





When the other aspect, polluted water is pure it can sustain lifeforms on the other aspect, polluted water is the cause of disaster. UN SDG 6 promotes 'Clean Water and Sanitation' ensuring access to water and sanitation for all. All stakeholders of society are having the fundamental rights to access this resource in easily accessible and clean form. Also the society must ensure the water as resource must not be polluted by human activities. Wastage must be eradicated. At present, it is becoming very difficult to obtain sufficient quantity and good quality water. All this is due to unscientific usage. Also the resource is continuously diminishing at various sources and going out of access to certain sections of society. So it is our duty to ensure the sustainability of water through pollution mitigation, judicious usage and environmental awareness. DIT University promotes this objective through its policy of sustainable water usage, reuse of waste water, conservation principle and promoting same through research and outreach activities.



#### **Sewage Treatment Plant Specifications**

Sewage Treatment Plant

Treatment capacity - 500kld

Manufacturer - Ion Exchange India Itd

Year of commissioning - April 2019

Technology - MBBR

Average treatment – 500 cubic metre per day

**Operation & Maintenance with - Mentor Water Experts** 

Record - Daily Log Book

Intake water quantity & processed water quantity record, chemicals record used in process

Daily testing parameters testing's –pH (6.5 to 8.5), TDS (less than 2000ppm, mlls - 10to 35%, chlorine level 5 to 10ppm, color-colorless & odor –odorless

Treated water testing - quarterly

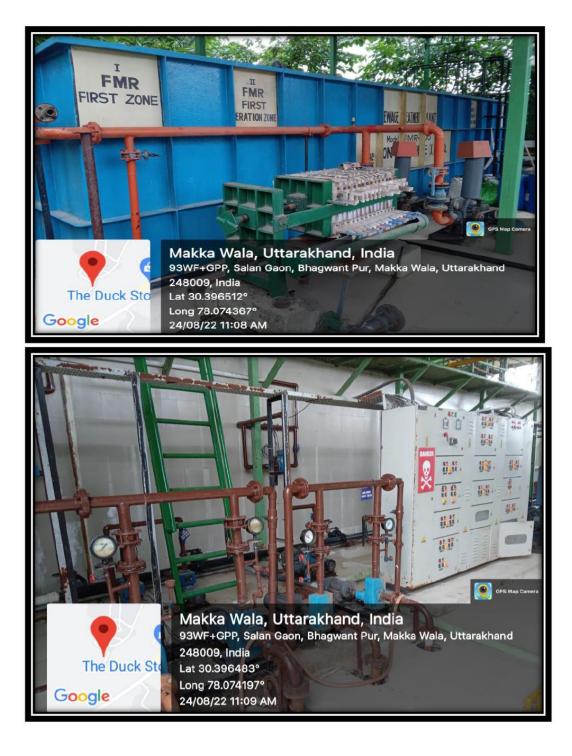
NABL Accredited analytical parameters



# Waste Water Recycle - STP Plant









| Mente  |   |                                     | 1000              | Same and    | Treatm               | COLUMN POR |          | 10.000                 | 20.00         | 22.00                                   | 34.00      | 100        | 4,00           |
|--|---|-------------------------------------|-------------------|-------------|----------------------|------------|----------|------------------------|---------------|---|------------|------------|----------------|
| Parte  | - MACADON FO                              | operer                              | Section.          | site - Di   | T LINING             | \$4.00     | 16.00    | 18.00                  | Techneros II. |   | the .      | Cher 1     | dea.           |
|  | -   | 1                                   | 1 10 1000         |             |                      | clert      | elen     | Clean                  | SC-strain     | Class                                   | Ten        | 20.1       | dea.           |
| Print Parts  | ereneret.                                 | cleen                               | deen              | cleen       | cleen                | cleen      | aun      | Clim.                  | 9.0-1         | 80.1                                    | Ren.       | 00.1       | 4. 1.          |
| Cheers Control<br>Presidency Freid<br>Bar Screen<br>DOT<br>EQT Level | Clean                                     | clere<br>804                        | Ro'l.             | 70%         | 40%                  | Ser.       | 40       | Clean<br>Clean<br>90-1 |               | AND | 2.0        | 8109       | 1188           |
| STP 265 KI   |   |                                     |                   |             |                      |            | 8.4      | 8.7                    | 1.9<br>OK     | BIY                                     | 7:51       | OIL        | 7:88<br>ou     |
| Injet Flow   | m3/Hr                                     | 52                                  |                   |             |                      | 7.4<br>0K  |          | OX                     | OK            |   | 6 curs     | Rua        | Run            |
| Anoxic chamber   | Ok/Nok                                    | ok.                                 | - and -           |             |                      | Run        | Run      | Tun                    | Rus           | Run                                     | OF         | ELL        | on             |
| Agitator   | Run/ Stop                                 | Run                                 |                   |             |                      | ak         | OX       | OK                     | CHC.          | OK                                      | ou         | OLL        | ok             |
| FMR  | Ok/Nok                                    | OK                                  | OK OK             |             | 0K                   | OK.        | OK       | OK                     | OK,           | 01                                      | CF.        | OFF        | PGF            |
| Lamella  | Ok/Nok<br>On/Off                          | OFF                                 | OR                |             | OFF                  | OPP        | Off      | Off                    | OH            | off                                     | -          |            | -              |
| udge recirculation   | Min                                       | or                                  | -                 | +           | -                    | +          |          | -                      | ON            | 00                                      | Cu         | 84         | 011            |
| Sludge Drained   |   | ON                                  | OFV .             | OPP         |                      | ON         | ON       | ON                     | 0 .4          | Bill                                    | 04         | 04         | CH             |
| Chlorine Dosing  | kg/cm2                                    | 0.4                                 | 04                | 110         | 0.41                 | 0.4        | 0.4      | DIX                    | 01            |   | 1 PERMIT   |            |                |
| Blower Pressure<br>liter Diff. pressure                              |   |                                     | 1                 |             |                      | 1          |          |                        | -             |   |            |            |                |
| FMR 300  | S. C. |                                     |                   | 1           |                      |            | -        | æ. 0                   | 9.1           | 9.2                                     | 8:8        | 8:9        | 9:2            |
|  | 1153/341                                  | 71                                  | 73                | 5.1         | 5.3                  | 52         | 8.8      | 89                     |               | ok                                      | Ore        | ON         | ok             |
| Inlet Flow<br>Anoxic chamber   | Ok/Nok                                    | ok                                  | OK.               | ok          | OK.                  | ok         | OK       | OK                     | Run           | Buc                                     | Ran        | Pater      | Run            |
| Amoxic chamber<br>Agitator   | Bun/ Stop                                 | Run                                 | Run               | Run         | Ryn                  | Run        | Bur      | Pur                    | 0 K           | OK                                      |            | ou         |                |
| FMR  | Ok/Nok                                    | OK                                  | OF                | OK          | OK                   | OK         | OK       | OK                     | ok            | OK                                      | ou         | OUL        | OLE            |
| Lamella  | Ok/Nok                                    | ok                                  | OK                | OK          | OK.                  | OK         | OK.      | ak                     | OH            | OH                                      | off        | OFF        | c.H.           |
| Sludge recirculation   | Om/Off                                    | OFF                                 | OPP               | on          | 000                  | OFF        | 04       | ON                     | - in          | -                                       |            | -          | -              |
| Sludge Drained   | Min                                       | -                                   | -                 | -           | -                    |            |          | 0.01                   | ON            | 0 N<br>Q Y                              | en         | 011        | 04<br>04       |
| Chlorine Dosing  | On/Off                                    | an                                  | an                | OPP         | ON                   | on         | 0.4      | 2.8                    | 0.4           | 0.4                                     | 04         | 04         | 04             |
| Blower Pressure  | kg/iml                                    | 04                                  | 10.11             | 04          | 0.4                  | 0.4        | 0.4      | 101                    |               |   |            |            |                |
| FMR 20   |   |                                     |                   |             |                      | -          |          | -                      |               | 1                                       |            |            | O le           |
| Inlet Flow   | m3/Hr                                     | -                                   | -                 |             | 1.7                  | -          |          | OIL                    | ok            | 0 10                                    | OK         | or         |                |
| Anoxic chamber   | Ok/Nok                                    | OR                                  | OK                | <u>gk</u>   | gk                   | ok         | OK       |                        | Run           | Alto                                    | Run        | Rein       | Bol LL+1       |
| Agitator   | Run/ Stop                                 | Run                                 | Run               | Run         | Run                  | Plan       | Run      | Run                    | OK            | OK                                      | OF         | ou         | ou             |
| FMR  | Ok/Nok                                    | OK                                  | OF                | OK          | OK                   | OK         | ok       | OK                     | ok            | GH                                      | BUL        | OK         | OK             |
| Lamella  | Ok/NoA                                    | OK.                                 | CK.               | OK.         | OF                   | OPP        | COFF     | OH                     | 0.14          | off                                     | cff        | OH         | off            |
| Sludge recirculation   | On/Off<br>Min                             | oce                                 | opp               | OPP         | av                   | - urr      | 1 cm     |                        |               |   |            | 1          | a m            |
| Sludge Drained   | On/Off                                    | ARE                                 | 0.00              | OR          | OPP                  | 000        | 100      | OFF                    | OH            | OH                                      | Off        | 0A         | 04             |
| Chlorine Dosing<br>Blower Pressure                                   | Ng/cm2                                    | 014                                 | 060               | 04          | 04                   | 04         | O.Y      | 0.4                    | 0.1           | 10.4                                    | 04         | 04         | 0.4            |
|  |   | 0.4                                 | 10.4              |             |                      |            | 1000     |                        |               | -                                       | -          | -          | 1.11           |
| Tertiary Trea  | itment                                    | 701                                 | 604               | 701         | 80%                  | 70%        | 10 1.    | 80-1-                  | 10:1          | 60%                                     | 80%        | 70.1.      | 60%            |
| EWT Level<br>Filter Diff. pressure                                   | < 1.5 kg/cm2                              | 1.3                                 | 1.4               | 12          | 13                   | 12         | TH       | 1. 2                   | 1+2           | OH                                      | 1:2        | 22         | 20             |
| Outlet flow  | m3/Hr                                     | \$1012                              | stop              |             | 25                   | 22         | OFF      | 20                     | 18            | OF                                      | 25<br>6 Pt | OFF        | 0ff            |
| Backwash Pressure  | kg/cm2                                    | OPE                                 | OPE               | 0.4         | 03                   | DEE        | OF       | OFF                    | OH            | Of                                      | on         | 041        | 04.            |
| UV System  | On/Off                                    | OFF                                 | div               | OFF         | OFF                  | 01V<br>501 | Off      | 901                    | 00            | Bal                                     | 90%        | Ble 11 -   | 90%            |
| TWT Level  | in %                                      | 80%                                 | 701               | 701         | 60%                  | 50%        | 63-1     | 10-1                   | 10-1          | 265                                     | 04         | OH         | CH             |
| TWP Pressure   | kg/cm2                                    | 0.6                                 | 06                | 0.6         | 0.6                  | 0.6        | 0H       | OFF                    | OH.           | STAP                                    | off        | Stop       | Stop           |
| Filter Press   | Run/ Stop                                 | Step                                | Stel              | step        | Stop                 | Stat       | STOP     | STel                   | STOP          | 90-1                                    | 20%        | 301-       | 30%            |
| SHT Level  | inN                                       | 401.                                | 407               | 001         | you                  | 407        | dan 1    | 1101                   | 0.2.1         | 1100-0                                  | 1 com      | 2000       |                |
| UF Treatm  | nent                                      |                                     |                   | -           |                      | 1941       | 700      | 60-                    |               | 10.1.                                   | 80%        | Be +1.     | dey.           |
| UF Feed Tank Level   |   | 8.01.                               | -201              | 801         | 70%                  | 80%        | 11116    | 12.54                  | 1.4           | 1 . 4                                   | CA         | 0.44       | off            |
| Iniet Pressure   | < 2.0 kg/cm3                              |                                     | 15                | 14          | 15                   | 0.3        | 12       | 0-3                    |               | 0.4                                     | off        | 0 ft       | 0(+            |
| Permit Pressure  | < 1.0 kg/cm3                              |                                     | 0.5               | 81          | 2.1                  | 0.5        | 25       | 2.4                    | 1 2.5         | 0.4                                     | 0.66       | OF         | C.H.           |
| Permit Flow  | >2 m3/hr<br><3.0 m3/hr                    | 0.2                                 | A.L.              | 0.2         | 03                   | 200        | 0.4      | 10.0                   | 0.4           |   | "GGC       | ott        | e.ef           |
| Reject Pressure  | <1.0 m5/ht<br>< 1.5 kg/cm2                | 2.4                                 | 0.1               | 11          | 12                   | 13         | 111      | 0.5                    | 0.9           | 1-1                                     | Q.(+       | CH         | 0.66           |
| Reject Flow<br>Backwash Pressure                                     | <1.5 kg/0%                                | 2.4                                 | 1.2               | OPF         | OPP                  | OFF        | 2.5      | 2.5                    | 5.0           |   | @ff        | 0(4        | 0 FI           |
| Chemical Tank Level  |   | 2.41                                | 23                | 0 PF<br>201 | 201                  | 201        | 20.      | 1204                   | . 20-1        |   | 2011       | 20-1       | 20.1           |
| Lif Water Tank Level   |   | Rey                                 | 701               | · 801       | 201                  | 800        | 1 70 .   | 1 70-1.                |               | 507                                     | 100%       | 90%        |                |
| Rushing Tank Level   | N   | 731                                 | 80                | . 701       | 801                  |            | 60-1     | 10-                    | - ID O.       | 1-107                                   | Outlet     | 265 KLD    | 96 1/<br>Total |
| Inlet 300 KLD  | KL  | Inlet                               | 200 KLD           | KL.         | 265 KLD              | 0 Total    | 0        | tlet 500               | KL            | UP                                      | -upit      | - and held |                |
|  |   |                                     |                   | -           | 10000                | 0          | 0.0      | 11100 12               |               | -                                       |            | -          |                |
| 39802  |   |                                     |                   | -           | 5308                 | 2          | 1 On I   | 1404                   | -             | -                                       |            |            |                |
| 39957  |   | -                                   |                   | -           | 5318                 | -          | 221      | 211                    |               |   |            |            |                |
| 39914  | 1.0/                                      | -                                   | Taket             | -           | 2310                 | 156        | D        | ay Total               | 342           | 14 Da                                   | y Total    |            | 342.4          |
| Day Total  | 186 KL                                    | Da                                  | y Total<br>iesult | Shift       | N                    | lame       | Sign     | Engineer               | rs Remark     |   |            | -          |                |
| Parameter  | Limit<br>6.5 to 8.5                       |                                     |                   | G           | -                    |            | - Seller | 1 1 1 1 1 1 1 1        | -ontering     |   |            |            |                |
| pH   |   | 7.1                                 | . 002             | A           | GAN!                 | PAL        | 1009     | -                      |               |   |            |            |                |
| TDS  | <2000ppm<br>10 to 35%                     | 155                                 | SSOMM             |             | A RASPAL<br>B Kundon |            | R.       |                        |               |   |            |            |                |
| MLSS   | 10 to 15%                                 | 100                                 | 25010<br>511M     |             |                      |            | -        | Client Remark-         |               |   |            |            |                |
|  | S to 10 ppr                               | 2                                   | ALC N             |             | G4 HEADO             |            |          | Client Remark-         |               |   |            |            |                |
| Chiorine Level<br>Colour   |   | riess <u>61C</u><br>iess <u>61C</u> |                   |             | Checked By Rahul and |            |          |                        |               |   |            |            |                |

Water Log Book at STP



