout it cannot be moved away, otherwise entire factory layout to be changed which means we have to close the factory for two years to create new infrastructure and financial implications will lead to permanent closure of the
2.	After relocation of the existing shot Blasting and Fettling Section, the area shall be used as buffer zone and shall also develop thick canopy of green belt within 4 th respondent unit premises adjacent to the compound wall of the school premises which will act as a barrier for air pollution.	

		foundry”
3.	The unit shall either completely reuse the dumped waste mould sand within the premises or dispose it to the Common Waste Mould Sand Reclamation unit M/s. Ammarun Enviro Guard Industries, Annur Taluk or for other beneficial uses.	Not complied. However, the unit has covered the storage location with red sand and green belt is being developed. (Photos enclosed)
4a.	The unit shall stop the shot blasting and fettling operations in the existing location instead shall do the shot blasting and fettling operations in the Unit’s sister concern i.e. 5 th respondent unit of M/s Hitech Die Cast Private limited (or) by giving job work through outside vendors.	Not complied. However, the unit vide its letter dated 19.08.2020 informed that “As per the sequence of operation and plant layout it cannot be moved away, otherwise entire factory layout to be changed which means we have to close the factory for two years to create new infrastructure and financial implications will lead to permanent closure of the foundry”
4b.	The 4 th respondent unit shall forthwith stop storing the fresh sand adjacent to the boundary of the school premises.	Complied. The unit has shifted the fresh mould sand storage towards the eastern side of the premises and the previous storage area was utilized for green belt development. (Photos enclosed)
4c.	The unit shall raise the remaining length of the compound wall with steel gladding facing the school premises (unit’s western boundary wall) as done in the other portion of same compound	Complied. (photographs enclosed)

	wall.	
4d.	Internal roads shall be wetted repeatedly so as to mitigate the fugitive emissions during vehicle movements inside the premises.	Complied.
4e.	The unit shall ensure that the mist spray arrangements provided should be interlocked/automated to suppress the fugitive emissions during vehicle movement.	Complied. The unit has provided water mist sprinklers along the vehicle movement area near the petitioners school boundary and the same was under operation. Further the unit has automated the water sprinkling system in the premises with auto on/off system with timer and the same was in operation (Photographs enclosed)
5.	The unit shall conduct the ambient air quality/ambient noise level/stack monitoring in the unit and in the school premises every month and furnish the report to the Board	Not complied. However, the unit vide its letter dated 19.08.2020 informed that "We are already having online monitoring systems and we maintain the norms well within the parameters prescribed by the TNPCCB and requested to conduct test once in a year"
6.	The unit shall convert the venturi wet scrubber system with stack arrangement for the induction furnace to the dry/cassette filter as an advanced technology	Not complied. However, the unit vide its letter dated 19.08.2020 informed that "the unit has improved the APC
7.	The unit shall provide the adequate air pollution control measures for the metal pouring bay as	measures and its functioning satisfactorily and may be

a further improvement measures.	allowed to continue with the present proven system"
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ii. M/s Hitech Die Cast Private Limited:

S. No	Recommendations	Compliance status as on 27.08.2020
1.	The 5 th respondent unit of M/s Hitech Die Cast Private Limited is located behind the 4 th respondent unit of M/s Unicast Alloys Private Limited which itself acts as an barrier.	No remarks
2.	The unit shall operate and maintain the air pollution control measures continuously and efficiently and also conduct the ambient air quality/ambient noise. level/stack monitoring in the unit and in the school premises every month and furnish the report to the Board	Not complied. However, the unit vide its letter dated 19.08.2020 informed that "We are already having online monitoring systems and we maintain the norms well within the parameters prescribed by the TNPCB and requested to conduct test once in a year"
3.	The unit shall either completely reuse the dumbered waste mould sand within the premises or dispose it to the Common Waste Mould Sand Reclamation unit M/s. Ammarun Enviro Guard Industries, Annur Taluk or for other beneficial uses	Not complied. However, the unit has covered the storage location with red sand and green belt is being developed. (Photos enclosed)
4.	The unit shall convert the venturi wet scrubber system with stack arrangement for the induction furnace to the dry/cassette filter as an advanced technology	Not complied. However, the unit vide its letter dated 19.08.2020 informed that "the unit has improved the APC measures
5.	The unit shall provide the adequate air pollution control measures for the metal pouring bay as a further improvement measures.	and its functioning satisfactorily and may be allowed to continue with the present proven system"

6.0 Recommendations:

Since the respondent unit's furnished its reply letter dated 19.08.2020 for the compliance of specific recommendations for the Hon'ble NGT (SZ) order dated 20.07.2020 that the industry is already facing severe financial crisis due to recession in automobile industry and further financial loss due to Covid-19 pandemic in implementing the recommendations and the unit has not furnished any time-bound schedule to comply the recommendations. Hence, the respondent units may be directed to furnish and comply the recommendations in a phased manner with a time bound schedule, failure to comply with the time bound schedule environmental compensation may be levied as follows:

Environmental Compensation formulae = $PI \times N \times R \times S \times LF$

PI – Pollution index for Orange category unit – 50 (Range from 41 to 59)

N – Number of days for which violation took place

R – Factor in Rupees – Rs. 250/-

S – Scale of operation - 1.5 for large scale unit

LF – Kurumbapalayam Village Panchayat Population is 2,755 as per the 2011 census which is less than one million, Hence location factor – 1.0

Hence, $EC = 50 \times 250 \times 1.5 \times 1.0$

= Rs. 18,750/day


District Environmental Engineer
Tamilnadu pollution Control Board
Coimbatore South
27-09-2020

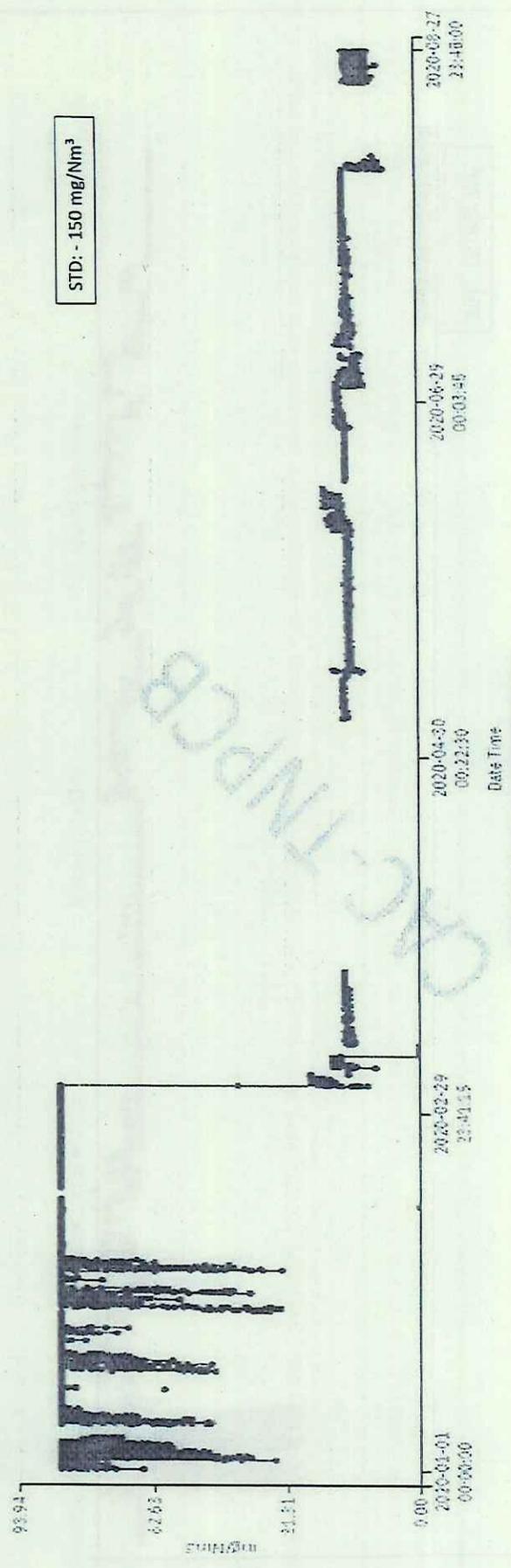
Encl: Annexure

I – Trend graph of the source monitoring report of the respondent units (from 01.01.2020 to 27.08.2020) obtained from CAC, TNPCB, Chennai.

II – Photographs

M/s.Unicast Alloys Ltd, Coimbatore.
 Data Period:-01.01.2020 to 27.08.2020 (8 Months)
 Ref:- DEE, Coimbatore South (fnpcbcbcs@gmail.com)

Source Monitoring Service Provider:-Glens



UNICAST_ALLOYS-PM_Validated

- > No Exceedance were Observed for the above said parameters UNICAST_ALLOYS-PM.
- > Trend chart has been provided for 8 months from (01.01.2020 to 27.08.2020).
- > Data validated in Care Air Centre.

[Signature]
 08/18/2020
 AD (GAC)

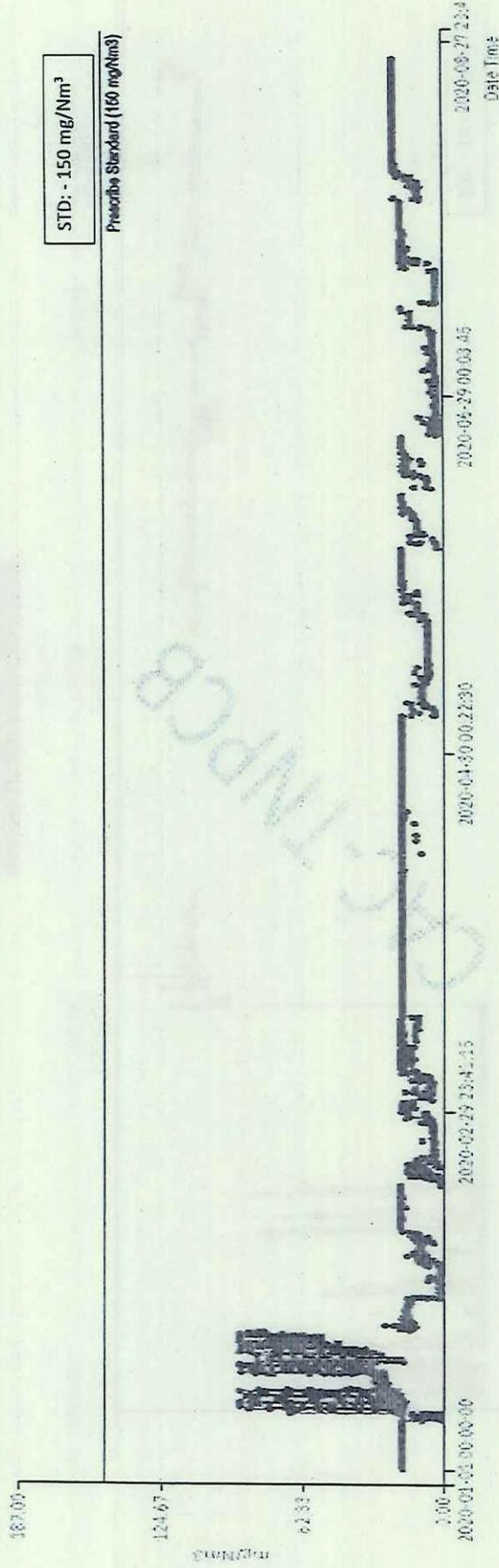
M/s.HITECH DIE CAST PVT LTD, Coimbatore.

Data Period:-01.01.2020 to 27.08.2020 (8 Months)

Ref: - DEE, Coimbatore South (tnpcbcbs@gmail.com)

Source Monitoring

Service Provider:-Glens



- > No Exceedance were Observed for the above said parameters HITECH_DIE-PM.
- > Trend chart has been provided for 8 months from (01.01.2020 to 27.08.2020).
- > Data validated in Care Air Centre.

[Signature]
AD (CAC)



ANNEXURE - II
PHOTOS
M/s. UNICAST ALLOYS PRIVATE LIMITED

**FRESH SAND HANDLING NEAR THE BOUNDARY OF SCHOOL PREMISES
AND THE HEIGHT OF THE COMPOUND WALL NOT RAISED (BEFORE)**



COMPOUND WALL RAISED & SAND STORAGE REMOVED (AFTER)





COMPOUND WALL RAISED & GREEN BELT DEVELOPMENT IN THE FRESH SAND STORAGE AREA ADJACENT TO SCHOOL PREMISES (AFTER)



WASTE MOULD SAND AND SAND PLANT FINE DUST STORAGE (BEFORE)





COVERED THE LOCATION WITH RED SAND AND GREEN BELT IS BEING DEVELOPED (AFTER)



● ○ REDMI NOTE 5 PRO
MI DUAL CAMERA

2020/8/27 18:28

COVERED THE LOCATION WITH RED SAND AND GREEN BELT IS BEING DEVELOPED (AFTER)



● ○ REDMI NOTE 5 PRO
MI DUAL CAMERA

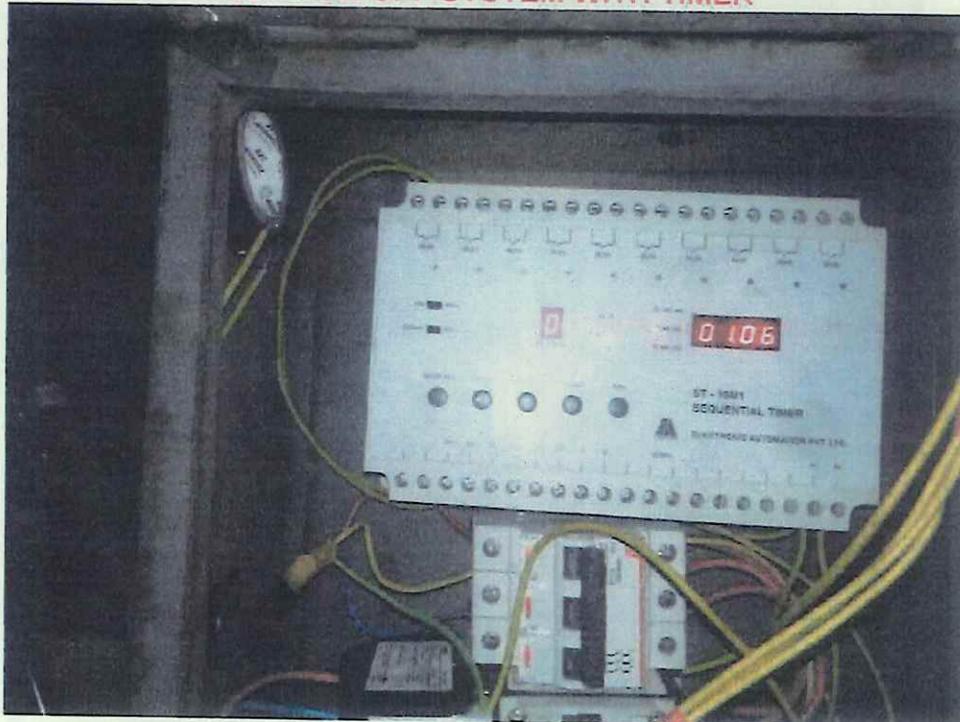
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COVERED THE LOCATION WITH RED SAND AND GREEN BELT IS BEING DEVELOPED (AFTER)

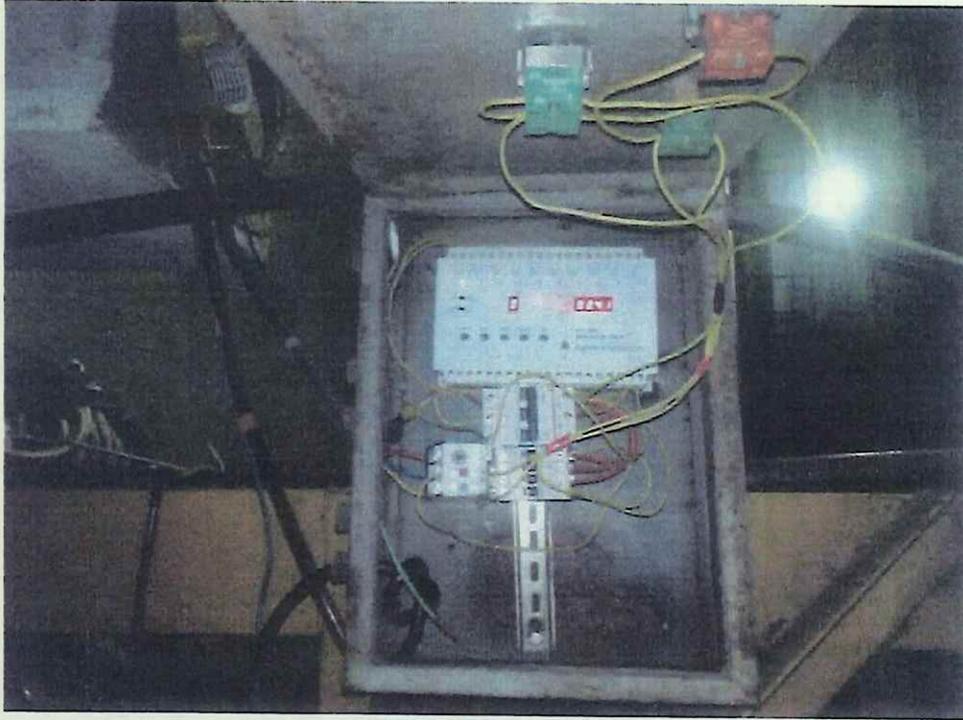


AUTOMATED WATER SPRINKLING SYSTEM WITH AUTO ON/OFF SYSTEM WITH TIMER

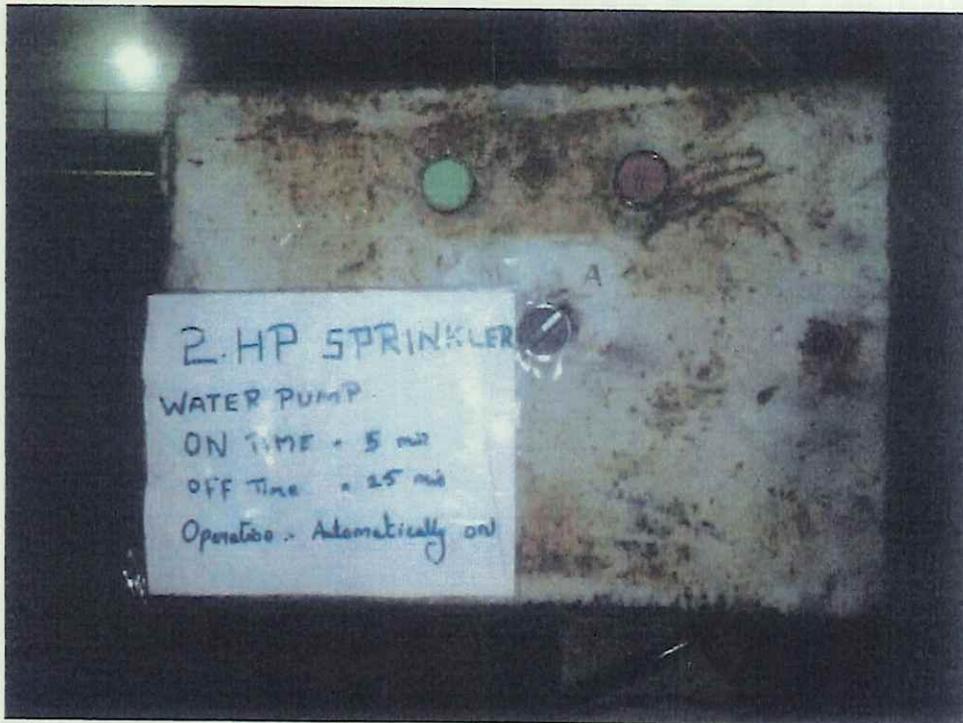




**AUTOMATED WATER SPRINKLING SYSTEM WITH
AUTO ON/OFF SYSTEM WITH TIMER**



**AUTOMATED WATER SPRINKLING SYSTEM WITH
AUTO ON/OFF SYSTEM WITH TIMER**





M/s. DISHA - A LIFE SCHOOL PREMISES PHOTOS

GREEN BELT DEVELOPED IN THE SCHOOL PREMISES JUST ADJACENT TO THE UNIT'S BOUNDARY



GREEN BELT DEVELOPED IN THE SCHOOL PREMISES JUST ADJACENT TO THE UNIT'S BOUNDARY





**ADDITIONAL GREEN BELT DEVELOPED IN THE SCHOOL PREMISES
JUST ADJACENT TO THE UNIT'S BOUNDARY**



**PHOTOS SHOWING THE LEAVES OF THE TREES AND PLANTS
WITH NO DUST DEPOSITION**





PHOTOS SHOWING THE LEAVES OF THE TREES AND PLANTS WITH NO DUST DEPOSITION



PHOTOS SHOWING THE LEAVES OF THE TREES AND PLANTS WITH NO DUST DEPOSITION

