Sasan Power Limited

CIN: U40102MH2006PLC190657

6 X 660 MW Sasan Ultra Mega Power Project Gram: Siddhi khurd Post Office: Tiyara Singrauli – 486 886 Madhya Pradesh, INDIA www.reliancepower.cn in

Date: 23-Nov-2021

Ref: SPL/ENV/MOEF&CC/EC/ 2021-22/25

Ministry of Environment Forest & Climate Change Regional Office (Western Region) Kendriya Paryawaran Bhawan, link Road No.-3 E-5, Ravi Shanker Nagar Bhopal-462016 Madhya Pradesh

Sub: Six Monthly Compliance status of Environmental Clearance along with Environmental Monitoring Reports-Reg.

Ref:

- Environmental Clearance-Letter No. F No. J-13011/15/2006-IA (T) dated; 23-Nov-2006.
- EC amendement vide no. J-13011/15/2006-IA (T) dated; 21-July-2009.
- EC revalidation vide no. J-13011/15/2006-IA (T) dated; 19-April-2012.

Dear Sir.

With reference to the above subject, please find enclosed herewith Six Monthly Environmental Clearance (EC) compliance status report along with the Environmental Monitoring report like Ambient Air Quality, Stack Emission, Water & Waste Water Quality, Noise Level, Met data and Green belt development during the period of April-2021 to September-21. This is for your kind information & record please.

Kindly acknowledge the receipt of these reports.

Thanking You,

Yours faithfully,

For Sasan Power Limited

(Sachin Mohapatra) Station Director

Cc:

- 1. The Regional Officer, M.P Pollution Control Board, Singrauli, Madhya Pradesh.
- 2. The Chairman, M.P Pollution Control Board, Bhopal.
- 3. Zonal Office, CPCB-Bhopal.
- 4. MoEF &CC, New Delhi.

Encl: EC Compliance Report.

SIX MONTHLY COMPLIANCE REPORT

OF

ENVIRONMENTAL CLEARANCE

6*660 ULTRA MEGA THERMAL POWER PLANT

at

SASAN, WAIDHAN, DIST.-SINGARAULI
(MADHYA PRADESH)

Submitted to:

Western Regional Office (Bhopal)

Ministry of Environment & Forest

Central Pollution Control Board, New Delhi

Madhya Pradesh Pollution Control Board-Bhopal



Submitted by:

Environment Management Department
Sasan Power Limited
Village-Siddhi khurd; Post- Tiyara
Tehsil-Waidhan; Dist- Singrauli, Pin- 486886
(Madhya Pradesh)

PERIOD: April-21 to September-2021

Contents

Sr. No.	Title	Page No.		
1	Introduction	2		
2	Compliance status of Environmental Clearance for SUMPP	3-12		
3	Micro Meteorology	12		
4	Ambient Air Quality	13		
5	Noise Environment	13		
6	Water Quality	13		
7	Green Belt Development	13-14		
8	Establishment of Online Monitoring Equipments	14-15		
9	Environment Awareness program	16-18		
10	Corporate Social Responsibility	19-25		

List of Annexure

Sr. No.	Annexure Details	Page No.		
1	Ambient Air Quality Monitoring Results	26-27		
2	Stack Emission Monitoring Results	28-29		
3	Noise Quality Monitoring Results	30-33		
4	Ground & Potable water Analysis Report	34-39		
5	Surface Water Quality Analysis Report	40-45		
6	Ash Pond Effluent Analysis Report	46		
7	ETP Outlet Analysis Report	47		
8	STP Outlet Analysis Report	48-49		
9	Ground water quality (Around Ash Pond) Analysis Report	50-51		

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

1.0: Introduction:

- 1. Sasan Power Limited is operating 3960 MW (6 x 660MW) Coal based Thermal Power Plant at Sasan, Dist- Singrauli, Madhya Pradesh.
- 2. The project of great National importance, through its operating units, is supplying power to 17 utilities in 7 states.
- 3. All the 6 units of 660MW each have achieved Commercial Operation.
- 4. All the operation related permits, including Environmental Clearance, Forest Clearance from MOEF&CC and consents from Madhya Pradesh Pollution Control Board, are in place.
- 5. Environmental quality monitoring in & around the project site is being carried out by MoEF&CC/NABL approved Laboratory on a regular basis.
- 6. 03 No. of Continuous Ambient Air Quality Monitoring Stations (CAAQMS) along with Environmental Parameter Display Board at main gate have been established.
- 7. Continuous Emission Monitoring System (CEMS) is installed in flue of all the units and the data is linked to the CPCB server.
- 8. Online Effluent Monitoring System is installed at the outlet of Central Monitoring Basin and data is linked to the CPCB server.
- 9. IP based High optical zoom camera focus toward ETP outlet, Stack Emission, Coal Yard, is installed and footage capturing on CPCB server on continuous basis.
- 10. Upliftment of the socio -economic status of the nearby community and society are carried out on a continuous basis through various programs run under the company's Corporate Social Responsibility (CSR) scheme.
- 11.A vast green belt as per the CPCB guidelines is being developed to curb the emission and also to provide an aesthetic look.
- 12. Point wise compliance status of Environmental Clearance for SPL is furnished herewith.

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) Compliance status on Environmental Clearance

(6X660 MW Coal based Thermal Power Plant-SUMPP)

. MOEF Ref. Letter No.: J-13011/15/2006-IA.II (T) dated Nov 23, 06, J – 13011/15/2006-IA-II (T) dated Jul 21, 09 and EC revalidation vide no. J – 13011/15/2006-IA-II (T) dated April 19, 2012

Sr. No.	Stipulation	Compliance Status
ı	All conditions stipulated by Madhya Pradesh Pollution control Board vide their letter no S688/TS/MPPCB/2006 dated July 6, 06 shall be strictly implemented.	All the conditions are being implemented.
	The proposed configuration of the project (5x800) could be changed provided that the total capacity of the power plant shall not exceed 4000 MW and that no individual unit shall be less than 500 MW.	Complied. The total capacity of the project is 3960 MW with 6 units of 660 MW each. Hence, the total project and units capacities conform to the stipulated condition.
III	The total land requirement shall not exceed 3723 acres for all the activities/facilities of the power project put together.	Complied. 3723 acres of land has been acquired.
V	The land requirement which has been reduced from that proposed originally shall be reconciled at the stage of issue of notification for land acquisition under section 6.	Complied. The land acquisition completed as per Sec 6 notification.
VI	R&R in sufficient detail shall be finalized before award of the project and a copy of the detailed R&R shall be submitted to MOEF within three months of issue of this letter or before award of the project.	Complied. R&R plan submitted to MOEF on 8-Aug-2006 by PFC. R&R plan submitted by SPL to GoMP on 16-Feb-2008 and R&R compensation package notified by District Collector vide public notice on 9-Sep-2008 and same is being implemented.
VII	The PAPs losing their homesteads or a major portion of the land shall not be	An R&R colony (Surya Vihar colony) with all the basic facilities like school, temple, hospital, market

Page **3** of **25**

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) ousted from the land till they are settled in place, Panchayat Bhavan etc. has been the alternate sites. constructed for persons affected by the Land Acquisition. VIII A Committee under the auspices of the A committee has been constituted, which is district administration with representatives monitoring the implementation under the guidance of the PAPs, local Panchayat and of District Collector. The copy is available with the representatives of NGOs and the project district administrator. proponent shall be constituted to monitor the implementation of the R&R plan. IX Ancient Shiva temple shall be outside the Complied. plant boundary and access to the temple shall be provided by project authorities IX Ash and Sulphur of the coal to be used in Noted and being complied. the project shall not exceed 34% and 0.5 Regular coal quality monitoring is being carried % respectively. out by SPL. Ash and sulphur content in the coal being used in the project is less than 34% and 0.5% respectively. Χ Two bi flue and one single flue stacks of This condition is amended vide MOEF's letter no. 275 m height each shall be provided with J - 13011/15/2006-IA-II (T) dated July 21, 09 as continuous online monitoring equipments. "Two tri-flue stacks of 275 m height each provided Exit velocity of 25 m/sec shall be with continuous online monitoring equipments for maintained SOx, NOx and Particulate matter. Exit velocity of flue gases is not less than 25 m/s. Mercury emissions from stack also be monitored on quarterly basis." Amended condition is being complied. ΧI High efficiency electrostatic Precipitator High efficiency ESP are installed with efficiency of 99.96% (ESP) with efficiency not less than 99.9% shall be installed to ensure that the Particulate emission is maintained to less than particulate emission does not exceed 50 50mg/Nm3. Stack Emission monitoring report is mg/Nm3. attached as Annexure 1. XII Space provision shall be made for Flue Space provision has been kept in the layout for Gas De-sulphurization (FGD) unit, if FGD.

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)

	(1° April 2021 to 30	September 2021)
	required at a later stage.	
XIII	Low NOx burners shall be provided	Complied. Low NOx burners are provided in the boiler of all the units.
XIV	Adequate dust extraction system such as bag filters and water spray system in dusty areas such as coal and ash handling areas, transfer areas and other vulnerable areas shall be provided.	Being Complied. Dust suppression system is provided at all Transfer points, Dust extraction system is installed at Coal Silo, Coal Bunkers, Intermediate Ash Silo and Main Ash Silos. Rain Gun type water sprinkler system is installed in Coal Handling area. Internal roads are made pukka to avoid generation of fugitive dust. Water sprinkling is being carried out regularly to reduce the fugitive emissions in dust prone area.
XV	Fly ash shall be collected in dry form only and ash generated shall be used in a phased manner as per provisions of the notification on fly ash utilization issued by Ministry in September, 1999 and its amendment. By end of 9 th year full fly ash utilization should be ensured. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration slurry.	Being Complied. Dry fly-ash collection system is in place. All efforts are being made to comply with the provisions of fly-ash notification issued by the Ministry in November 2009. The condition of adopting HCSD system is amended vide MOEF letter no J-13011/15/2006-IA-II (T) date Jul 21, 2009. The 67 th EAC held during March 19-20, 2010. The matter of ash disposal was deliberated in details & EAC has recommended the project to adopt medium slurry concentration of 38% ash & 62 % water disposal.
XVI	Ash pond shall be lined with LDPE lining. Adequate safety measures shall also be implemented to protect the ash pond bund from getting breached.	Complied. The matter was discussed in the EAC meeting held on March 19-20,2010 Matter was deliberated in detail and EAC decided that "Suitably well designated lining using LDPE/HDPE or any other suitable impermeable material like puddle day shall be provided" Ash pond is lined using HDPE surrounding to the embankment and the bottom is lined for its

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)

		impermeability with Bentonite.
XVII	Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority/ State Ground Water Board and a copy of the same shall be submitted within three months to the Ministry.	Complied. A detailed report has been prepared in consultation with CGWA and copy is submitted to MoEF. Rain water harvesting pond & rain water harvesting pits are established to conserve rain water.
XVIII	The treated effluents confirming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary	Noted and is being complied. This condition is amended vide MOEF's letter no. J – 13011/15/2006-IA-II (T) dated July 21, 09, "Discharge of effluents from the power plant may be permitted with condition that the quality of effluents should be as per prescribed norms and should meet the water quality of the receiving body at discharge point and discharge quantity should not exceed 5% of the total consumption of water except in monsoon".
XIX	Regular Monitoring of ground water in and around the ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the groundwater quality is not adversely affected due to the project.	Noted and is being complied. Piezometers are installed near ash pond area. Ground water monitoring from ash pond area being carried out & report being submitted. The environmental monitoring report, including the monitoring repots of ground water in and around the ash pond area, is enclosed.
XX	A 200 m wide greenbelt will be developed on the western side of the plant area; total area under greenbelt in the plant site will be 474.14 acres which does not include greenbelt area in ash pond and town ship. In addition, a green belt of 50 m width will be developed all around the ash pond.	Being Complied. Development of greenbelt / green cover inside the plant area is in progress. 455312 plants in approx 648.36 acres area have been planted till Sept, 2021. The entire designated area shall be taken up in phases for Greenbelt / greenery development.
XXI	First Aid and sanitation arrangements shall be made for drivers and other contract	Complied.

Page **6** of **25**

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) workers during construction phase. All the 6 units of the project are in operation. XXII Leg of noise level should be limited to 75 Being Complied. dBA and regular maintenance Condition as amended vide MOEF's letter no. J equipment to be undertaken. For people 13011/15/2006-IA-II (T) dated July 21, 09, which working in the high noise area, personnel states that protective devices should be provided. "Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/ less noisy area Turbines are covered with acoustic enclosure system to control noise levels. Personnel protective equipments are provided in working area to minimize the impact on health, if any. Regular health checkup, including audiometric tests, is conducted and records are maintained. High Noise area Display board installed in Noise generation area to aware the workers. XXIII Regular monitoring of the ambient air Being Complied quality shall be carried out in and around Regular ambient air quality monitoring is being the power plant and records maintained. carried out at the monitoring locations The location of the monitoring stations and recommended by the Regional Officer, MPPCB. frequency of monitoring shall be decided in Half yearly monitoring reports are being submitted consultation with SPCB. Periodic reports to the regional office (MoEF-Bhopal). Ambient air shall be submitted to the regional office of monitoring report is attached as **Annexure 1**. this Ministry. **XXIV** The project proponent shall advertise in at Complied.

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) The notice has been published in the following least two local newspapers widely circulated in the region around the project, newspapers. one of which shall be in the vernacular Danik Bhaskar dt.13.12.2006 language of the locality concerned, Nav Bharat Times dt.13.12.2006 informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www.envfor.nic.in. XXV A separate environment monitoring cell Complied. with suitable qualified staff should be set Separate environment cell is established with up for implementation of the stipulated qualified Staff under direct control of Sr. environmental safeguards. Executive. **XXVI** The project proponent shall also submit six Condition is amended vide MOEF's letter no. J monthly reports on the status 13011/15/2006-IA-II (T) dated July 21, 09". compliance of the stipulated EC conditions Latest compliance report for the period of Octoberincluding results of monitored data (both in 20 to March-21 has been submitted to MoEF&CC. hard copies as well by e-mail) to the CPCB and MPPCB vide letter no. SPL/ENV/ respective Regional Office of MOEF, the MoEF & CC/EC/2021-22/04 dated 28-May-2021. respective Zonal Office of CPCB and the SPCB. **XXVII** Office Regional of the Noted & Agreed. Ministry Environment and Forests located Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental **Impact** Assessment Report Environmental Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. XXVIII Separate funds should be allocated for There is a separate fund allocated for the implementation of environmental environmental protection measures and is Page 8 of 25

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) protection measures along with item-wise separately governed under the SAP accounting break up. This cost should be included as system. The expenditure is reported as a part of part of the project cost. The funds Annual Environmental statement submitted to the earmarked for the environment protection measures should not be diverted for other purposes and year wise expenditure should be reported to this Ministry. XXIX Full cooperation should be extended to the Noted & being complied. Scientists Officers from the Ministry/Regional Office of the Ministry at Bhopal / the CPCB / the SPCB who would monitoring the compliance be environmental status. Following are additional conditions as per MoEF's letter no. J – 13011/15/2006-IA-II (T) dated July 21, 09 XXX A sewage treatment plant shall be provided Sewage treatment plant is operational. Treated and the treated sewage shall be used for sewage waste water taken to the CMB for its further utilization. raising greenbelt/ plantation. XXXI Adequate safety measures shall be provided Fire fighting arrangement is provided in coal plant area to check/minimize yard to prevent fire. spontaneous fires in coal yard, especially during summer season. **XXXII** Storage facilities for auxiliary liquid fuel such Noted & being complied. as LDO and/ HFO/LSHS shall be made in the plant area in consultation with the Dept. of For the storage of LDO/HFO, licenses from the Explosives, Nagpur. Sulphur content in the Chief Controller of Explosives, Nagpur have liquid fuel will not exceed 0.5%. Disaster been obtained. Management Plan shall be prepared to meet any eventuality in case of an accident taking Onsite Emergency Plan is approved by the Director, Industrial Health and Safety is in place due to storage of oil. place. XXXIII Adequate funds shall be allocated Being complied. undertaking CSR Activities Major thrust areas are:-

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

<u>Literacy initiatives:</u> Provide quality education by engaging DAV management in R&R schools.

Improve drinking water and sanitation facilities in the existing school & nearby vicinity. Providing Urjanchal Scholarship for meritorious students, organizing painting competition etc.

<u>Health initiatives:</u> Primary Health Centre established in Surya Vihar (R&R) colony with qualified Dr. & staffs. Free medicines are being provided to PAPs. Organize Gynae camp, Free Eye Checkup & Health Checkup Camp, Blood donation camp etc.

Sports and Cultural Initiatives: Sponsoring activities like All India & District Level Football & Cricket tournaments, celebration of world environment day, Singrauli Mahotsawa, Durga Puja, etc.

<u>Infrastructure Development initiatives</u> like Construction of bore wells & hand pumps, rainwater harvesting ,construction of road ,wall painting etc.

<u>Sustainable Livelihood initiatives</u> like Employment to local people, Construction skill training through CIDC, CSTC followed by deployment in project activities, formation of Cooperative Societies & SHGs for awarding of construction contracts, dairy management, wadi cultivation, poultry, goatry, tailoring classes for women, etc.

<u>Vidyaadan Project:</u> Vidyadaan project has hatched to aim improve the suroounding govt. school performance and results.

The idea involves utilizing the high skilled and ready to use employee of SAPL for the betterment of the society and setting new trend and benchmark.

Group Blood Donation Campaign: Blood donation campaign organised by Sasan Power Ltd. where maximum of our employee volunturrily had participated in the programme

XXXIV

First aid and sanitation arrangements shall be made for the drivers and other contract

Complied.

Construction work completed and plant is fully

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021) workers during construction phase. operational. **VXXX** Provision shall be made for the housing of Complied. construction labour within the site with all Construction work completed and plant is fully necessary infrastructure and facilities such as fuel operational. for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. **XXXVI** A copy of the clearance letter shall be sent by the Complied proponent to concerned Panchayat, Zila Parisad/ http://www.reliancepower.co.in/business areas Municipal Corporation, urban local Body and the /power projects/coal based projects/sasan/en local NGO, if any, from whom suggestions/ vironment.htm representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent. **XXXVI** The proponent shall upload the status of Being Complied. compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall http://www.reliancepower.co.in/business areas simultaneously be sent to the Regional office of /power projects/coal based projects/sasan/en MOEF, the respective Zonal office of CPCB and vironment.htm the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂ and NO_x (ambient levels as well Environmental data display board is as stack emissions) shall be monitored and established at the main gate. displayed at a convenient location near the main gate of the company in the public domain. The environment statement for each financial year **XXXVI** Being complied. ending 31st March in Form - V as is mandated to Ш Latest Annual Environment Statement Report, be submitted by the project proponent to the has been submitted to the MPPCB vide letter concerned State Pollution Control Board as No. SPL/EMG/MPPCB/ES/2021-22/13 on dtd. prescribed under the Environment (Protection) 05.07.2021. Latest CTO Compliance report Rules, 1986 as amended subsequently, shall also vide letter no. SPL/EMG/ MPCB/CTO /2021be put on the website of the company along with the status of compliance of EC conditions and shall 22/23 submitted to RO- MPPCB, Singrauli and also be sent to the respective Regional Offices of Member Secretary, MPPCB-Bhopal MOEF by e - mail. dtd.19.10.2021. XXXIX The project authorities shall inform the Regional Complied. Office as well as the Ministry regarding the date of

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.

Micro meteorology: An online Weather Monitoring Station (WM-271-Make-Envirotech) is installed at Environment Lab for the monitoring of site-specific micro-meteorological data for the recording of parameters from 00.00 hr to 23.00 hrs. .

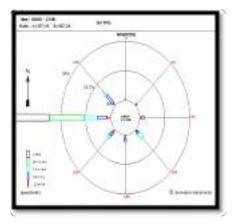
Wind rose Diagrammed

Instrument under maintenance

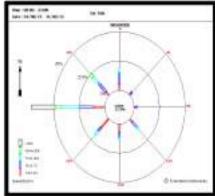
April-2021

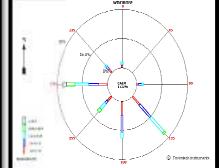
May-2021

June-2021 (Wind Dir: W)



July-2021 (Wind Dir: W)





Aug-2021 (Wind Dir: W) Sept-2021(Wind Dir: ESW)

Page 12 of 25

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

Ambient Air Quality: The scenario of existing Ambient Air Quality in the study area has been assessed through a network of 06 Ambient Air Quality locations which is inside & outside the plant premises. The monitoring network in the air quality surveillance program has been established based on the consultation with the Regional office of Madhya Pradesh Pollution Control Board, Singrauli.

Third party NABL & MOEF&CC accredited laboratories have been entrusted for carrying out Environmental monitoring, analysis & reporting of environmental parameters at locations designated within and outside plant premises.

Pre- calibrated Fine dust samplers have been used for carrying out ambient air quality monitoring in line with provisions of National Ambient Air Quality Standards (NAAQS). The parameters monitored are PM10, PM 2.5, Sulphur dioxide (SO₂), Oxides of Nitrogen (NOx) & Carbon mono oxide (CO).

Noise Environment: Noise level being monitored in Ambient & Work zone area at 12 Locations once in a month. The noise levels at each location were recorded for 24 hours, using integrated sound level meter.

Water Quality: The existing status of water quality for groundwater and surface water was assessed by collecting the water samples from Hand pumps/Bore wells from the village viz. Sidhikhurd, Tiyara, Sasan, Harawaha, and surface water sample from Mayar River, Rihand River & Gawaya Nalaha. Potable water from Plant & Security Camp is also analyzed. The overall water quality parameters have been found to be below the stipulated permissible limits.

Green Belt Development:

A green belt is being developed along the plant boundary, along the roads & other available open space, using native species avenue plantation as per the CPCB guidelines for curbing emission and providing aesthetic look.

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

455312 trees covering an area of **648.36** acre, with survival rate of **85** % have already been planted till Sept, 2021. A nursery for growing the saplings, being used for plantation purposes, has also been established inside the plant premises.

Criteria used for selection of species for greenbelt:

- Fast growing
- Thick canopy cover
- Perennial & evergreen
- Large leaf area index
- High sink potential
- Efficient in absorbing pollutants without affecting their growth
- Suitable for the local seasons

Online Monitoring Stations:

✓ **Ambient Air Quality:** We have installed 3 nos. of Continuous Ambient Air Quality Monitoring Stations as per the guidelines of Madhya Pradesh Pollution Control Board to monitor PM 10, PM 2.5, SO₂, NOx & CO.





Flue Gas Emission Monitoring, we have installed Continuous emission monitoring system in all the six stacks & data being transferred on CPCB server.





Page 14 of 25

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

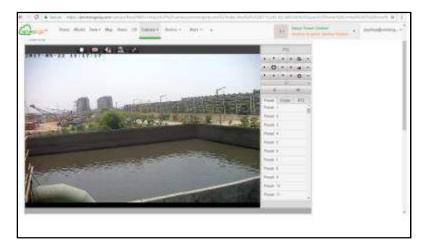
Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

✓ Online Effluent monitoring system: We have also installed Online Effluent Monitoring System and data being transferred on CPCB server.





✓ IP based camera with night vision facility installed Nr. ETP and linked with MPPCB server.



✓ Electronic Environmental Parameter Display Board Installed at the main gate of factory premises.



Page **15** of **25**

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

ENVIRONMENT AWARNESS PROGRAMS

Sasan power Limited continuously spreading environmental awareness among employees and villagers through celebration of various International Day's and cultural programs.

World Environment Day Celebration :

- World Environment Day (WED) is celebrated every year on 5 June to raise awareness and to take positive environmental action to protect our nature and the planet Earth.
- This year also, Sasan power Limited has celebrated Word Environment
 Day 2021 with full enthusiasm. Because of the COVID 2019 restrictions,
 all the celebrations were planned to be made by following social
 distancing and avoiding any public gathering. Therefore, with the help of
 Team IT, events / competitions were made totally online and response
 by the participants has also been highly encouraging.
- A large number of participation was noticed from the employee, their family and contract worker's side in the various online competitions like Quiz, Slogan, Poster, Essay etc. Prized were also distributed to the winners by following strict social distancing.
- The Sasan leadership has also praised the way of celebrating World Environment Day this year. The Sasan leadership has conveyed their best wishes for World Environment Day for Entire Sasan Family.
- About 500 nos new plantation were also done at different locations like near Buddha Temple at Township & different departments by respective HODs and employees on occasion of WED with following COVID-19 social distances guidelines
- Some Glimpses are as follows:

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)



Page **17** of **25**

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)

➤ World Ozone Day had been celebrated on 16 th September, 2021 with online Quiz competitions to spread awareness among employees to control greenhouse emission .

> Green Belt Development:

- a) 8700 nos trees had been planted in 11.0 Acres Area during Apr 21 to Sept.21.
- **b)** Greenbelt Development has covered 648.36 Acres of land within Power Plant as against the requirement of 474.14 Acres.

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

SASAN POWER LIMITED

Corporate Social Responsibility

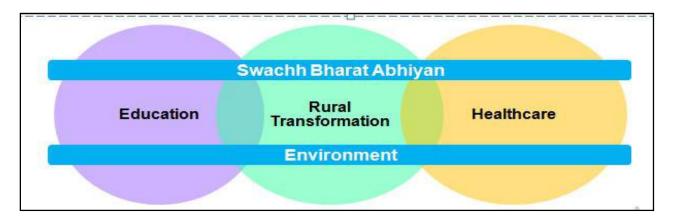
Major Highlights- Apr 21-Sep 21

CSR Initiatives and activities:

➤ **CSR Mission Statement:** To be a socially responsible corporate entity with a thrust on community development, environment, health & safety through sustained business conduct.

> Its comprehensive development program attempts to:

- To improve the standard of living of the community and
- Create local prosperity, thereby aiming to promote a sustainable lifestyle of self-sufficiency.
- > Key Thematic Focus Areas:



Geographical Outreach:

- 20 Villages of District Singrauli, Madhya Pradesh
- Population catered through CSR endeavors: 30,000

Partners:

 BAIF, DAV Schools, Indian Red Cross Society, Sahara Manch, Local Govt. Bodies and Deptts

Major CSR Highlights-

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)

DAV School Surya Vihar-Running CBSE Affiliated School upto Std. XII and providing quality education to 1255 students coming from underpriviledge section of the society on completely free basis. School having state of the art facilities.



CBSE Board Results Class X- Year-wise Performance DAV Surya Vihar

CBSE Class X Result DAV Surya Vihar -2020-21

Outstanding performance in CBSE Board Exams with 100% pass out results and five students scoring above 90% marks amongst 37 students.

Doubles of	Surya Vihar			
Particular	2018-2019	2019-2020	2020-21	
Student appeared in 10 th Board	49	38	37	
Passed	47	38	37	
Compartment	2	0	0	
Passed Percentage	95.92%	100.00%	100.00%	
Average Marks percentage (QPI)	62.49	73.93%	73.41%	
Toppers Marks (%)				
Topper-I	96.80%	94.40%	94.40%	
Topper-II	96.40%	90.40%	93.00%	
Topper-III	96.30%	90.20%	91.60%	
Nos of Students having Marks Above 90%	6 (12.24%)	3 (7.89%)	5 (13.51%)	
Nos of Students having Marks 80-90%	7 (14.29%)	10 (26.32%)	5 (13.51%)	
Nos of Students having Marks 70-80%	5(10.20%)	7(18.42%)	7 (18.91%)	
Nos of Students having Marks 60-70%	12(24.49%)	15(39.47%)	18 (48.64%)	

International yoga day observation:

The day observed at DAV School Surya Vihar to sensitize the aspect and impact of Yoga. The program was conducted following the COVID-19 protocol.



Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

Co-curriculum activities at DAV School-different such activities were conducted at school through online/offline medium for overall educational development of students









Observation of Independence day / Teachers Day / Sanskrit day /National book reading day LMC Meeting 2020-21











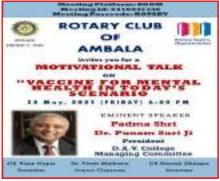
Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

Under restriction of Covid 19, to improvise Education, Mental, Health standards various Webinars on deferent topics with subject experts were conducting during April 21 to Sep 21.









Primary Health Centre Surya Viharfully eqipped health Centre with 24x7 Hours ambulance facility for linkages with secondary and tertiary healthcare facilities.

Total 5167 patients benefitted through OPD.

Nos of Patient benefitted through OPD

OPD-PHC Surya Vihar FY 21-22											
SI.NO	Months Male Female Total										
1	Apr-21	374	336	710							
2	May-21	310	248	558							
3	Jun-21	350	328	678							
4	Jul-21	567	458	1025							
5	Aug-21	651	473	1124							
6	Sep-21	629	443	1072							
	Grand Total	2881	2286	5167							
	Average Mor	thly OP	861.16								
	Average Dails	y OPD	28.71								

Promotion of Institutional delivery: 40 units Baby kit distributed to the mother opted for institutional deliveires.







Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC For

Sasan Ultra Mega Power Project (1st April 2021 to 30thSeptember2021)

COVID-19 Prevention and Care services: Different initiatives like Mask, Sanitiser, Ration Kit distribution conducted in the operational villages





Repairing & Maintnace of Hand Pumps for ensuring safe drinking water to community





Training on HIV /AIDS awerness through Sahara Manch a local NGO affiliated with State AIDS Controll Society





Plantation inititaves at Govt HS School- Sasan



Safe Motherhood Program in collaboration with Govt ICDS Deptt in 24 Aganwadis





Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC

Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)

Media Coverage



are strikes an andre dod deep man if it as note प्रकार ज्यून में ये का राज्य स्वीवता के एक पात्र पात्र आर्थका के अरोप में विश्वास्त के कार्यों पूर्णुंचा कृत्य विश्वास के क्रा तीन प्रकार किया जब । क्रांचर्च का कृत्युंचा में प्रकार क्रांच्या कि क्र proper if none means have in payin few yet mean to before it film white the seather if few yet found to the last that the passes of mean that me had play trees in few that for he as quite it may had been play trees on few that for the play trees on few that the first own or the few that the play the play the play trees on the play trees सीरत कावार सुक्षातित विश्वत वर्त इन्दरक्त विद्या ने अवन्त क्रम्य विद्यान इतित तेवार क्षम विद्यान । प्रता अववार is traces is these specie has It species is seened in the column.

altiffer the scale of the energy of and the altiffer that it leads to be benefited it of it from an generals agreetly the of a find season for the seas कार्याक राज्या के राज का कार्याक रूप है तकत रही है रेस्ट्र पीत प्राप्तकालक है तह वो प्रतिदान पीत के रिता पर्वत राज देश प्रतिदान उन्होंने पीत राज्या है रिता प्रतिदान उन्होंने प्रतिदान के रिता प्रकारणात्त्र से यो अपनेका है तही विकासी का प्रतिदान कर्मा कर्मा कर्मा स्वार्तित याः ग्रांकवित्री स्वार्तित व्यक्त विश्वास प्रदेश वित्र के इस प्रदान विश्वास तथा। विदेशक द्वारत का अल केवार अंतरी के द्वार विश्वास साथ अंतरीका E 1811 ATMOST MAKE A भूगता के जानका है जिस पर उसके एक के भूगे में जानका प्रेस प्रतिकार जिल्ला करने के जान सराहत करने जानका करने के जान सराहत जाने

रिली, सोमदार ३० अभरत २०२१ डीएवी सर्य विहार में राष्ट्रीय खेल दिवस पर उत्सव

stream regar | Tetrazleft (Osse)

दीएकी पब्लिक स्कूल सूर्य विहार में मेंजर ध्यानचंद के जन्मदिवस के उपलब्ध में प्रत्येक वर्ष की भाति इस वर्ष भी राष्ट्रीय खोल विवस हवीरुलास के साथ मनाया गया। कार्यक्रम के आरंभ में जियालय के प्राचार्य मृत्युंजय कुमार तिवासी में दीप क्वायलन किया। जिसके बाद रिक्षक एवं शिक्षकाओं के लिए मेनोरंजक क्रीड़ा का आयोजन किया गया।

इस अवसर पर विद्यालय के शिक्षक सुख्यचेन विश्वा ने भाषण के माध्यम से खेल एवं उसके महत्व के बारे में बताया। खेल प्रशिक्षक राजेस्याम याएव ने शासन ग्रारा दिए जाने वाले खेल पुरस्कारों व ओलीपक मेम्स के बारे में रोचक attention ज्ञानकारी प्राचार्य भी तिकारी ने कहाकि खेल न नेत्रल मनोरंजन का साधन है व्यक्तिक शारीहरूक संध्या मानशिक रूप से समस्य रहने के feru अत्यायश्यक है। कार्यक्रम में सभी शिधाकों का सक्ष्योग रहा। कार्यक्रम में छात्र ऑनलाइन माध्यय से जुड़े। कार्यक्रम का संचालन सुखाचेन मिना ने किया।



ाडीएवी सूर्य विहार में विश्व स्वास्थ्य दिवस मनाया

क्षत्र की रक्षापना दिवस के आसार पर तार्थ अस्पारा THEFT जान विका distrib fill merries: स सूर्य विशास म MARIE MAN र्वकाम का प्रारंभ केंद्र गांप terefer in erent DOMESTI PRINTER. जगप्रकाम बादव एवं पुरुषेत्र विधा ने first murray व्यासम्बद्ध की म्यूनाय समा को लेकर अपने विकार व्यक्त लीय का प्रकारक की किस्स का प्रति सक्षण रहने के लिए प्रेरिस किया हाने प्रशास विकास के प्रा मुख्यालय क्यार सिवारी ने काली



teufffert mart 変現 over for univers THE PERSON NAMED IN safer married एवं अपने आप मही बीमारियों से प्रधान का है । क्योंकि समारा अध्यक्त रहे अस्त्रीयन तभी संशात है जात हम स्वरूद eif and surious ages out firmen and

10 Sep, 2021 *

STOR अनुनाम विकास की अपने के उपासी व अपनाम । जूरी अनाम की एकारण प्रश on near than an man, set mar sea रति । प्राथमका जीवाल कर सम्बन्ध अन्य स und recommended roll : frest correct etuna an menalta musea steam तारा चलाए जा रहे कार्यकार्य के अनुस् हम, हमारी दिनक्का रख एवं सभी पूज के शासकीय तथा विविध्यक्तिय प्रशास कर कार्यक्रम अनुपालन राग्रेष्ट्याम पादव के हारा तर erwinen erempe Director ment begen हारा किया गया । शांति पाउ साथ जानेक्स संयम हुआ।



वैक्षे प्रवेतक रक्त रहते विकर में विरव पर्यावरण दिवस मनामा नक where the process of the process of

रण = - the norm 10 -डीएकी स्थिबिहार की भना आंवल शह ने राष्ट्रीय पञता वयन परीक्षा में राफलता प्राप्त कर रचा नया इतिहास

INGROLY

सासन पावर लिमिटेड में एचआईवी एड्स जागरूकता कार्यक्रम का आयोजन

Compliance Status Report for "Environmental Clearance" Accorded by the MoEF&CC

Sasan Ultra Mega Power Project (1st April 2021 to 30th September 2021)



द्वा निर्मित देशों प्रेनम पहन हुई। प्रतृत निया पर। द्वारे अतार बीचा। पता दी दियों से आग अना माने विकार में कियों दिवन के प्राप्तन में अनेक . पता तथा तथा काम की भी तक आवर्षक . भी देखा वा सकता । जारी बात कि हार क्रानिक मेरेन हो। क्रानिक के शुक्री पर्ने - प्रातीन है को विद्याल के लिए अपनक कि दे पता हो उनके पतिल का अपना विकास में क्रांची कुनुमा मुन्ता तिको। असन्तर निर्दे हुए दिने सहित्य में भी में भारत चरिए तथा दिनम जमात में हिन्दे के क्रा देन क्रमान किया गया जीवीं। जिल पने पाने पानारों भी जनकों से ' से परिचार नग' भी जनगर परिचा en kare form chien i groupe in tel pa unon te frame di loci. Desse in non il agge est un हा किया और विश्वय देश की है। जिस्साहा किये प्रतिनी हिस्सीत का अबत की कर्मक का बनता अब हुए तर्मक प्रेरंप प्रश्ना को हो उत्पेद: अवोध्य के प्रिया तथ विवर्त करों ने अन्यवर तमा दिनों अध्योध्य रेजिन निर्दे विकास किए सेविक ने निर्दे दिवा । प्रीक्षान प्रीक्षित की विद्याल के अपनी पानीन के द्वार किया गया जाति हा कि जब म जर्म किस नह कि। यह अभवेत कान्य ने बारेड्य में मुं। यह तो कि बरनान में क्रमेर के यह

क्रमण, बैक्सा करन कर की बेला । को प्रमुति हो महे तक समृद्र मेर करते हता. तिकते में बात कि बेली बात की अपन्त है बस कर्न में सब इब प्राप्त हुए समा पूजा होती. निकाल के प्रकों भी कार्यक्र में क्याँ हुई

डीएवी सूर्य विहार में हिन्दी दिवस पर हुए कार्यक्रम , डीएवी पब्लिक स्कूल सूर्य विहार में मनाया गया योग दिवस

बैद्धना पास्त्र पास्त्र परिवेचन रिलापन दारा विसर्वेशित खेटवे पॉल्क कल सर्वे विकार में सबस क्षेत्रिक्त की दिनम रोकाल अकारम उदा हुने नगरका इत्यदि के मध्या से स्थय क्या । यह कार्वद्रम वृप ए। या आधारीय ; वर्षप्रती पद्धति द्वरा प्राचर्त के दिला निर्देश में उन्होंनेसे फिल्क प्रदेश सिंह एरं शांतिक जिल्ला राष्ट्रे त्याम बाद्य के संचानत में विद्यालय के विश्वकों को उपस्थित में सम्बन इजा। कार्यक्रम के डाईच में विद्यालय के प्रचार्य कार्यालय रूपा निवर्ध के जा देश प्रतासन का कार्यक्रम का इगागि क्रिय तथा महत एवरिट प्रदर्श गर, फिल्हा तिह को पार्श्वरी अञ्चलके अधित की रहे । शहरता विद्यालय के मेरबर अध्यक्षक किन्तान निशा के द्वारा येन बात की निरामत जिला वर उसने निरास रहे हिंदी जिल्हिक जीपने संबोध क्यारी पायेर य बीमने विशेष विकर्त के दूरा येंग के महल की बाल रथा। हमा विद्या करते गर्त । क्षेत्रहिंग येंग दिवस के जान पानी हैं गय उपने बार को स्वाब स्काप से तथ राज्यपत के द्वार ३१ जुन के दिवस का मानवा अवसा पर ऑगलाहन पोन प्रतिसमयों करती गर्दी दिसरों 🐧 तनोंने बताया कि दिखारी में विश्वानी तथा सभी कार रूप हर व्यक्तिक विश्वन प्रवेश्यम पहल के. विष्ट सब्द में पूज त्यकर क्षाने शह व कारोग जनसमान को पंपास प्राणयम पूर्व नमकार हार एवं नारकार का प्रदर्श किया गया। एरबेर । यहार क्षां करित समूर में आराधन मिर्ट अधिका। इस्सार के इस साम को स्थाप सहस पारिए एरं हो हिंदी क्रिक्ट असरका कि के ब्राह बीर करने के जारत व मुनित हुने ने करण प्रका दिलेश व हर्ताया किया तरने दिसकते में सीमितित करना चाहिए । मानन स्टिए बनाए गए, मोनवर प्रध्यापन करण। स्थान प्रधानिक । कार्यक्रम के ओर में विद्यालय के। इसके बाद दिये अध्यापना किरण दीवित के हुआ समा हो के ब्राए प्रकंत महस्तर मंदरने मेर के प्रचार से लिखते ने अपने वस्तर में बढ़ा कि चेता. चनकर साम इडा। नैसर अंगरी के ब्रात मीडिय हुत तका की गई। यहा दावों के दात अर्थीय नकेंग । पाल की विधानत है हो। हमें रोबल कर तहरा चाहिए। कार्य रोका विका पया। व्यायेकन के द्वाना में शांति आपिका औरने एक रक्त का आंग के हुए। तक पर लां हम के वे बहुत को और अध्या बहु। पाट तक विश्वासित की प्रार्थन के बाव कार्यक्रम विभेन शाम प्रदर्शित किए कर ओपनी रीता किए के. यह है ज्योंकि तीन के बाधान में इस माने क्यांगा. मीक हुआ







CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



6x660 MW SASAN ULTRA MEGA POWER PROJECT AMBIENT AIR QUALITY DATA

April, 2021 to September, 2021

စ္က	uts					Loca	tions ar	d Conce	entratio	ns (in µg	g/m³)				
Months	Pollutants	AA	Q1	AA	Q2	AA	Q3	AA	Q4	AA	Q5	AA	Q6	AA	Q7
2	<u>8</u>	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
	PM10	51.02	58.03	46.36	54.02	58.02	63.82	43.99	50.27	50.02	58.01	59.01	64.15	51.36	58.22
₩ ₩	PM2.5	22.26	29.01	22.63	28.36	27.82	34.15	22.96	28.96	24.61	29.3	30.15	35.25	23.88	28.11
202	S02	18.02	23.07	17.26	22.06	26.45	32.83	12.93	16.14	18.17	23.65	25.77	32.56	14.36	19.25
April, 2021	N02	22.14	28.11	23.33	28.06	32.96	40.15	15.17	20.89	25.96	30.52	30.58	37.15	27.96	31.55
▼	СО	568	692	479	601	669	755	338	482	558	690	682	752	622	692
	Hg	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	PM10	51.21	56.74	46.28	51.12	55.47	59.71	41.82	46.19	50.67	54.27	56.28	60.69	50.4	55.6
4	PM2.5	21.29	27.3	21.5	26.41	25.28	30.17	20.39	24.65	23.18	27.49	27.28	31.05	23.05	26.59
202	S02	17.12	23.77	15.2	18.82	25.69	29.4	11.14	14.52	18.14	24.75	23.63	26.91	11.2	16.96
May, 2021	N02	22.58	29.1	21.2	27.6	30.19	35.47	15.66	18.28	25.11	29.25	29.63	34.49	23.17	28.46
_	СО	513	617	510	582	628	714	331	425	602	656	628	702	606	669
	Hg	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	PM10	49.49	53.71	42.49	49.17	51.33	57.5	37.43	43.28	44.58	50.11	51.63	56.88	43.22	49.63
ત	PM2.5	22.2	25.52	21.41	24.36	23.96	27.22	17.19	22.37	20.12	24.03	21.49	25.83	22.05	25.82
June, 2021	S02	18.3	21.31	14.6	18.1	22.22	26.54	8.78	14.39	16.96	22.02	20.33	26.11	9.05	15.11
une,	N02	22.71	26.2	19.3	22.75	26.93	30.17	14.52	18.12	21.14	26.42	24.2	29.73	15.48	22.11
	СО	506	542	472	536	647	693	301	390	572	613	608	678	514	589
	Hg	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	PM10	40.57	49.11	39.37	45.12	48.76	53.41	33.2	39.67	41.63	45.12	48.3	52.31	40.52	45.76
	PM2.5	18.25	23.25	15.03	20.36	19.63	24.08	14.19	18.44	15.93	20.05	18.7	25.19	18.22	23.93
	S02	15.49	18.89	11.26	16.33	16.36	20.81	7.55	13.11	14.75	19.12	15.19	20.44	9.56	14.05
	N02	20.48	24.33	17.59	22.3	22.52	26.99	13.81	17.6	19.53	24.01	22.6	25.11	15.44	18.6
	СО	477	516	459	502	559	596	306	344	511	563	588	622	502	547
	Hg	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	PM10	40.78	46.73	38.19	44.22	50.38	54.37	30.42	37.9	40.44	45.77	48.09	53.17	40.6	46.3
	PM2.5	17.7	22.52	13.53	19.01	21.93	25.83	12.62	17.96	17.86	23.11	22.63	26.02	18.96	25.02
	S02	14.01	18.05	11.49	16.14	17.71	21.89	7.02	12.96	15.11	19.78	17.36	23.53	13.39	17.22
	N02	20.07	24.86	16.88	23.46	23.17	27.69	10.89	14.52	20.26	25.01	23.33	28.01	16.12	20.77
	СО	425	522	399	510	535	589	302	352	428	566	589	642	531	578
	Hg	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



	PM10	40.17	45.21	35.66	42.63	45.18	53.82	31.5	36.74	40.01	46.1	49.47	54.17	40.11	44.63
2021	PM2.5	18.11	25.14	15.18	21.96	20.55	26.6	13.02	18.11	20.78	25.86	22.17	26.79	20.02	24.78
	S02	13.36	17.52	10.78	15.72	16.96	22.17	7.31	11.01	13.32	18.78	19.55	22.55	12.81	16.74
emb	N02	20.67	25.45	14.11	21.45	22.63	25.78	9.88	15.02	20.91	25.17	23.05	27.11	17.63	23.48
September,	СО	475	575	378	452	504	592	314	378	439	581	588	644	545	582
	Hg	BDL													

All values in µg/m3 Where, BDL (Below Detection Limit)

AAQ1 = Sasan Village, AAQ2 = Harrahwa village, AAQ3 = Construction office, AAQ4 = Tiyara Town Ship, AAQ5 = Siddhi Khurd Village, AAQ6=Permanent Store, AAQ7= Siddhi kallan village

Prepared By

Signature.....

Name <u>Dr. Dinesh K. Uchhariya</u>
Designation <u>Dy Manager (Technical)</u>

AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



6x660 MW SASAN ULTRA MEGA POWER PROJECT

Flue Gas Monitoring DATA

April, 2021 to September, 2021

Unit Capacity : 660 MW
Stack Height : 275 m
Stack Dia : 7.1m
Platform level : 135 m

Months	Pollutants	Locations and Concentrations (in mg/Nm³)								
Widitis	Foliatarits	Unit # 1	Unit # 2	Unit #3	Unit # 4	Unit # 5	Unit # 6			
	PM	46.1	42.5	47.1	45.1	46.1	44.9			
11	S02	869	886	824	883	852	877			
1,203	NOx	232	235	243	239	235	240			
April, 2021	СО	1.52	1.61	1.58	1.77	1.81	1.66			
	Exit Velocity (m/s)	25.92	25.58	25.76	25.93	25.66	25.61			
	PM	44.9	41.9	45.2	43.9	44.8	46.1			
21	S02	958	870	876	858	871	888			
May, 2021	NOx	227	229	237	241	230	234			
May	CO	1.69	1.55	1.81	1.82	1.46	1.52			
	Exit Velocity (m/s)	25.56	25.21	25.08	25.44	25.19	25.78			
	PM	45.2	43.7	47	44.8	48.1	45.9			
	S02	975	866	883	866	887	871			
2021	NOx	236	217	241	231	242	241			
June, 2021	CO	1.82	1.61	1.47	1.76	1.68	1.67			
<u> </u>	Hg	BDL	BDL	BDL	BDL	BDL	BDL			
	Exit Velocity (m/s)	25.27	25.09	25.12	25.1	25.03	25.29			
	PM	43.6	45.3	42.6	46.1	47.8	46.1			
121	S02	868	846	893	878	910	888			
July, 2021	NOx	240	232	235	233	244	228			
ja	CO	1.73	1.41	1.69	1.91	1.63	1.49			
	Exit Velocity(m/s)	25.86	25.43	25.76	25.22	25.96	25.68			
	PM	44.8	47.6	45.1	43.9	42.9	40.9			
202;	S02	873	876	869	848	896	847			
st, 2	NOx	235	241	237	228	233	226			
August, 2021	CO	1.55	1.62	1.58	1.6	1.44	1.51			
	Exit Velocity(m/s)	25.28	25.52	25.17	25.19	25.55	25.16			



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



4	PM	47.1	42.4	46.8	44.7	46.2	43.4
	S02	888	869	893	852	847	855
2021	NOx	241	238	242	233	236	261
ptember,	СО	1.69	1.91	1.7	1.7	1.67	1.73
	Hg	BDL	BDL	BDL	BDL	BDL	BDL
Sepi	Exit Velocity(m/s)	25.58	25.52	25.75	25.36	25.93	25.82

All values in mg/Nm3

Where, BDL (Below Detection Limit)

Prepared By

Signature......

Name _____Dr. Dinesh K. Uchhariya

AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED AMBIENT NOISE MONITORING April, 2021 to September, 2021

Month / continue		Day		Night			
Month/Locations	Min	Max	Leq	Min	Max	Leq	
April, 2021							
Construction Office	57.1	72.2	68.9	54.1	66.7	63.7	
Permanent Store	55.8	66.8	63.1	52.7	63.1	60.1	
Sasan Village	45.9	53.4	50.1	42.1	44	43.2	
Siddhi Khurd Village	47.1	51.9	49.7	41.9	43.1	42.7	
Harrahawa Village	45.3	50.5	47.8	40.7	42.9	41.3	
Tiyara Town Ship	44.8	49	46.1	37.2	41.5	39.2	
Siddhi Kallan	42.9	53.8	51.5	42.1	44	43.1	
May, 2021	•	II.	•	•	•		
Construction Office	54.7	70.6	67.2	51.9	64.8	60.5	
Permanent Store	52.1	68.2	64.6	50.8	61.6	58.6	
Sasan Village	43.5	54.1	51.6	41.6	43.2	42.1	
Siddhi Khurd Village	45.6	53.6	47.9	40.2	44.6	41	
Harrahawa Village	44.2	52.2	46.2	41	43.5	40.8	
Tiyara Town Ship	41.3	47.7	43.8	35.8	40.1	38.7	
Siddhi Kallan	43.7	51.3	45.8	40.3	42.7	41.2	
June, 2021		I			1		
Construction Office	53.5	68.8	65.6	50.2	62.1	58.3	
Permanent Store	51.6	65.6	62.1	48.1	60.3	56.7	
Sasan Village	42.1	53.5	50.5	39.3	42	40.9	
Siddhi Khurd Village	41.8	52.2	46.2	38	43.8	40.7	
Harrahawa Village	42.6	53.4	47.7	40.4	42.5	41.3	
Tiyara Town Ship	38.7	44.1	40.3	36.1	41.6	39.3	
Siddhi Kallan	41.2	50.8	45.1	38.8	43.2	40.8	
July, 21	1	1	•		•	•	
Construction Office	52.7	65.8	62.6	48.7	60.7	56.1	
Permanent Store	50.1	64.6	60.1	49.6	59.1	55.3	
Sasan Village	40.6	52.5	47.5	37.2	41.3	39.5	
Siddhi Khurd Village	42.2	51.2	46.8	39.1	42.7	41.3	
Harrahawa Village	40.9	52.4	48.1	38.2	43.2	40.1	
Tiyara Town Ship	37.4	45.1	42.3	33	39.9	37.7	
Siddhi Kallan	39.1	49.8	44.6	37.3	42	40.9	
August, 21	1	1		ı		· ·	
Construction Office	53.5	66.2	61.2	50.2	63	57.6	



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



Permanent Store	52.7	63.3	61.6	51.5	60.5	58.5			
Sasan Village	41.8	53.4	46.1	38	40.9	39.2			
Siddhi Khurd Village	43.6	52.8	49	40.5	43.1	42.9			
Harrahawa Village	44.1	53.3	50.6	39.6	44	42.6			
Tiyara Town Ship	38.5	43.6	40.7	35.4	37.5	36.4			
Siddhi Kallan	40.2	51.1	47.1	38.4	43.3	41.3			
September, 21									
Construction Office	55.5	67.5	63.7	52.1	65.3	59.1			
Permanent Store	53.7	65.1	62.1	50.6	62.1	57.2			
Sasan Village	43.8	52.6	49.5	37.2	42.9	40.8			
Siddhi Khurd Village	45.6	51.2	48.2	40.4	42.2	41.3			
Harrahawa Village	43.1	54.1	51.9	39.9	43.6	41.1			
Tiyara Town Ship	39.5	48.8	45.5	36.1	40.1	38.9			
Siddhi Kallan	43.2	52.2	49.8	39.7	42.7	40.8			

All values in dB(A)

Prepared By

AETRL (P.) LIMITED

Checked & Approved By

Signature...... Name <u>Rajesh Jain</u>

Designation <u>Manager</u>

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India © 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED REPORT OF AMBIENT OLC (ALONG THE) NOISE MONITORING April, 2021 to September, 2021

Month /Logotics			Night			
Month/Locations	Min	Max	Leq	Min	Max	Leq
April, 2021	<u> </u>	l				
Amlohari Village	42.8	52	49.9	39	42.3	41.1
Dhatura Village	45.9	54.1	50.2	38.7	41.2	40.3
TF-435	46.4	53.5	52.1	41.1	43.9	42.5
Hirrwah Village	43.5	52.9	48.7	40.8	42.7	41
Naugarh Village	45.1	50.5	48.3	38.9	41.8	39.5
Pachaur Village	44.8	52.2	49.1	37.2	40.5	38.9
Shiv Pahari	46.1	62.1	60	45.2	52.1	48.9
May, 2021	<u> </u>	l	l	l	l	
Amlohari Village	40.9	53.4	48.5	40.9	43.2	41.9
Dhatura Village	44.2	52.6	49.1	39.5	44.1	42.4
TF-435	43.8	51.7	49.6	40.7	42.1	41.6
Hirrwah Village	44.7	53.2	50.8	38.3	43.6	40.6
Naugarh Village	42.6	51.8	49.9	37.2	42	39.1
Pachaur Village	41.1	53.9	46.6	36.8	41.2	37.9
Shiv Pahari	43.8	63.6	61.1	43.1	54.2	47.3
June, 2021				1	1	1
Amlohari Village	43.7	51.7	47.3	38.5	42.7	40.9
Dhatura Village	42.6	50.9	46.7	37.7	41	39.4
TF-435	42.1	52.8	48.8	39.8	43.9	40.6
Hirrwah Village	43.9	52.1	49.2	36.9	41.1	38.6
Naugarh Village	41.2	50.3	45.1	38	42.5	39.8
Pachaur Village	42	52.2	46.9	37.1	42.8	40.1
Shiv Pahari	47.1	61.8	57	41.8	52.3	46.7
July, 2021	<u> </u>	l	l	l	l	
Amlohari Village	40.8	52.3	46.6	39.2	43.9	41.3
Dhatura Village	41.1	51.1	45.1	38.9	43.2	41
TF-435	40.6	53.6	47.9	37.2	42.5	39.9
Hirrwah Village	42.3	51.5	46	35.7	40.7	37.1
Naugarh Village	40.9	52.6	46.3	36.3	40.9	38.2
Pachaur Village	42.2	50	47.2	38.8	41.5	39.8
Shiv Pahari	43	62.7	55.2	40.1	53.6	48.5
August, 2021	L	I	1	1	1	1



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



Amlohari Village	42.9	53.2	48.5	41	44.1	42.1			
Dhatura Village	42.5	52.1	46.6	40.7	42	41.2			
TF-435	41.2	54.1	48.1	39.9	43.3	42.1			
Hirrwah Village	40.8	52.6	45.2	38.6	41.5	40.7			
Naugarh Village	41.1	53.7	45.7	39.5	41.2	40.6			
Pachaur Village	42.5	53.1	48.9	40.3	43.6	41.7			
Shiv Pahari	44.2	64.1	58.8	44.5	52.1	49.1			
September, 2021									
Amlohari Village	43.2	51.6	47.6	40.7	43.8	42.7			
Dhatura Village	44.7	53.0	49.1	41.6	43.6	42			
TF-435	45.1	53.7	50.8	38.1	42.1	40.9			
Hirrwah Village	42.9	50.3	47.6	37.3	42.7	41.1			
Naugarh Village	43.2	52.8	46.2	40.9	43.9	41.8			
Pachaur Village	44.3	52.6	47.1	41.2	43.3	42.2			
Shiv Pahari	46.1	62.1	57.9	43.1	51.6	48.8			

All values in dB(A)

Prepared By

Name Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

The state of the s

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

Parameters	IS:10500	April, 2021						
	1991(Reaff:2012) Limits (Permissible Limits)	Monitoring Location						
		GW1	GW2	GW3	PW1	PW2	PW3	
pH	6.5-8.5	7.7	7.61	7.46	7.06	6.91	6.93	
Colour (Hazen)	15	4.12	2.28	3.52	BDL	BDL	BDL	
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	
Turbidity (NTU)	5	BDL	BDL	0.55	BDL	BDL	BDL	
Total Dissolved Solids (mg/L)	2000	490	474	478	90	90	99	
Total Alkalinity (mg/L)	600	181	163	176	51.1	43.7	56.8	
Total Hardness as CaCO ₃ (mg/L)	600	185	176	188	45.7	47.5	57.1	
Calcium as Ca (mg/L)	200	53.1	50.1	52.5	9.33	9.61	10.4	
Magnesium as Mg (mg/L)	100	12.69	12.33	13.79	5.43	5.7	7.58	
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL	
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL	
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL	
Chlorides (mg/L)	1000	67.9	51.7	61.9	1.63	1.93	2.32	
Sulphate (mg/L)	400	72.3	66.9	66.7	2.01	1.87	1.91	
Fluoride (mg/L)	1.5	0.76	0.745	0.602	BDL	BDL	BDL	
Nitrate (mg/L)	45	4.47	5.23	3.89	BDL	BDL	BDL	
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL	
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL	
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL	
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent	
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent	
GW=Ground Water.	GW1= Siddhi Khurd Village, GW2= Sasan Village, GW3= Harrahwa Village,							
PW = Potable Water	PW1= Service Building, PW2=Township Canteen, PW3= Purvanchal Canteen							

Where, BDL (Below Detection Limit)

Prepared By

Signature..... Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED



Checked & Approved By

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

	IS:10500			May,	2021		
Parameters	1991(Reaff:2012) Limits (Permissible			Monitorin	g Location		
	Limits)	GW1	GW2	GW3	PW1	PW2	PW3
рH	6.5-8.5	7.7	7.55	7.61	7.11	6.89	6.96
Colour (Hazen)	15	4.12	3.06	3.12	BDL	BDL	BDL
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity (NTU)	5	BDL	BDL	BDL	BDL	BDL	BDL
Total Dissolved Solids (mg/L)	2000	478	482	482	89	78	90
Total Alkalinity (mg/L)	600	169	171	181	46.4	40.2	51.4
Total Hardness as CaCO ₃ (mg/L)	600	182	192	180	44.3	41.8	50.3
Calcium as Ca (mg/L)	200	52.8	51.5	53.5	9.06	9.24	11.5
Magnesium as Mg (mg/L)	100	12.12	15.36	11.23	5.18	4.54	5.16
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides (mg/L)	1000	68.2	55.8	63.7	1.72	1.78	2.11
Sulphate (mg/L)	400	70.1	62.1	65.1	1.93	1.63	1.59
Fluoride (mg/L)	1.5	0.723	0.756	0.636	BDL	BDL	BDL
Nitrate (mg/L)	45	5.86	2.85	3.41	BDL	BDL	BDL
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
GW=Ground Water.	GW1= Siddhi Khurd	/illage, GW2=	Sasan Villag	e, GW3= Harr	ahwa Villa <mark>ge,</mark>		
PW = Potable Water	PW1= Service Buildir	ng, PW2=Tow	nship Cantee	n, PW3= Purv	anchal Cante	en	

Where, BDL (Below Detection Limit)

Prepared By

Signature...... Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED



Checked & Approved By

Signature......

Name Rajesh Jain

Designation Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

	IS:10500			June,	2021		
Parameters	1991(Reaff:2012) Limits (Permissible			Monitorin	g Location		
	Limits)	GW1	GW2	GW3	PW1	PW2	PW3
рН	6.5-8.5	7.63	7.47	7.55	7.08	6.92	6.87
Colour (Hazen)	15	3.88	2.61	2.96	BDL	BDL	BDL
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity (NTU)	5	BDL	BDL	BDL	BDL	BDL	BDL
Total Dissolved Solids (mg/L)	2000	467	469	476	93	82	90
Total Alkalinity (mg/L)	600	166	158	173	48.1	41.7	52.7
Total Hardness as CaCO ₃ (mg/L)	600	172	182	177	45	40.1	49.4
Calcium as Ca (mg/L)	200	50.4	52.7	51.1	9.52	9.18	11.3
Magnesium as Mg (mg/L)	100	11.17	12.21	11.96	5.15	4.16	5.04
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides (mg/L)	1000	61.9	53.4	57.2	1.88	1.28	2.27
Sulphate (mg/L)	400	66.3	57.8	62.6	1.52	1.11	1.63
Fluoride (mg/L)	1.5	0.668	0.618	0.604	BDL	BDL	BDL
Nitrate (mg/L)	45	2.76	3.26	2.93	BDL	BDL	BDL
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
GW=Ground Water.	GW1= Siddhi Khurd	/illage, GW2=	Sasan Villag	e, GW3= Harr	ahwa Village,		
PW = Potable Water	PW1= Service Buildir	ng, PW2=Tow	nship Cantee	n, PW3= Purv	anchal Cante	en	

Where, BDL (Below Detection Limit)

Prepared By

Signature......Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED



Checked & Approved By

Signature......

Name Rajesh Jain

Designation Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

	IS:10500			July,	2021		
Parameters	1991(Reaff:2012) Limits (Permissible			Monitorin	g Location		
	Limits)	GW1	GW2	GW3	PW1	PW2	PW3
рН	6.5-8.5	7.72	7.31	7.47	6.98	6.98	6.97
Colour (Hazen)	15	2.78	2.24	2.02	BDL	BDL	BDL
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity (NTU)	5	BDL	BDL	BDL	BDL	BDL	BDL
Total Dissolved Solids (mg/L)	2000	451	458	468	90	80	86
Total Alkalinity (mg/L)	600	161	161	170	52.7	40.2	50.1
Total Hardness as CaCO ₃ (mg/L)	600	176	172	173	47.1	43.8	45.7
Calcium as Ca (mg/L)	200	51.5	51.9	50.8	9.93	9.44	11.6
Magnesium as Mg (mg/L)	100	11.48	10.27	11.17	5.38	4.95	4.13
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides (mg/L)	1000	50.1	51.7	52.7	1.78	1.78	2.11
Sulphate (mg/L)	400	60.7	55.9	61.1	1.63	1.36	1.46
Fluoride (mg/L)	1.5	0.627	0.602	0.585	BDL	BDL	BDL
Nitrate (mg/L)	45	2.93	2.63	2.12	BDL	BDL	BDL
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
GW=Ground Water.	GW1= Siddhi Khurd	/illage, GW2=	Sasan Villag	e, GW3= Harı	ahwa Village,		
PW = Potable Water	PW1= Service Buildir	ng, PW2=Tow	nship Cantee	n, PW3= Purv	anchal Cante	en	

Where, BDL (Below Detection Limit)

Prepared	Ву
----------	----

Signature......Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED



Checked & Approved By

Signature......

Name _____Rajesh_Jain

Designation ____Manager

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

	IS:10500			August	, 2021		
Parameters	1991(Reaff:2012) Limits (Permissible			Monitorin	g Location		
	Limits)	GW1	GW2	GW3	PW1	PW2	PW3
рН	6.5-8.5	7.55	7.36	7.33	7.01	6.92	6.95
Colour (Hazen)	15	2.42	1.96	2.63	BDL	BDL	BDL
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity (NTU)	5	BDL	BDL	BDL	BDL	BDL	BDL
Total Dissolved Solids (mg/L)	2000	440	441	451	86	84	88
Total Alkalinity (mg/L)	600	166	150	177	50.4	41.9	48.2
Total Hardness as CaCO ₃ (mg/L)	600	171	166	170	44.9	44.5	47.2
Calcium as Ca (mg/L)	200	49.7	48.5	51.1	9.58	9.32	11.9
Magnesium as Mg (mg/L)	100	12.58	10.87	10.26	5.11	5.15	4.19
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides (mg/L)	1000	52	42.5	47.8	1.93	1.86	2.28
Sulphate (mg/L)	400	51.9	53.2	58.3	1.77	1.55	1.83
Fluoride (mg/L)	1.5	0.612	0.611	0.517	BDL	BDL	BDL
Nitrate (mg/L)	45	2.25	2.52	2.46	BDL	BDL	BDL
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
GW=Ground Water.	GW1= Siddhi Khurd	/illage, GW2=	Sasan Villag	e, GW3= Harı	ahwa Village,		
PW = Potable Water	PW1= Service Buildir	ng, PW2=Tow	nship Cantee	n, PW3= Purv	anchal Cante	en	

Where, BDL (Below Detection Limit)

Prepared By

Signature..... Dr. Dinesh K. Uchhariya

Designation <u>Dy Manager (Technical)</u>
AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED GROUND / POTABLE WATER QUALITY

	IS:10500			Septemb	per, 2021		
Parameters	1991(Reaff:2012) Limits (Permissible			Monitorin			
	Limits)	GW1	GW2	GW3	PW1	PW2	PW3
рН	6.5-8.5	7.27	7.55	7.37	6.89	6.97	6.9
Colour (Hazen)	15	2.58	3.96	3.18	BDL	BDL	BDL
Odor	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity (NTU)	5	BDL	BDL	BDL	BDL	BDL	BDL
Total Dissolved Solids (mg/L)	2000	448	437	448	78	80	84
Total Alkalinity (mg/L)	600	152	157	166	44.2	40.1	43.7
Total Hardness as CaCO ₃ (mg/L)	600	169	164	175	40.2	43.7	45.6
Calcium as Ca (mg/L)	200	47.7	47.1	52.4	9.89	9.81	10.7
Magnesium as Mg (mg/L)	100	12.08	11.44	10.69	3.71	4.73	4.67
Residual Chlorine(mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Total Ammonia (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Boron (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
Chlorides (mg/L)	1000	51.5	44.7	48.1	1.47	1.74	2.08
Sulphate (mg/L)	400	44.6	55.1	54.6	1.61	1.81	1.47
Fluoride (mg/L)	1.5	0.578	0.588	0.527	BDL	BDL	BDL
Nitrate (mg/L)	45	3.15	3.52	2.88	BDL	BDL	BDL
Phenolic Compound(mg/L)	0.002	BDL	BDL	BDL	BDL	BDL	BDL
Mineral Oil (mg/L)	0.5	BDL	BDL	BDL	BDL	BDL	BDL
Sulphide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Cyanide (mg/L)	0.05	BDL	BDL	BDL	BDL	BDL	BDL
Anionic detergent (mg/L)	1	BDL	BDL	BDL	BDL	BDL	BDL
TC (MPN/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
E. Coli (Nos/100ml)	Shall not be detected in 100 ml sample	Absent	Absent	Absent	Absent	Absent	Absent
GW=Ground Water.	GW1= Siddhi Khurd	Village, GW2=	Sasan Villag	e, GW3= Harı	rahwa Village,		
PW = Potable Water	PW1= Service Buildir	ng, PW2=Tow	nship Cantee	n, PW3= Purv	anchal Cante	en	

Where, BDL (Below Detection Limit)

Prepared By

Signature......Dr. Dinesh K. Uchhariya

DesignationDy Manager (Technical)

AETRL (P.) LIMITED

Checked & Approved By

Signature......

Name <u>Rajesh Jain</u>

Designation <u>Manager</u>

AETRL (P.) LIMITED



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY (April, 2021)

Parameters	IS:2296	Monitoring Location			
raidificters	Class 'C' Limits	SW1	SW2	SW3	
рН	6.5-8.5	7.33	7.47	7.52	
Colour (Hazen)	300	171	138	142	
Total Dissolved Solids (mg/L)	1500	459	439	461	
Dissolved Oxygen (mg/L)	4	5.93	5.77	5.58	
Biochemical Oxygen Demand (mg/L)	3	2.51	2.29	2.53	
Chloride (mg/L)	600	59.8	57.9	61	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	
Fluoride (mg/L)	1.5	0.586	0.562	0.582	
Sulphate (mg/L)	400	65.1	48.5	47.5	
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL	
Nitrate (mg/L)	50	14.05	13.8	16.1	
Arsenic (mg/L)	0.2	BDL	BDL	BDL	
Copper (mg/L)	1.5	BDL	BDL	BDL	
Iron (mg/L)	50	0.155	0.1 71	0.174	
Zinc (mg/L)	15	0.169	0.157	0.233	
Cadmium (mg/L)	0.01	BDL	BDL	BDL	
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL	
Selenium (mg/L)	0.05	BDL	BDL	BDL	
Lead (mg/L)	0.1	BDL	BDL	BDL	

SW= Surface Water

SW1=Gavaiya Nalla (Harrahwa Village), SW2=Mayar River, SW3= Rihand River

Where, BDL (Below Detection Limit)

Prepared By

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

Checked & Approved By

Signature.....

Name Rajesh Jain
Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY May, 2021

Parameters	IS:2296	Monitoring Location			
Parameters	Class 'C' Limits	SW1	SW2	SW3	
рН	6.5-8.5	7.29	7.32	7.49	
Colour (Hazen)	300	182	152	166	
Total Dissolved Solids (mg/L)	1500	442	448	436	
Dissolved Oxygen (mg/L)	4	6.05	5.19	5.38	
Biochemical Oxygen Demand (mg/L)	3	2.39	2.42	2.63	
Chloride (mg/L)	600	56.1	55.1	69	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	
Fluoride (mg/L)	1.5	0.558	0.577	0.591	
Sulphate (mg/L)	400	63.8	51.6	51.2	
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL	
Nitrate (mg/L)	50	10.36	9.13	12.6	
Arsenic (mg/L)	0.2	BDL	BDL	BDL	
Copper (mg/L)	1.5	BDL	BDL	BDL	
Iron (mg/L)	50	0.136	0.122	0.16	
Zinc (mg/L)	15	0.158	0.135	0.208	
Cadmium (mg/L)	0.01	BDL	BDL	BDL	
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL	
Selenium (mg/L)	0.05	BDL	BDL	BDL	
Lead (mg/L)	0.1	BDL	BDL	BDL	

 ${\sf SW=Surface\ Water\ SW1=Gavaiya\ Nalla\ (Harrahwa\ Village),\ SW2=Mayar\ River,\ SW3=Rihand\ River}$

Where, BDL (Below Detection Limit)

Prepared By

Signature.....

Name <u>Dr. Dinesh K. Uchhariya</u>

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

Checked & Approved By

Signature.....

Name Rajesh Jain
Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India © 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY June, 2021

Davamatara	IS:2296	Monitoring Location			
Parameters	Class 'C' Limits	SW1	SW2	SW3	
рН	6.5-8.5	7.35	7.52	7.42	
Colour (Hazen)	300	196	172	180	
Total Dissolved Solids (mg/L)	1500	431	434	410	
Dissolved Oxygen (mg/L)	4	6.12	5.6	5.76	
Biochemical Oxygen Demand (mg/L)	3	2.42	2.27	2.31	
Chloride (mg/L)	600	53.7	51.8	63.8	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	
Fluoride (mg/L)	1.5	0.531	0.581	0.558	
Sulphate (mg/L)	400	60.7	49.7	42.8	
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL	
Nitrate (mg/L)	50	8.11	3.93	7.42	
Arsenic (mg/L)	0.2	BDL	BDL	BDL	
Copper (mg/L)	1.5	BDL	BDL	BDL	
Iron (mg/L)	50	0.142	0.102	0.133	
Zinc (mg/L)	15	0.139	0.12	0.187	
Cadmium (mg/L)	0.01	BDL	BDL	BDL	
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL	
Selenium (mg/L)	0.05	BDL	BDL	BDL	
Lead (mg/L)	0.1	BDL	BDL	BDL	

SW= Surface Water SW1=Gavaiya Nalla (Harrahwa Village), SW2=Mayar River, SW3= Rihand River

Where, BDL (Below Detection Limit)

Prepared By

AETRL (P.) LIMITED

The second second

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u> Designation <u>Manager</u>



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY July, 2021

Daramatara	IS:2296	Monitoring Location				
Parameters	Class 'C' Limits	SW1	SW2	SW3		
рН	6.5-8.5	7.29	7.33	7.31		
Colour (Hazen)	300	220	196	210		
Total Dissolved Solids (mg/L)	1500	429	378	402		
Dissolved Oxygen (mg/L)	4	6.52	6.12	6.03		
Biochemical Oxygen Demand (mg/L)	3	2.16	2.47	2.29		
Chloride (mg/L)	600	50.9	52.7	57.9		
Cyanide (mg/L)	0.05	BDL	BDL	BDL		
Fluoride (mg/L)	1.5	0.552	0.558	0.56		
Sulphate (mg/L)	400	58.1	49.7	48.1		
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL		
Anionic detergent (mg/L)	1	BDL	BDL	BDL		
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL		
Nitrate (mg/L)	50	7.66	4.78	5.96		
Arsenic (mg/L)	0.2	BDL	BDL	BDL		
Copper (mg/L)	1.5	BDL	BDL	BDL		
Iron (mg/L)	50	0.131	0.127	0.133		
Zinc (mg/L)	15	0.118	0.131	0.178		
Cadmium (mg/L)	0.01	BDL	BDL	BDL		
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL		
Selenium (mg/L)	0.05	BDL	BDL	BDL		
Lead (mg/L)	0.1	BDL	BDL	BDL		

SW= Surface Water SW1=Gavaiya Nalla (Harrahwa Village), SW2=Mayar River, SW3= Rihand River

Where, BDL (Below Detection Limit)

Prepared By

Signature.....Dr. Dinesh K. Uchhariya

AETRL (P.) LIMITED



Checked & Approved By

Signature.....

Name Rajesh Jain
Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)
Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India © 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY August, 2021

Dougraphous	IS:2296	Monitoring Location			
Parameters	Class 'C' Limits	SW1	SW2	SW3	
рН	6.5-8.5	7.4	7.57	7.44	
Colour (Hazen)	300	236	220	263	
Total Dissolved Solids (mg/L)	1500	414	358	370	
Dissolved Oxygen (mg/L)	4	6.41	6.42	6.11	
Biochemical Oxygen Demand (mg/L)	3	2.33	2.21	2.01	
Chloride (mg/L)	600	46.5	40.2	40.1	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	
Fluoride (mg/L)	1.5	0.515	0.502	0.514	
Sulphate (mg/L)	400	50.2	41.6	46.3	
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL	
Nitrate (mg/L)	50	9.36	5.26	5.02	
Arsenic (mg/L)	0.2	BDL	BDL	BDL	
Copper (mg/L)	1.5	BDL	BDL	BDL	
Iron (mg/L)	50	0.118	0.134	0.16	
Zinc (mg/L)	15	0.126	0.147	0.144	
Cadmium (mg/L)	0.01	BDL	BDL	BDL	
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL	
Selenium (mg/L)	0.05	BDL	BDL	BDL	
Lead (mg/L)	0.1	BDL	BDL	BDL	

SW= Surface Water SW1=Gavaiya Nalla (Harrahwa Village), SW2=Mayar River, SW3= Rihand River

Where, BDL (Below Detection Limit)

Prepared By

Signature

Name <u>Dr. Dinesh K. Uchhariya</u>
Designation <u>Dy Manager (Technical)</u>

AETRL (P.) LIMITED

Checked & Approved By

Signature...... Name <u>Rajesh Jain</u>

Designation <u>Manager</u>



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited SURFACE WATER QUALITY September, 2021

Davamatava	IS:2296	Monitoring Location			
Parameters	Class 'C' Limits	SW1	SW2	SW3	
рН	6.5-8.5	7.31	7.44	7.31	
Colour (Hazen)	300	210	214	204	
Total Dissolved Solids (mg/L)	1500	422	336	352	
Dissolved Oxygen (mg/L)	4	6.52	6.72	6.63	
Biochemical Oxygen Demand (mg/L)	3	2.42	2.55	2.22	
Chloride (mg/L)	600	44.1	47	41.8	
Cyanide (mg/L)	0.05	BDL	BDL	BDL	
Fluoride (mg/L)	1.5	0.528	0.552	0.502	
Sulphate (mg/L)	400	55.1	44.3	47.6	
Phenolic Compound (mg/L)	0.005	BDL	BDL	BDL	
Anionic detergent (mg/L)	1	BDL	BDL	BDL	
Oil and Grease (mg/L)	0.1	BDL	BDL	BDL	
Nitrate (mg/L)	50	7.52	7.52	6.89	
Arsenic (mg/L)	0.2	BDL	BDL	BDL	
Copper (mg/L)	1.5	BDL	BDL	BDL	
Iron (mg/L)	50	0.127	0.128	0.141	
Zinc (mg/L)	15	0.106	0.117	0.189	
Cadmium (mg/L)	0.01	BDL	BDL	BDL	
Chromium as Cr ⁶⁺ (mg/L)	0.05	BDL	BDL	BDL	
Selenium (mg/L)	0.05	BDL	BDL	BDL	
Lead (mg/L)	0.1	BDL	BDL	BDL	

SW= Surface Water SW1=Gavaiya Nalla (Harrahwa Village), SW2=Mayar River, SW3= Rihand River

Where, BDL (Below Detection Limit)

Prepared By

Signature......Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited ASH POND EFFLUENT ANALYSIS REPORT (April, 2021 to September, 2021)

				М	onths					
Parameters	Limits	April, 2021	May, 2021	June, July, 2021 2021		Aug, 2021	Sept, 2021			
рН	6.5-8.5	6.82	6.69	6.79	6.89	6.84	6.89			
TSS (mg/L)	100	49	56	48	56	46	58			
Oil and Grease (mg/L)	20	BDL	BDL	BDL	BDL	BDL	BDL			
Arsenic (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Lead (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Cadmium (mg/L)]	BDL	BDL	BDL	BDL	BDL	BDL			
Chromium as Cr ⁶⁺ (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Manganese (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Selenium (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Zinc (mg/L)		0.227	0.242	0.332	0.301	0.335	0.31			
Aluminum (mg/L)	-	2.93	3.02	2.48	2.11	2.25	2.96			
Total Chromium (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Copper (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Mercury (mg/L)		BDL	BDL	BDL	BDL	BDL	BDL			
Iron (mg/L)		0.402	0.442	0.391	0.339	0.361	0.323			
Nickel (mg/L)		0.252	0.291	0.247	0.228	0.236	0.207			

Where, BDL (Below Detection Limit)

Prepared By

Signature......Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

The state of the s

Checked & Approved By

Signature.....

Name Rajesh Jain

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited **ETP Outlet** (April, 2021 to September, 2021)

				Мо	nths		
Parameters	Limits	April, 2021	May, 2021	June, 2021	July, 2021	Aug, 2021	Sept, 2021
рН	5.5 to 9.0	7.47	7.31	7.55	7.32	7.5	7.47
Total Dissolved Solids (mg/L)	2100	902	886	832	844	806	852
Chlorides (mg/L)	1000	128	112	126	130	128	136
Biochemical Oxygen Demand (mg/L)	30	9.61	10.12	11.6	10.1	9.5	11.3
Chemical Oxygen Demand (mg/L)	250	59.7	70.2	80.1	76.7	62.5	84.2
Total Suspended Solids (mg/L)	100	66	58	62	60	52	48
Oil & Grease (mg/L)	10	2.36	1.96	2.08	2.11	2.52	2.68

Prepared By

Signature..... Name Dr. Dinesh K. Uchhariya

AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name Rajesh Jain

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED STP Outlet (Purvanchal Camp) (April, 2021 to September, 2021)

			Concentration of Pollutants (STP Outlet)						
Parameters	Limits	April, 2021	May, 2021	June, 2021	July, 2021	Aug, 2021	Sept, 2021		
рН	6.5 to 9.0	7.27	7.3	7.27	7.3	7.41	7.32		
Biochemical Oxygen Demand (mg/L)	30	7.05	7.15	5.73	5.02	5.52	5.04		
Chemical Oxygen Demand (mg/L)	250	55.9	59.1	47.7	49.1	61.7	57.1		
Total Suspended Solids (mg/L)	100	42	38	52	80	56	48		
Oil & Grease (mg/L)	10	0.86	0.93	0.78	0.68	0.6	0.88		
Fecal Coliform (MPN/100 ml)	<1000	72	80	62	72	86	72		
Residual Chlorine (mg/L)	5	0.11	0.17	0.22	0.12	0.23	0.19		

Prepared By

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

Company of the second

Checked & Approved By

Name Rajesh Jain

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



Sasan Power Limited STP Outlet (Near Hydrogen Plant) (April, 2021 to September, 2021)

			Conce	ntration of Po	llutants (STP	Outlet)	
Parameters	Limits	April, 2021	May, 2021	June, 2021	July, 2021	Aug, 2021	Sept, 2021
рН	6.5 to 9.0	7.4	7.38	7.33	7.41	7.38	7.29
Biochemical Oxygen Demand (mg/L)	30	8.02	8.63	7.05	5.76	5.41	5.22
Chemical Oxygen Demand (mg/L)	250	63.5	68.1	61.7	58.6	52.7	47.1
Total Suspended Solids (mg/L)	100	44	40	36	46	56	36
Oil & Grease (mg/L)	10	0.89	0.98	0.76	0.47	0.55	0.42
Fecal Coliform (MPN/100 ml)	<1000	62	58	96	78	70	48
Residual Chlorine (mg/L)	5	0.17	0.13	0.1	0.15	0.19	0.22

Prepared By

Signature......Dr. Dinesh K. Uchhariya

Designation Dy Manager (Technical)

AETRL (P.) LIMITED

Checked & Approved By

Signature..... Name <u>Rajesh Jain</u>

Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetri2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED

GROUND WATER QUALITY (Around the Ash Pond)

						(June,	2021)										
		Pelzometer															
Parameters	IS:10500 Limits	Piezometer (SPL/AD/PZ-01)	Piezometer (SPL/AD/PZ-02)	Piezometer (SPL/AD/PZ-03)	Piezometer (SPL/AD/PZ-04)	Piezometer (SPL/AD/PZ-05)	Piezometer (SPL/AD/PZ-06)	Piezometer (SPL/AD/PZ-08)	Piezometer (SPL/AD/PZ-10)	Nr Old Labor Camp (Island 3 and Island 4 area)	Security Training Center (Island-3)						
рН	6.5-8.5	7.51	7.47	7.56	7.59	7.55	7.6	7.49	7.31	7.48	7.66						
Colour (Hazen)	15	3.06	2.78	2.13	3.28	3.14	2.38	3.11	2.36	3.36	2.96						
Odor	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.						
Turbidity (NTU)	1	0.48	0.44	0.54	0.6	0.52	0.72	0.54	0.54	0.55	BDL						
TDS (mg/L)	2000	369	481	442	404	436	469	455	442	484	462						
Total Alkalinity (mg/L)	600	175	180	163	156	168	180	172	152	187	165						
Total Hardness as CaCO ₃ (mg/L)	600	186	186	170	189	181	192	191	178	193	181						
Calcium as Ca (mg/L)	200	48.7	50.2	48.1	50.7	48.3	53.1	51.8	47.8	53.8	49.2						
Magnesium as Mg (mg/L)	100	15.6	14.7	12.1	15.1	14.6	14.4	14.9	14.2	14.2	14.1						
Residual Chlorine (mg/L)	1	BDL	BDL														
Total Ammonia (mg/L)	0.5	BDL	BDL														
Boron (mg/L)	1	BDL	BDL														
Chlorides (mg/L)	1000	47.8	46.8	46.1	55.1	45.7	47.1	60.1	44.7	51.7	57						
Sulphate (mg/L)	400	40.1	56.1	40.7	44.9	53.8	48.3	55.6	47.1	60.9	47.1						
Fluoride (mg/L)	1.5	0.611	0.622	0.607	0.626	0.589	0.599	0.611	0.591	0.612	0.582						
Nitrate (mg/L)	45	3.25	2.96	4.99	5.36	4.15	4.28	5.08	4.08	3.25	3.22						
Phenolic Compound (mg/L)	0.001	BDL	BDL														
Mineral Oil (mg/L)	0.5	BDL	BDL														
Sulphide (mg/L)	0.05	BDL	BDL														
Cyanide (mg/L)	0.05	BDL	BDL														
Anionic detergent* (mg/L)	1	BDL	BDL														

Where, BDL (Below Detection Limit)

Prepared By

Signature Dr. Dirach K. Habbarina

Name <u>Dr. Dinesh K. Uchhariya</u>
Designation <u>Dy Manager (Technical)</u>

AETRL (P.) LIMITED



Checked & Approved By

Signature.....

Name Rajesh Jain
Designation Manager



CIN: U73100MP2002PTC015352

Approved: by Ministry of Environment, Forest and Climate Change (MoEF&CC)

Registered Office: 63/1, Kailash Vihar, Near Income Tax Office, City Center-II

Gwalior-474 011, M.P., India 9 0751-409 9976, 2232177

Email: aetr/2016@gmail.com, aelgwalior@gmail.com



SASAN POWER LIMITED

GROUND WATER QUALITY (Around the Ash Pond)

					(9	Septemb	er, 202	L)							
			Pelzometer												
Parameters	IS:10500 Limits	Piezometer (SPL/AD/PZ-01)	Piezometer (SPL/AD/PZ-02)	Piezometer (SPL/AD/PZ-03)	Piezometer (SPL/AD/PZ-04)	Piezometer (SPL/AD/PZ-05)	Piezometer (SPL/AD/PZ-06)	Piezometer (SPL/AD/PZ-08)	Piezometer (SPL/AD/PZ-10)	7.5 32.06 Agre. 0.36 470 152 179 52.7 11.48 BDL BDL 52.2 66.1 0.642 5.01 BDL BDL BDL BDL BDL	Security Training Center (Island-3)				
рН	6.5-8.5	7.35	7.39	7.51	7.48	7.37	7.51	7.57	7.42	7.5	7.44				
Colour (Hazen)	15	3.11	2.55	2.75	3.06	3.85	2.63	3.85	2.86	32.06	2.36				
Odor	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.	Agre.				
Turbidity (NTU)	1	0.52	0.37	0.4	0.34	0.57	0.44	0.31	0.23	0.36	BDL				
TDS (mg/L)	2000	378	463	451	417	444	457	440	461	470	452				
Total Alkalinity (mg/L)	600	166	171	166	161	161	174	168	159	152	160				
Total Hardness as CaCO ₃ (mg/L)	600	181	178	171	177	179	180	179	172	179	175				
Calcium as Ca (mg/L)	200	47.5	51.8	49.7	51.2	50.1	52.4	50.2	49.2	52.7	48.5				
Magnesium as Mg (mg/L)	100	15.12	11.78	11.36	11.9	13.06	11.9	13	11.91	11.48	13.06				
Residual Chlorine (mg/L)	1	BDL	BDL												
Total Ammonia (mg/L)	0.5	BDL	BDL												
Boron (mg/L)	1	BDL	BDL												
Chlorides (mg/L)	1000	44.1	41.2	47.8	53.8	47.8	48.9	62.8	46.2	52.2	51.2				
Sulphate (mg/L)	400	41.8	51.7	42.2	47.2	51.6	45.7	57.2	41	66.1	43.9				
Fluoride (mg/L)	1.5	0.605	0.652	0.642	0.611	0.596	0.558	0.583	0.555	0.642	0.511				
Nitrate (mg/L)	45	2.89	3.56	4.42	6.18	4.78	6.11	5.78	4.75	5.01	3.8				
Phenolic Compound (mg/L)	0.001	BDL	BDL												
Mineral Oil (mg/L)	0.5	BDL	BDL												
Sulphide (mg/L)	0.05	BDL	BDL												
Cyanide (mg/L)	0.05	BDL	BDL												
Anionic detergent (mg/L)	1	BDL	BDL												

Where, BDL (Below Detection Limit)

Prepared By

Designation Dy Manager (Technical)

AETRL (P.) LIMITED



Checked & Approved By