



सेल SAIL

स्टील अथॉरिटी ऑफ इण्डिया लिमिटेड
STEEL AUTHORITY OF INDIA LIMITED

**PROJECT On:-To Analyze the Ammonia
Slippage in Coke Oven gas, CCD#3 Scrubbers
and suggest the measures to reduce it.**

Guided by:

Mr. Anand Shukla

GM,

CO & CCD Dept.

Bhilai Steel Plant,

Chhattisgarh, India.



Submitted by:

Parag Shrivastava

Department of Chemical Engineering

School of Studies Engineering & Technology

Guru Ghasidas Vishwavidyalaya, Bilaspur

Enrollment no :- GGV/20/01539

CONTENT

S no.	Topics	Page no.
1.	Cover	1
2.	Certificate	2
3.	Acknowledgement	3
4.	Abstract	4
5.	Content	6
6.	Brief History of SAIL,BSP	8
7.	Process flow diagram of Steel Plant	10
8.	Coke oven and coal chemical department	11
9.	Coke OVEN battery	14
10.	Coal Chemical Department- CCD-1	19
11.	CCD-2	24
12.	CCD-3	29
13.	Plant unit- Tar separation plant	32
14.	Primary gas cooler	34
15.	Electrostatic tar precipitator	35
16.	Gas exhauster	37
17.	Gravel filter plant	38
18.	Distillation Plant	40
19.	Elemental sulfur plant	42
20.	Project- To analyze Ammonia Slippage in Coke Oven Gas, CCD#3 Scrubbers and suggest the measures to reduce it	44
21.	Process descroption of NH3 and H2S Scrubber of Unit-500/501	46
22.	H2S/NH3 Scrubbing system of BPP	47
23.	Suggestive measures to reduce the NH3 slippage from scrubber	52



भिलाई इस्पात संयंत्र
BHILAI STEEL PLANT

मानव संसाधन विकास विभाग
HUMAN RESOURCES DEVELOPMENT DEPARTMENT

प्रमाणपत्र
CERTIFICATE

पंजीयन क्र.
Regn. No. P-23/8363

प्रमाणित किया जाता है कि श्री / कुमारी
This is to certify that Shri / Ku. Parag Shrivastava

सेमिस्टर विद्यार्थी
Seventh Sem., student of B.Tech. of School of Studies College / Institute
(Chemical) Engg. & Tech., G.C.V. Bilaspur.

ने अवकाश कालीन प्रशिक्षु के रूप में दिनांक से तक प्रशिक्षण प्राप्त किया।
has undergone project based training from 29/05/2023 to 24/06/2023

प्रोजेक्ट
Project Report on "To Analyze the Ammonia Slippage in Coke Oven Gas, CCD#3
Scrubbers and suggest the measures to reduce it."

इस अवधि में उनका कार्य निष्पादन
His / her performance during the training period has been Excellent

भिलाई दिनांक
Bhilai, Dated 24/06/2023

प्रमाणित किया जाता है
Incorporated in the