

File No: J-11011/489/2009-IA.II(I)

Government of India Ministry of Environment, Forest and Climate Change IA Division



Date 25/07/2024



To,

M/s. JSW VIJAYANAGAR METALLICS LIMITED

Room No. 8, First Floor, HSM 1 Old Lab, JSW Steel Limited, Toranagallu

Email: env.jvml@jsw.in

Ref:

Environmental Clearance granted to JSW Steel Ltd vide no. IA-J-11011/489/2009-IA-II (INDI)

dated 29/11/2021.

Subject:

Proposal for Splitting of existing EC of M/s JSW Steel Ltd, Vijayanagar works of 18 MTPA Steel plant,1490 MW CPP along with 2.2 MTPA Slag cement between M/s JSWSL, M/s JVML and M/s JSWCL, with a final configuration of 13 MTPA Steel, 1490 MW of CPP and 0.2 MTPA Slag cement unit will remain for M/s JSW STEEL LTD, Transfer of 5 MTPA Steel to M/s JVML and Transfer of 2 MTPA Slag Grinding Unit to Existing 4 MTPA Slag cement plant of M/s JSWCL, located at Vijayanagar works, Toranagallu, Ballari, Karnataka - Splitting of EC to M/s. JSW VIJAYANAGAR METALLICS LIMITED-regarding

Sir/Madam,

This is in reference to your application for grant of splitting of Environmental Clearance (EC) under the provision of the EIA Notification 2006 and its amendment dated 21st April 2023- in respect of Proposal for Split of existing EC of JSW Steel Ltd, Vijayanagar works of 18 MTPA Steel plant, 1490 MW CPP along with 2.2 MTPA Slag cement between JSWSL, JVML and JSWCL, With a final configuration of 13 MTPA Steel, 1490 MW of CPP and 0.2 MTPA Slag cement unit will remain for JSW STEEL LTD, Transfer of 5 MTPA Steel to JVML and Transfer of 2 MTPA Slag Grinding Unit to Existing 4 MTPA Slag cement plant of JSWCL at Vijayanagar works, Toranagallu, Ballari, Karnataka submitted to Ministry vide proposal number IA/KA/IND1/459265/2024 dated 20/01/2024.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC24A1001KA5580178S (ii) File No. J-11011/489/2009-IA.II(I)

(iii) Clearance Type Splitting of EC

(iv) Category

(v) **Project/Activity Included Schedule No.** 3(a) Metallurgical Industries (ferrous and non

ferrous)

(vi) Sector IND1

(vii) Name of Project

Vijayanagar works of 18 MTPA Steel plant, 1490 MW CPP along with 2.2 MTPA Slag cement between JSWSL, JVML and JSWCL, With a final configuration of 13 MTPA Steel, 1490 MW of CPP and 0.2 MTPA Slag cement unit will remain for JSW STEEL LTD, Transfer of 5 MTPA Steel to JVML and Transfer of 2 MTPA Slag Grinding Unit

Proposal for Split of existing EC of JSW Steel Ltd,

to Existing 4 MTPA Slag cement plant of JSWCL at Vijayanagar works, Toranagallu, Ballari,

Karnataka

(viii) Name of Company/Organization

M/s. JSW VIJAYANAGAR METALLICS

LIMITED

(ix) Location of Project (District, State) Ballari, Karnataka

(x) Issuing Authority MOEF&CC

3. As per the provisions of the Environment Impact Assessment (EIA) Notification, 2006, the above-mentioned project/activity listed at S. No. 3(a) Metallurgical industries (ferrous and non-ferrous) under Category "A" of the schedule of the EIA Notification, 2006 and being appraised at Central Level.

- 4. The proposal is considered in the 56th meeting of the EAC for Industry-I sector held during 14th –15th March, 2024, wherein the Committee, after detailed deliberations, recommended the proposal. 60.15.3 The proposal was processed in the Ministry wherein the Ministry raised queries on some aspects related to the layout plan of the main plant and placement of other two split units, mechanism by which the splitting will be accomplished, and the and the relative apportionment of pollution load between the split Units. Accordingly, the proposal was again placed before the EAC in its 60th meeting of the EAC for Industry-I sector held on 11th -12th June, 2024 wherein the EAC after detailed deliberations, recommended the proposal. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed at https://parivesh.nic.in.
- 5. The details of the proposal are as per the EIA/EMP report submitted by the proponent. The Unit configuration and capacity after splitting are given at Annexure I. Project Information, EC Responsibility and Environmental Liability Matrix are given at Annexure II.
- 6. The EAC, in its meeting held during 14th to 15th March, 2024, inter-alia, deliberated the following:
- i. M/s JSW Steel Limited (JSWSL) was accorded environmental clearance vide lr.no. EC21A008KA165146 dated 29/11/2021 for enhancement of production capacity of its Integrated Steel Plant from 16 MTPA to 18 MTPA located in Toranagallu Village Ballari District, Karnataka.
- ii. The PP has not implemented some of the facilities as envisaged in the EC dated 29.11.2021 as detailed at relevant para above. Consent to Establish for said expansion project was accorded by KSPCB vide vide Consent order no CTE-332802 dated 17/08/2022.
- iii. The instant proposal is for seeking splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL), with a final configuration of 13 MTPA Steel, 1490 MW of CPP and 0.2 MTPA Slag cement unit to remain with JSWSL, Transfer of 5 MTPA Steel to JVML and Transfer of 2 MTPA Slag Grinding Unit to JSWCL (in addition to existing 4 MTPA Slag cement plant) at Vijayanagar works, Toranagallu, Ballari, Karnataka due to restructuring of partnership arrangements as detailed in the relevant para above.

- iv. The EAC, constituted under the provision of the EIA Notification, 2006 comprising Expert Members/domain experts in various fields, examined the proposal submitted by the Project Proponent in desired format along with EIA/EMP reports prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent.
- v. The EAC noted that the Project Proponent has given an undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the EIA/EMP reports. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.
- vi. The EAC also took into consideration the drone survey of the project site and kml file on the Google Earth presented by the project proponent along with DSS of the project site on PARIVESH and made following deliberations accordingly.
- vii. The EAC also took into consideration the site visit undertaken by sub-committee of EAC (Industry-1) from 30.11.2023 to 02.12.2023 and the observations and recommendations made by the sub-committee in its report.
- viii. The Committee also took into consideration the issues addressed by the project proponent based on the queries raised by EAC during the appraisal of previous applications which were returned in present form due to technical shortcomings and appraised the instant application accordingly.
- ix. The EAC deliberated on the Certified Compliance Report (CCR) issued by IRO, MoEF&CC vide letter dated 16.11.2022 based on the site inspection carried out and noted that PP has not implemented the complete facilities as envisaged in the expansion project. The EAC also deliberated on the observations of IRO pertaining to partial/non-compliance of some of the EC conditions followed by the ATR submitted by the PP and the updated compliance along with the action plan and timelines for the CCR report submitted to EAC (Industry-1) during the 56th EAC meeting and is of the opinion that PP shall strictly comply with the conditions as per the action plan and within the timeframe as committed. No more extension of time period with respect to the non-complied specific conditions will be granted further.
- x. The EAC noted that PP has submitted the requisite documents required for appraising the proposal for splitting of EC under the provisions of EIA Notification, 2006 and found that the proposal is in order.
- xi. The EAC deliberated on the detailed addendum to EIA/EMP Report submitted by the PP including the salient features that will arise out of splitting arrangement such as project information matrix, raw material requirement, environment management plan, waste management, EC condition compliance matrix, environmental liability matrix etc. among the three entities along with the Environmental Appraisal Report submitted by the transferee entities i.e. JVML and JSWCL and found it satisfactory.
- xii. The EAC deliberated on the comparative statement pertaining to pollution load assessment after the proposed change post splitting of EC and found it satisfactory.
- xiii. The EAC deliberated on the budget spent to address the PH issues / socio-economic development presented before the EAC and found it satisfactory.
- xiv. The EAC deliberated on the EC condition responsibility Matrix of JSWSL, JVML and JSWCL with respect to the EC conditions after splitting of existing EC and an undertaking submitted by M/s. JSWSL to comply with all the conditions stipulated in EC dated 29.11.2021, being a principal lessor and found it satisfactory.
- xv. The EAC deliberated on the note submitted by PP outlining the operational status of the airport including the chronology of the permissions obtained and is of the view that PP shall ensure to operate the facility only after valid and requisite permissions required to operate the same.
- xvi. The EAC opined that install the requisite number of CAAQMS linked with CPCB server at designated places as discussed during the meeting.
- xvii. The EAC noted that JSWSL complex covers an area of 3234.2 hectares of land which is also mentioned in the EC dated 29.11.2021. However, considering several subsidiary companies operating within the complex for which PP has

provided an area statement for all such subsidiaries, including a list and associated permissions, the EAC opined that the area of JSWSL shall be updated excluding all such subsidiaries and post splitting balance area and the EC shall be accorded accordingly with updated area details. Also, the EAC advised PP that they need to ensure that all such subsidiaries shall have relevant permissions related to land, EC/FC/CTE/CTO and associated permissions required to operate such facilities along with separate entry/exit gates.

xviii. The EAC advised PP to ensure that there shall be sign boards at prominent locations covering name, capacity and area of the operating units within the JSW Complex along with EC/CFO details.

- xix. The EAC opined that as committed, PP shall comply with the condition for development and maintenance of greenbelt in at least 33% area of the JSW complex as principal lessor.
- xx. The EAC also advised PP to widely publicize the executive summary of the EC split proposal and publish the split ECs in local newspapers.
- xxi. The EAC also deliberated on the ADS reply of the project proponent and found it satisfactory.
- xxii. The EAC noted that the Integrated Site Specific Wildlife Conservation plan (ISSWLCP) has been prepared for the whole JSW complex by JSW Steel Limited and this shall be applicable to all the Auxiliary companies. In this regard, the EAC is of the view that PP shall strictly comply with the directions of State Forest Department, obtain approval and implement the conservation plan as per the timelines.
- xxiii. The EAC is of the opinion that all the three entities i.e. JSWSL, JVML and JSWCL shall undertake Village Adoption programme as committed.
- xxiv. The EAC deliberated on the written submission of the project proponent and found it satisfactory.
- 7. The EAC, in its 56th meeting of Expert Appraisal Committee (Industry-1 Sector) held during 14th–15th March, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the instant proposal for splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL), as per the details mentioned in the summary of the proposal above, subject to additional specific conditions.
- 8. The proposal was processed in the Ministry wherein the Ministry raised queries on some aspects accordingly, the proposal was again placed before the EAC in its 60th meeting of the EAC for Industry-I sector held on 11th -12th June, 2024. In the meeting, inter-alia, deliberated the following:
- i. The instant proposal was considered during the 56th meeting of the EAC for Industry-I sector held on 14th 15th March 2024 wherein the EAC recommended the proposal for splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL).
- ii. The EAC deliberated in detail on the reasons and justification provided by PP/Consultant (as detailed in relevant para above) for retaining 0.2 MTPA cement plant with JSWSL and discussed the location of this 0.2 MTPA cement grinding unit on layout and found it satisfactory.
- iii. The Committee deliberated in detail and found the clarification provided by the Project Proponent (PP) regarding the air pollution control devices between the split units satisfactory. Additionally, the responsibilities transferring between the split units are addressed adequately. The Committee directs the PP to ensure effective implementation of these measures, including regular monitoring and reporting of the performance of the air pollution control devices, as well as timely updates on the progress of the responsibilities transfer between the split unit
- iv. The Committee finds the clarification provided by the Project Proponent on the water treatment facilities satisfactory. Additionally, the Committee acknowledges the adequate addressing of the responsibilities transferring between the split units. The Committee directs the PP to ensure effective implementation of these measures and to regularly monitor and

report the performance of the water treatment facilities.

- v. The Committee deliberated on the clarification provided by the Project Proponent on the fugitive emission component and found it satisfactory, including the relative apportionment of pollution load between the split units. The Committee directs the PP to ensure effective implementation of the targetted measures, with regular monitoring and reporting to ensure compliance and effectiveness in managing fugitive emissions.
- vi. The EAC deliberated in detail on the submission of the Project Proponent on the interdependency of the raw materials and their transportation between the split units and found it satisfactory.
- vii. The EAC reviewed the revised proposed split EC conditions and additional EC conditions, focusing on ensuring that mitigation measures are comprehensive and effective. PP emphasized the clear distribution of responsibilities among the split units to prevent overlaps and ensure proper implementation. The EAC highlighted the need for robust compliance and monitoring frameworks, continuous stakeholder engagement, and effective risk management strategies. Additionally, PP advised to consider cumulative impacts of the units, encourage sustainable practices, and ensure compliance with legal and regulatory frameworks. Finally, EAC recommended adaptive management approaches to continually improve mitigation measures based on monitoring results and new data.
- viii. The PP is advised to implement the 'Ek Ped Maa Ke Naam' Campaign which was launched on 5th June 2024 on the occasion of the World Environment Day to increase the forest cover across the Country. This plantation drive is other than Green belt development.
- 9. The EAC, in its 60th meeting after detailed deliberations, recommended that the details provided in the ADS, as outlined in the relevant paragraph above, may be updated or supplemented with information from the minutes of the 56th EAC meeting (Industry-1) held on 14th 15th March 2024 subject to uploading of ADS submission on Parivesh portal, and based on the information/clarification furnished by the project proponent, the EAC recommended the proposal for splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL). The other specific conditions and general conditions stipulated in the minutes of 56th meeting of the EAC for Industry-I sector held on 14th 15th March 2024 shall remain the same.
- 10. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the Expert Appraisal Committee (Industry-1 Sector) hereby decided to splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL), as per the details mentioned in the summary of the proposal above under the provisions of EIA Notification, 2006 subject to specific conditions and general conditions at Annexure III.
- 11. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- 12. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
- 13. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 14. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

15. This issues with approval of the competent authority.

(Dinesh Runiwal) Scientist 'F'/ Director Tel: 011-20819289 Email - d.runiwal@gov.in

Copy To

- 1. The Secretary, Department of Forest, Environment & Ecology, Government of Karnataka, Room No. 708, Gate 2, Multi Storey Building, Dr. Ambedkar Veedhi, Bangalore -560 001.
- 2. The Director General of Forest, Ministry of Environment, Forest and Climate Change, New Delhi
- 3. The Member Secretary, Karnataka State Pollution Control Board, No. 25, 6–9th Floor, Public Utility Building, M.G. Road, Bangalore 560 001.
- 4. The Deputy Director General of Forests (C), Integrated Regional Office, Ministry of Environment, Forest and Climate Change, Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore 560034
- 5. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 6. The Member Secretary, Central Ground Water Authority, Jamnagar House, 18/11, Man Singh Road Area, New Delhi, Delhi 110001
- 7. The Chief Wildlife Warden, Govt. of Karnataka, Aranya Bhawan, 18th Cross, Malleswaram, Bangalore-560003
- 8. District Collector, Bellary, District, Karnataka.
- 9. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi.
- 10. M/s JVML for information please.
- 11. M/s JSWCL-for information please.
- 12. Guard File/Monitoring File/Website/Record File/Parivesh Portal.

(Dinesh Runiwal)
Scientist 'F'/ Director

Annexure 1

Specific EC Conditions for (Metallurgical Industries (ferrous and non ferrous))

1. Specific

S. No	EC Conditions
1.1	

Additional EC Conditions

- 1. This EC is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
- 2. This EC is granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.



Splitting of existing EC of JSW Steel Ltd, Vijayanagar works dated 29.11.2021 between JSW Steel Limited (JSWSL), JSW Vijayanagar Metallics Limited (JVML) and JSW Cement Limited (JSWCL), Unit configuration and capacity as detailed below

Sl. N	Facility	Units	As per E		After Present Proposal of Splitting of EC				C	Remarks	
0.			Unit	Total	Units under	JSWSL	Transf JVM			sfer to WCL	
			Cap		Unit Cap.	Total	Unit Cap.	Total	Unit Cap.	Total	
1.	Ore beneficia tion Plant	OBP-1	(OBP-1 will be relocated to OBP- 2)	19.5 MTPA	-	19.5 MTPA	-	-	-	-	
		OBP-2	1X 2.5 MTPA 1X 5.0 MTPA 1 X 7.5 MTPA 1 X 4.5 MTPA		1X 2.5 MTPA 1X 5.0 MTPA 1 X 7.5 MTPA 1 X 4.5 MTPA	E	S	Α-		•	No change
2.	Sinter Plants	SP1 SP2 SP3	2.3 MTPA 2.3 MTPA 5.75 MTPA	14.95 MTPA	2.3 MTPA 2.3 MTPA 5.75 MTPA	12.65 MTPA)\- \\\-	2.3 MT PA	-	pSS	SP5 transfer to
		SP4 SP5	2.3 MTPA 2.3 MTPA	3	2.3 MTPA		2.3 MTPA		-		JVML
3.	Pellet Plants	PP1 PP2 PP3	5 MTPA 5 MTPA 6.8 MTPA	16.8 MTPA	5 MTPA 5 MTPA 6.8 MTPA	16.8 MTPA		-	- /- /-		No change
4.	Coke Ovens	CO3 CO4 CO5 CO6	1.5 MTPA 2 MTPA 3 MTPA 1.5 MTPA	8 MTPA	1.5 MTPA 2 MTPA 3 MTPA 1.5 MTPA	8 MTPA	3 -	P.C.	- js	-	No change
5.	Hot Metal- COREX	COREX 1 COREX 2	0.8 MTPA 0.8 MTPA	1.6 MTPA	0.8 MTPA 0.8 MTPA	1.6 MTPA	- 1	-	-	-	No change
6.	Hot Metal- Blast Furnace	BF1 BF2 BF3 BF4 BF5	2.5 MTPA 2.17 MTPA 4.4 MTPA 3 MTPA 4.5	16.57 MTPA	2.5 MTPA 2.17 MTPA 4.4 MTPA 3 MTPA -	12.07 MTPA	- - - 4.5	4.5 MT PA		-	4.5 MTPA BF5 transfer to JVML
7.	Pig Caster (MGP)	-	MTPA 1 x 1200 TPD 3 x 3600 TPD	17000 TPD	1 x 1200 TPD 3 x 3600 TPD	12000 TPD	MTPA - -	500	-	-	5000 TPD MGP transfer to JVML

Sl. N	Facility	Units	As per E		Afte	r Present	Proposal o	of Splitt	ing of E	C	Remarks
0.			Unit	Total	Units under	JSWSL	Transf JVM			sfer to WCL	
			Cap		Unit Cap.	Total	Unit Cap.	Total	Unit Cap.	Total	
			1 x 5000 TPD		-		1 x 5000 TPD	TP D	-		
8.	Crude steel	SMS1	3.8 MTPA	18 MTPA	3.8 MTPA	13.2 MTPA	-		=	-	
		SMS2	6.4 MTPA		6.4 MTPA		-	4.8	-		
		SMS3	1.5 MTPA EAF 1.5 MTPA ZPF	2-KY0	1.5 MTPA EAF 1.5 MTPA ZPF		C _A	MT PA	-		SMS4 of 4.8 MTPA transfer to JVML
		SMS4	4.8 MTPA BOF		-		4.8 MTPA BOF		-		
9.	Lime Kilns	LCP1	4X300 TPD	7200 TPD	4X300 TPD	5400 TPD	-		-	-	
		LCP2	4X300 TPD +	P	4X300 TPD +	700	J.	180 0	-		Transfer of 3X600
		I CIDO	3X600 TPD	v 4	3X600 TPD		3 4	TP D			TPD Lime kilns to
		LCP3	2X600 TPD 3X600		2X600 TPD		3X600		-	DS:	JVML
10	g .		TPD	20.7	2.2.1 (TTD.)	15.5	TPD			S	
10.	Casters	Slab Caster 1	3.2 MTPA	20.7 MTPA	3.2 MTPA	15.7 MTPA			-	-	
		Slab Caster 2	6.4 MTPA	34	6.4 MTPA		1,5	5.0 MT			5.0 MTPA
		Slab Caster 3 Slab	1.6 MTPA 5.0	3	1.6 MTPA	She 15	5.0	PA			Slab Caster 4
		Caster 4 Billet	MTPA 1.5	/// C	1.5 MTPA	DEE'	MTPA		-3	2	transfer to JVML
		Caster 1 Billet Caster 2	3.0 MTPA	7	3.0 MTPA	(-	-				
11.	Hot Strip Mills	HSM1	4.0 MTPA	14.2 MTPA	4.0 MTPA	9.2 MTPA) - e	5.0	-	-	5.0 MTPA
		HSM2	5.2 MTPA	e	5.2 MTPA	ents	- 5.0	MT PA	-		HSM3 transfer to JVML
- 1-		HSM3	5.0 MTPA		-		5.0 MTPA		-		JVIVIL
12.	Pipe Mill	-	1x0.4 MTPA	0.4 MTPA	1x0.4 MTPA	0.4 MTPA	-	-	-	-	No change
13.	Wire Rod Mill	WRM1 WRM2	0.6 MTPA 1.2	1.8 MTPA	0.6 MTPA 1.2 MTPA	1.8 MTPA	-	-	-	- -	No change
1 /	D -1 0		MTPA	2.2		2.2	-		-		
14.	Rebar & Section Mills	BRM1 BRM2	1.0 MTPA 1.2	2.2 MTPA	1.0 MTPA 1.2 MTPA	2.2 MTPA	-	-	-	-	No change
15.		CRM1	MTPA 1.8	6.4	1.8 MTPA	6.4	_	_		_	
13.		CIXIVII	MTPA	MTPA	1.0 WIIFA	MTPA	=	-	-	-	No change

Sl. N	Facility	Units	As per E	_	Afte	After Present Proposal of Splitting of EC			ting of E	C	Remarks
0.			Unit	Total	Units under		Transi JVN	ЛL	JS	sfer to WCL	
			Cap		Unit Cap.	Total	Unit Cap.	Total	Unit Cap.	Total	
	Cold Rolling	CRM2	2.3 MTPA		2.3 MTPA		-		-	-	
	Mills	CRM3	2.3 MTPA		2.3 MTPA		-		-		
16.	Galvaniz ing Lines	CGL1	4X0.25 MTPA	1.9 MTPA	4X0.25 MTPA	1.9 MTPA	-	-	-	-	No abanca
		CGL2	2X0.45 MTPA		2X0.45 MTPA		-		-		No change
17.	Colour Coating Line	-	0.5 MTPA	0.5 MTPA	0.5 MTPA	0.5 MTPA	-	-	-	-	No change
18.	Captive Power Plants	CPP1 – Gas based CPP2 – Gas based	100 MW 130 MW	1490 MW	100 MW 130 MW	1490 MW	۷ . ا	1 ~	-	-	
		CPP3 – Coal + Gas	300 MW	1	300 MW		į		-		No change
		CPP4 – Coal + Gas	300 MW	D.	300 MW	C	S		-		
		CPP5- Coal	660 MW	1	660 MW	at the	2 7		-		
19.	Incinerat or	2	1000 kg/h	1000 kg/h	1000 kg/h	1000 kg/h	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-	-		No change
20.	Grinding	CP1	0.2 MTPA	2.2 MTPA	0.2 MTPA	0.2 MTPA	<u> </u>	-	-	2.0	2.0 MTPA CP2
	an <mark>d</mark> mixi <mark>ng</mark> unit	CP2	2.0 MTPA	7					2.0 MTP A	MTPA	transfer to JSWCL
21.	Oxygen Plant	e-Comp	1X2500 TPD 4X1800 TPD 1X900 TPD 1X2060 TPD 1X2200 TPD	14860 TPD	1X2500 TPD 4X1800 TPD 1X900 TPD 1X2060 TPD 1X2200 TPD	14860 TPD	0,000	-	- 1955	30	No change

e-Payments



Project Information, EC Responsibility and Environmental Liability Matrix

I. <u>Project Information Matrix including raw material, Environment Management Plan and waste generation</u>

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
1	Ore beneficiation Plant – 19.5 MTPA (Product) OBP1 - 1X2.5 MTPA (To be relocated to OBP2) OBP2 - 1X5.0 MTPA + 1X7.5 MTPA + 1X4.5 MTPA	Ore beneficiation Plant – 19.5 MTPA (Product) OBP1 - 1X2.5 MTPA (To be relocated to OBP2) OBP2 - 1X5.0 MTPA + 1X7.5 MTPA + 1X4.5 MTPA	Nil	Nil
2	Sinter Plants – 14.95 MTPA (Total) SP1 - 2.3 MTPA SP2 - 2.3 MTPA SP3 - 5.75 MTPA SP4 - 2.3 MTPA SP5 - 2.3 MTPA SP5 - 2.3 MTPA SP-5 Co-ordinates: Latitudes (North) – From 15°10'46.77" N-15°10'56.82"N Longitudes (East) – From 76°37'55.13"E - 76°38'11.27"E	Sinter Plants – 12.65 MTPA (Total) SP1 - 2.3 MTPA SP2 - 2.3 MTPA SP3 - 5.75 MTPA SP4 - 2.3 MTPA	Sinter Plants – 2.3 MTPA (Total) SP5 - 2.3 MTPA (After relocation) SP-5 Co-ordinates: Latitudes (North) – From 15°10'18" N- 15°10'28"N Longitudes (East) – From 76°41'28"E - 76°41'45"E	Nil
3	Pellet Plants – 16.8 MTPA (Total) PP1 – 5 MTPA PP2 – 5 MTPA PP3 – 6.8 MTPA	Pellet Plants – 16.8 MTPA (Total) PP1 – 5 MTPA PP2 – 5 MTPA PP3 – 6.8 MTPA	Nil	Nil
4	Coke Ovens – 8 MTPA (Total) $CO3 - 1.5 MTPA$ $CO4 - 2 MTPA$	Coke Ovens – 8 MTPA (Total) CO3 – 1.5 MTPA	Nil	Nil

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	CO5 – 3 MTPA	CO4 – 2 MTPA		
	CO6 – 1.5 MTPA	CO5 – 3 MTPA		
		CO6 – 1.5 MTPA		
5	Hot Metal COREX – 1.6 MTPA (Total)	Hot Metal COREX – 1.6 MTPA (Total)	Nil	Nil
	COREX1 – 0.8 MTPA	COREX1 – 0.8 MTPA		
	COREX2 – 0.8 MTPA	COREX2 – 0.8 MTPA	44	
6	Hot Metal- Blast Furnace - 16.57 MTPA (Total)	Hot Metal- Blast Furnace – 12.07 MTPA (Total)	Hot Metal- Blast Furnace – 4.5 MTPA (Total)	Nil
	BF1 - 2.5 MTPA	BF1 - 2.5 MTPA	BF5 - 4.5 MTPA	
	BF2 - 2.17 MTPA	BF2 - 2.17 MTPA		
	BF3 - 4. <mark>4 MTP</mark> A	BF3 - 4.4 MTPA		
	BF4 - 3 MTPA	BF4 - 3 MTPA		S
	BF5 - <mark>4.5 MTPA</mark>	Y	a E0.	C)
7	Pig Casters + Metal Granulation Plant (MGP) – 17000 TPD (Total)	Pig Casters + Metal Granulation Plant (MGP) – 12000 TPD (Total)	Metal Granulation Plant (MGP) – 5000 TPD (Total)	Nil
	Pig Caster - 1 x 1200 TPD + 3 x 3600 TPD	Pig Caster - 1 x 1200 TPD + 2 x 3600 TPD	MGP - 1 x 5000 TPD	
	MGP - 1 x 5000 TPD	Metal Granulation Plant (MGP) – 3600 TPD	EN	
8	Steel Melting Shops (SMS) – 18 MTPA (Total)	Steel Melting Shops (SMS) – 13.2 MTPA (Total)	Steel Melting Shops (SMS) – 4.8 MTPA (Total)	Nil
	SMS1 - 3.8 MTPA BOF	SMS1 - 3.8 MTPA BOF	SMS4 - 4.8 MTPA	
	SMS2 - 6.4 MTPA BOF	SMS2 - 6.4 MTPA BOF	BOF	
	SMS3 - 1.5 MTPA EAF + 1.5 MTPA ZPF	SMS3 - 1.5 MTPA EAF + 1.5 MTPA ZPF		
	SMS4 - 4.8 MTPA BOF			
9	Lime Kilns – 7200 TPD (Total)	Lime Kilns – 5400 TPD (Total)	Lime Kilns – 1800 TPD (Total)	Nil
	LCP1 - 4X300 TPD	LCP1 - 4X300 TPD	LCP4 - 3X600 TPD	
	LCP2 - 4X300 TPD + 3X600 TPD	LCP2 - 4X300 TPD + 3X600 TPD		
	LCP3 - 2X600 TPD	LCP3 - 2X600 TPD		

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	LCP4 - 3X600 TPD		capacity	
10	Continuous Casters – 20.7 MTPA (Total)	Continuous Casters – 15.7 MTPA (Total)	Continuous Casters – 5.0 MTPA (Total)	Nil
	Slab Caster 1 - 3.2 MTPA	Slab Caster 1 - 3.2 MTPA	Slab Caster 4 - 5.0 MTPA	
	Slab Caster 2 - 6.4 MTPA	Slab Caster 2 - 6.4 MTPA		
	Slab Caster 3 - 1.6 MTPA	Slab Caster 3 - 1.6 MTPA		
	Slab Caster 4 - 5.0 MTPA	Billet Caster 1 - 1.5 MTPA	CAR	
	Billet Caster 1 - 1.5 MTPA	Billet Caster 2 - 3.0 MTPA		
	Billet Caster 2 - 3.0 MTPA		Tr.	
11	Hot Strip Mills – 14.2 MTPA (Total)	Hot Strip Mills – 9.2 MTPA (Total)	Hot Strip Mills –5.0 MTPA (Total)	Nil
	HSM1 - <mark>4.0 MTPA</mark>	HSM1 - 4.0 MTPA	HSM3 - 5.0 MTPA	
	HSM2 - 5.2 MTPA	HSM2 - 5.2 MTPA		D _S
	HSM3 - 5.0 MTPA			Un .
12	Pipe Mill - 1 X 0.4 MTPA	Pipe Mill - 1 X 0.4 MTPA	Nil	Nil
13	Wire Rod Mill – 1.8 MTPA (Total)	Wire Rod Mill – 1.8 MTPA (Total)	Nil	Nil
	WRM1 - 0.6 MTPA	WRM1 - 0.6 MTPA	15 Trible	
	WRM2 - 1.2 MTPA	WRM2 - 1.2 MTPA		
14	Rebar & Section Mills – 2.2 MTPA (Total)	Rebar & Section Mills – 2.2 MTPA (Total)	Nil	Nil
	BRM1 - 1.0 MTPA	BRM1 - 1.0 MTPA	21000	
	BRM2 - 1.2 MTPA	BRM2 - 1.2 MTPA	a.X	
15	Cold Rolling Mills – 6.4 MTPA (Total)	Cold Rolling Mills – 6.4 MTPA (Total)	Nil	Nil
	CRM1 - 1.8 MTPA	CRM1 - 1.8 MTPA		
	CRM2 - 2.3 MTPA	CRM2 - 2.3 MTPA		
	CRM3 - 2.3 MTPA	CRM3 - 2.3 MTPA		
16	Galvanizing Lines – 1.9 MTPA (Total)	Galvanizing Lines – 1.9 MTPA (Total)	Nil	Nil
	CGL1 - 4X0.25 MTPA	CGL1 - 4X0.25 MTPA		
	CGL2 - 2X0.45 MTPA	CGL2 - 2X0.45 MTPA		
17	Colour Coating Line – 0.5 MTPA	Colour Coating Line – 0.5 MTPA	Nil	Nil

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
18	Captive Power Plants – 1490 MW (Total)	Captive Power Plants – 1490 MW (Total)	Nil	Nil
	CPP1 (Gas based) - 100 MW	CPP1 (Gas based) - 100 MW		
	CPP2 (Gas based) - 130 MW	CPP2 (Gas based) - 130 MW		
	CPP3 (Coal + Gas based) - 300 MW	CPP3 (Coal + Gas based) - 300 MW		
	CPP4 (Coal + Gas based) - 300 MW	CPP4 (Coal + Gas based) - 300 MW	CAR	
	CPP5 (Coal based) - 660 MW	CPP5 (Coal based) - 660 MW		
19	Incinerator – 1000 kg/hr	Incinerator – 1000 kg/hr	Nil	Nil
20	Slag Grinding and mixing unit – 2.2 MTPA (Total)	Slag Grinding and mixing unit – 0.2 MTPA (Total)	Nil	Slag Grinding and mixing unit – 6 MTPA (Total)
	CP1 - 1X <mark>0.2 MTPA</mark>	CP1 - 1X0.2 MTPA		Existing - 2X2.0 MTPA
	CP2 - 1X2.0 MTPA			CP2 - 1X2.0 MTPA (Expansion of Existing Cement Plant of JSW Cement from 4 MTPA to 6 MTPA)
21	Oxygen Plant – 14860 TPD (Total)	Oxygen Plant – 14860 TPD (Total)	Nil	Nil
	1X2500 TPD	1X2500 TPD	15	00
	4X1800 TPD	4X1800 TPD	EM	
	1X900 TPD	1X900 TPD	100	
	1X2060 TPD	1X2060 TPD	e.P\	
	1X2200 TPD	1X2200 TPD	5	
22	Plant Capacity	Plant Capacity	Plant Capacity	Plant Capacity
	Crude Steel - 18 MTPA	Crude Steel - 13 MTPA	Crude Steel - 5.0 MTPA	Slag Cement - 6 MTPA Slag Cement Plant (4.0
	Captive Power - 1490 MW	Captive Power - 1490 MW		MTPA Existing +2.0 MTPA after EC Splitting)
22	Slag Cement - 2.2 MTPA	Slag Cement - 0.2 MTPA	Eta al Dec Jan 4	Einel Dari Jan 4
23	 Final Products - HR Coils CR Coils MG/Slabs Wire Rods Rebars 	 Final Products - HR Coils CR Coils MG/Slabs Wire Rods Rebars 	Final Products -HR CoilsMGSlabs	Final Products - • Slag based cement products

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	BeamsBilletsSlabsSlag Cement	BeamsBilletsSlabsSlag Cement		
24	Land Details	Land Details	Land Details	Land Details
	 Total Area - 3234.2 ha Greenbelt Area - 1068 ha Note: The total area includes 60.7 ha which is sub leased to JSW CEMENT LIMITED and 205.78 ha which is sub leased to other JSW group companies located inside the complex. 	 Total Area - 2630.6 ha Greenbelt Area - 870 ha Note: The revised total area is excluding the following (i) 60.7 ha which is sub leased to JSW CEMENT LIMITED. (ii) 205.78 ha which is sub leased to other JSW group companies located inside the 	• Total Area - 337.1 ha • Greenbelt Area - 111 ha	 Total Area - 60.7 ha (Existing) Greenbelt Area - 20 ha
	Co-ordinates	complex. (iii) 337.1 ha proposed to sub lease to JSW VIJAYANAGAR METALLICS LIMITED. Co-ordinates	Co-ordinates	Co-ordinates
	Latitudes (North) – From 15°9'21.31"N- 15°12'7.68"N Longitudes (East) – From 76°37'4.75" - 76°44'1.93"E	Latitudes (North) – From 15°9'21.31"N- 15°12'7.68"N Longitudes (East) – From 76°37'4.75" - 76°44'1.93"E	Latitudes (North) – From 15°10'32.84"N – 15°11'14.70"N Longitudes (East) – From 76°41'19.91"E – 76°42'19.85"E	Latitudes (North) – From 15°10'17.43"N - 15°11'3.07"N Longitudes (East) – From 76°41'40.53"E - 76°42'11.94"E
25	Raw Material	Raw Material	Raw Material	Raw Material
	 Iron ore fines - 2,43,87,500 Iron ore lumps - 14,10,000 Coking coal - 1,08,00,000 COREX coal - 11,20,000 PCI coal - 33,14,000 Anthracite coal - 4,30,000 Limestone LCP - 45,17,623 Limestone Agg - 958236 	 Iron ore fines - 2,43,87,500 Iron ore lumps - 10,27,500 Coking coal - 1,08,00,000 COREX coal - 11,20,000 PCI coal - 26,39,000 Anthracite coal - 4,30,000 Limestone LCP - 34,57,511 Limestone Agg - 9,58,236 	 Iron ore lumps 3,82,500 PCI coal – 6,75,000 Lime/dolo stone LCP – 14,25,019 Dolomite Agg – 2,58,492 Ind Dolomite – 1,01,080 Ind. quartz –	 Slag - 49,62,889 Dry Fly Ash - 80,000 Clinker - 11,37,004 Gypsum - 69,752 Coal - 62,000

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	 Dolomite Agg - 7,28,347 Ind. limestone - 34336 Ind. dolomite - 11,15,426 Dolomite LCP - 1877987 Ind. quartz - 7,46,953 Bentonite - 1,00,000 Thermal Coal - 47,50,000 	 Dolomite Agg - 4,69,855 Ind. limestone - 34,336 Ind. dolomite - 10,14,346 Dolomite LCP - 15,13,081 Ind. quartz - 7,24,596 Bentonite - 1,00,000 Thermal Coal - 47,50,000 	 Beneficiated Iron ore fines 15,27,715 Pellet - 51,67,500 Coke - 15,75,000 Coke breeze - 1,27,061 Purchased scrap - 3,00,000 Purchased Slabs - 2,66,327 	
25(a)	Raw Material Interdependence	Raw Material Interdependence JSWSL Procures Raw material for both JSWSL and JVML, for making Steel.	Raw Material Interdependence • The Materials required for preparation of Steel is sourced from JSWSL.	Raw Material Interdependence • JSWCL procures the raw material like Clinker & Gypsum from outside for Cement
		 The beneficiation is done inside the Beneficiation plant of JSWSL and is transferred to JVML The material transfer from JSWSL to JVML is through either Conveyors/ Wagons. The conveyors/ Wagons are managed and owned by JSWSL. 	JVML has resource sharing agreement with JSWSL	outside for Cement making. The BF Granulated slag and fine coal is sourced from JSWSL and transportation is through wagons/Bulkers SWCL has resource sharing agreement
26	Water Requirement: Total -3,01,000 m³/day ISP - 144,465 m3/day	Water Requirement: Total - 2,78,076 m³/day ISP - 1,21,541 m³/day	Water Requirement: JVML- 22,824 m /day	Water Requirement: JSWCL-100 m ³ /day
27	Power Requirement : 1434 MW	Power Requirement : 1186 MW	Power Requirement : 235 MW	Power Requirement : 13 MW (Additional)
28	Fuel Requirement	Fuel Requirement	Fuel Requirement	Nil
	 Coke Oven gas (COG) 347 K Nm3/hr BF Gas (BFG) - 2740 K Nm³/hr 	• Coke Oven gas (COG) – 279 K Nm3/hr	• Coke Oven gas (COG) – 68 K Nm3/hr	

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	 COREX Gas – 315 K Nm³/hr DRI Gas – 200 K Nm³/hr LD Gas – 184 K Nm³/hr 	 BF Gas (BFG) – 1914 K Nm3/hr COREX Gas – 315 K Nm³/hr DRI Gas – 200 K Nm³/hr LD Gas – 128 K Nm³/hr 	 BF Gas (BFG) 826 K Nm³/hr LD Gas – 56 K Nm³/hr 	
29	Total Pollutant Load	Pollutant Load	Pollutant Load	Pollutant Load
	 a)Stack emission PM - 774.5 g/s PM2.5 - 240.6 g/s 	a)Stack emission	a)Stack emission	a)Stack emission
	• SO2 – 1912.8 g/s	• PM – 676.3 g/s	• PM – 96.6 g/s	● PM – 6.5
	• N <mark>Ox – 1689.8 g/s</mark>	• PM2.5 – 181.3 g/s	• PM2.5 – 58.6	(Existing) g/s +
	b) Fugitive Emission	 SO2 – 1817.4 g/s NOx – 1610.5 g/s 	g/s SO2 – 95.5 g/s NOx – 79.3	1.6 (New) g/s
	PM10 – 1.787 g/s	b) Fugitive Emission	g/s	
	PM2.5 – 0.7 g/s	PM10 – 1.787 g/s	b) Fugitive Emission	b) Fugitive Emission Covered shed are used
	b) Transport	PM2.5 – 0.7 g/s	All the raw materials are being handled by JSWSL	Covered shed are used
	PM10 – 1 g/s	b) Transport	00,1102	b) Transport
		PM10 – 1 g/s	b) Transport All the raw materials are being handled by JSWSL	Insignificant
29(a)	Air pollution control Devices Bag filter-78 ESP -12 Scrubber-31 Dispersion stacks- 37	Air pollution control Devices Bag filter-69 ESP -11 Scrubber-30 Dispersion stacks-33	Air pollution control Devices Bag filter-8 ESP -1 Scrubber-1 Dispersion stacks-4	Air pollution control Devices Bag filter-1 ESP -0 Scrubber-0 Dispersion stacks-0
		Environmental Manageme		
30	Air Pollution Control Measures	Air Pollution Control Measures	Air Pollution Control Measures	Air Pollution Control Measures
	 Design limit for dust emission from RMHS bag filters -< 30 mg/nm3 	• Design limit for dust emission from bag filters -< 30 mg/nm3	Design limit for dust emission from	Bag Filter based Dust Extraction systems

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	 Additional highperformance bag filters in all sinter plants, with emission limit of < 10 mg/nm3 High efficiency ESPs along with bag filters in pellet plant to limit dust to < 10 mg/nm3 Charging emission control by SOPRECO Emission reduction via MEROS in Sinter Plant Dry fogging and bag filter based Dust Extraction system in material handling Charging and pushing Emission control in coke ovens Low NOx stage combustion burners 	 Additional highperformance bag filters in all sinter plants, with emission limit of < 10 mg/nm3 High efficiency ESPs along with bag filters in pellet plant to limit dust to < 10 mg/nm3 Charging emission control by SOPRECO Emission reduction via MEROS in Sinter Plant Dry fogging and bag filter based Dust Extraction system in material handling Charging and pushing Emission control in coke ovens Low NOx stage combustion burners in under-firing Low NOx stage combustion burners in HSM 	bag filters -< 30 mg/nm3 Emission reduction via high performance ESP in Sinter Plant. PM emission <10mg/Nm3 Dry fogging and bag filter based Dust Extraction system in material handling Waste gas recycling for energy efficiency improvement. Dog house for primary extraction and Secondary dedusting system with bag filters Low NOx stage combustion burners in HSM	DSS Series
31	Noise Pollution Control Measures	Noise Pollution Control Measures	Noise Pollution Control Measures	Noise Pollution Control Measures
	 Plugging leakages in high-pressure gas/air pipelines. Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. Design of absorber system for the shift office and pulpit operator's cabin. Noise absorber systems in pump houses. 	 Plugging leakages in high-pressure gas/air pipelines. Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. Design of absorber system for the shift office and pulpit operator's cabin. Noise absorber systems in pump houses. 	 Plugging leakages in high-pressure gas/air pipelines. Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. 	 Reducing vibration of high speed rotating machines by regular monitoring of vibration and taking necessary steps. Noise level at 1m from equipment will be limited to 85 dB (A). The fans and ductwork will be designed for minimum vibration.

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior	Facility / activity granted	Facility / activity	Facility / activity granted
	EC along with configuration	Prior EC proposed to	granted Prior EC	Prior EC proposed to
	and capacity of parent EC	transfer to JSWSL along	proposed to transfer	transfer to JSWCL along
	(E.g.: Configuration, Capacity,	with configuration and	to JVML along with	with configuration and
	Area, Raw Materials, etc.)	capacity	configuration and	capacity
	Area, Raw Materials, etc.)	capacity	capacity	capacity
	Noise level at 1m from	Noise level at 1m	Design of	All the equipment in
	equipment will be	from equipment will	absorber	different units will
	limited to 85 dB (A).	be limited to 85 dB	system for the	be
	````	(A).	shift office	
		<ul><li>The fans and</li></ul>		designed/operated in such a way that
	will be designed for		and pulpit	
	minimum vibration.	ductwork will be	operator's cabin.	the noise level shall not exceed
	All the equipment in	designed for		
	different units will be	minimum vibration.	• Noise	85 dB (A).
	designed/operated in	All the equipment in	absorber	• Periodical
	such a way that the	different units will be	systems in	monitoring of
	noise level shall not	designed/operated in	pump houses.	work zone noise
	exceed 85 dB (A).	such a way that the	<ul> <li>Noise level at</li> </ul>	and outside plant
	<ul> <li>Periodical monitoring</li> </ul>	noise level shall not	1m from	premises.
	of work <mark>zone no</mark> ise and	exceed 85 dB (A).	equipment	Un-manned high
	outsid <mark>e plant prem</mark> ises.	<ul> <li>Periodical monitoring</li> </ul>	will be limited	noise zone will be
	<ul> <li>Un-manned high noise</li> </ul>	of work zone noise	to 85 dB (A).	marked as "High
	zone will be marked as	and outside plant	• The fans and	Noise Zone".
	"High Noise Zone".	premises.	ductwork will	<ul> <li>In shops where</li> </ul>
	<ul> <li>In shops where</li> </ul>	<ul> <li>Un-manned high</li> </ul>	be designed	measures are not
	measures are not	noise zone will be	for minimum	feasible, attempts
	feasible, attempts shall	marked as "High	vibration.	shall be made to
	be made to provide	Noise Zone".	All the	provide operators
	operators with sound-	<ul> <li>In shops where</li> </ul>	equipment in	with sound-proof
	proof enclosure to	measures are not	different units	enclosure to
	operate the system.	feas <mark>ibl</mark> e, attempts	will be	operate the
	<ul> <li>Workers exposed to</li> </ul>	shall be made to	designed/oper	system.
	noise level will be	provide operators	ated in such a	<ul> <li>Workers exposed</li> </ul>
	provided with	with sound-proof	way that the	to noise level will
	protection devices like	enclosure to operate	noise level	be provided with
	earmuffs and will be	the system.	shall not	protection devices
	advised to use them	<ul> <li>Workers exposed to</li> </ul>	exceed 85 dB	like earmuffs and
	regularly, while at	noise level will be	(A).	will be advised to
	work.	provided with	<ul> <li>Periodical</li> </ul>	use them
	<ul> <li>Workers exposed to</li> </ul>	protection devices	monitoring of	regularly, while at
	noisy work place shall	like earmuffs and	work zone	work.
	be provided with	will be advised to use	noise and	<ul> <li>Workers exposed</li> </ul>
	rotational duties.	them regularly, while	outside plant	to noisy work
	All workers will be	at work.	premises.	place shall be
	regularly checked	<ul> <li>Workers exposed to</li> </ul>	<ul> <li>Un-manned</li> </ul>	provided with
	medically for any noise	noisy work place	high noise	rotational duties.
	related health problem	shall be provided	zone will be	<ul> <li>All workers will</li> </ul>
	and if detected, they	with rotational duties.	marked as	be regularly
	will be provided with	<ul> <li>All workers will be</li> </ul>	"High Noise	checked
	alternative duty.	regularly checked	Zone".	medically for any
	·	medically for any	<ul><li>In shops</li></ul>	noise related
		noise related health	where	health problem
		problem and if	measures are	and if detected,
		detected, they will be	not feasible,	they will be
		provided with	attempts shall	provided with
		alternative duty.	be made to	alternative duty.
			provide	
			operators with	
			sound-proof	
			enclosure to	
			operate the	
			system.	
<u> </u>			· · · · · · · · · · · · · · · · · · ·	

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	by y e-com	P. R. State Shortests of Shorte	Workers     exposed to     noise level     will be     provided with     protection     devices like     earmuffs and     will be     advised to use     them     regularly,     while at work.      Workers     exposed to     noisy work     place shall be     provided with     rotational     duties.      All workers     will be     regularly     checked     medically for     any noise     related health     problem and if     detected, they     will be     provided with     alternative     duty.	DSS Sky
32	Effluents Generation And Management Measures	Effluents Generation And Management Measures	Effluents Generation And Management Measures	Effluents Generation And Management Measures
	<ul> <li>Zero Liquid Discharge outside plant boundary</li> <li>Effluent generated from coke ovens would be separately treated in Biological Oxidation and Dephenolization (BOD) treatment unit for removal of phenolic compounds and cyanide</li> <li>Cooling tower blow downs and treated effluent from BOD plant of coke ovens would be taken to the CETP for further treatment and reuse as make-up water.</li> </ul>	<ul> <li>Zero Liquid         Discharge outside         plant boundary</li> <li>Effluent generated         from coke ovens         would be separately         treated in Biological         Oxidation and         Dephenolization         (BOD) treatment unit         for removal of         phenolic compounds         and cyanide</li> <li>Cooling tower blow         downs and treated         effluent from BOD         plant of coke ovens         would be taken to the</li> </ul>	<ul> <li>Zero Liquid         Discharge         outside plant         boundary</li> <li>Cooling tower         blow downs         would be         taken to the         CETP for         further         treatment and         reuse as make-         up water.</li> <li>Waste Water         generated in         Wet GCP,         CCM and</li> </ul>	<ul> <li>Zero Liquid         Discharge outside         plant boundary</li> <li>Treatment of         plant sanitary         waste water         including canteen         effluent in a         sewage treatment         plant for         separation of         floating oil and         reduction of BOD         level.</li> </ul>

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.	CETP for further treatment and reuse as make-up water.  • Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.	capacity  HSM will be treated in dedicated Effluent Treatment Plants and treated water will be recycled back in plant process.  Treatment of plant sanitary waste water including canteen effluent in a sewage treatment plant for separation of floating oil and reduction of BOD level.	DSS
32( a)	Water treating facilities	Water treating facilities	Water treating facilities	Water treating facilities
	<ul><li>ETP-11</li><li>STP-7</li></ul>	• ETP-9 • STP-5	• ETP-2 • STP-1	• ETP-0 • STP-1
33	Solid and Hazardous Wastes Management Measures      All non-hazardous solid     wastes shall be utilized     in-house in Sinter     Plant/BOF.     BF/BOF Slag shall be     utilized in house or sold     to cement     manufacturers or used	<ul> <li>Solid and Hazardous Wastes Management Measures</li> <li>All non-hazardous         solid wastes shall be         utilized in-house in         Sinter Plant/BOF.</li> <li>BF/BOF Slag shall         be utilized in house         or sold to cement         manufacturers or</li> </ul>	Solid and Hazardous Wastes Management Measures  • All non- hazardous solid wastes shall be utilized in- house in Sinter	Solid and Hazardous Wastes Management Measures  • All non- hazardous solid wastes shall be utilized inhouse. • All other hazardous wastes shall be disposed
	for road construction.  Coal tar sludge and BOD sludge would be recycled for coke making by mixing with the coal charge.  All other hazardous wastes shall be disposed in secured landfill/ handed over to authorized dealers for	used for road construction.  Coal tar sludge and BOD sludge would be recycled for coke making by mixing with the coal charge.  All other hazardous wastes shall be disposed in secured landfill/ handed over	Plant/BOF.  • BF/BOF Slag shall be utilized in house or sold to cement manufacturers or used for road construction.  • All other	in secured landfill/ handed over to authorized dealers for disposal as per statutory norms.

SN	JSWSL at 18 MTPA	JSWSL at 13 MTPA	JVML at 5 MTPA	JSWCL
	Facility / activity granted Prior EC along with configuration and capacity of parent EC (E.g.: Configuration, Capacity, Area, Raw Materials, etc.)	Facility / activity granted Prior EC proposed to transfer to JSWSL along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JVML along with configuration and capacity	Facility / activity granted Prior EC proposed to transfer to JSWCL along with configuration and capacity
	disposal as per statutory norms.	for disposal as per statutory norms.	wastes shall be disposed in secured landfill/ handed over to authorized dealers for disposal as per statutory norms.	

# II. Environmental Liability Matrix

Sl. No	Environmental Liability	Parent Company	Transferee	Transferee
	5	JSWSL	Company 1  JVML	Company 2 JSWCL
1. Co	m <mark>pliance Obliga</mark> tions	400	(3) 1	
1.	EC Compliance	Timely submission	Timely submission	Timely submission
		of Compliance to EC	of Compliance to	of Compliance to EC
		Conditions for the 13	EC Conditions for	Conditions for the
		MTPA Plant shall be	the proposed 5	existing 4 MTPA
		the responsibility of	MTPA Plant shall	Cement plant along
		JSWSL	be the responsibility	with the proposed 2
		3	of JVML	MTPA Unit shall be
	9	CA.	640	the responsibility of
		"Ofectors she"	5 /// <b>//</b>	JSWCL
2.	CTE Compliance	Applicable for the 13	Applicable for the 5	Applicable for the 6
	3.	MTPA Steel Plant	MTPA Steel Plant	MTPA Cement Plant
3.	CTO Compliance	Applicable for the 13	Applicable for the 5	Applicable for the 6
	%	MTPA Steel Plant	MTPA Steel Plant	MTPA Cement Plant
4.	Compliance to Hazardous	Applicable for the 13	Applicable for the 5	Applicable for the 6
	waste mgmt. rules	MTPA Steel Plant	MTPA Steel Plant	MTPA Cement Plant
5.	Compliance to Plastic	Applicable for the 13	Applicable for the 5	Applicable for the 6
	waste mgmt. rules	MTPA Steel Plant	MTPA Steel Plant	MTPA Cement Plant
6.	Compliance to E waste	Applicable for the 13	Applicable for the 5	Applicable for the 6
	mgmt. rules	MTPA Steel Plant	MTPA Steel Plant	MTPA Cement Plant
7.	Compliance to Bio medical	Applicable for	Applicable for	Applicable for
	mgmt. rules	Medical wastes of	Medical wastes of	Medical wastes of
		JSW Sanjeevani	and in plant Health	and in plant Health
		Hospital and in plant	Centres	Centres
		Health Centres		
	mediation/Mitigation obligat			<b>,</b>
8.	EMP Measures	CAPEX and OPEX	CAPEX and OPEX	CAPEX and OPEX
		expenditure towards	expenditure towards	expenditure towards
		implementation of	implementation of	implementation of
		EMP Measures for	EMP Measures for	EMP Measures for

Sl. No	Environmental Liability	Parent Company JSWSL	Transferee Company 1 JVML	Transferee Company 2 JSWCL
		the 13 MTPA Steel Plant shall be the responsibility of JSWSL	the proposed 5 MTPA Steel Plant shall be the responsibility of JVML	the proposed expanded 6 MTPA Cement Plant shall be the responsibility of JSWCL
9.	Greenbelt Development	Development of minimum 33% of GB of the total project area of 7149 Acres shall be the responsibility of JSWSL	Development of minimum 33% of GB of the total project area of 833 Acres shall be the responsibility of JVML	Development of minimum 33% of GB of the total project area of 150 Acres shall be the responsibility of JSWCL
10	Remediation Plan (If Applicable)	In case of Violation of EC for the 13 MTPA Steel Plant, Expenditure towards mitigative measures for the Remediation Plan shall be the responsibility of JSWSL	In case of Violation of EC for the proposed 5 MTPA Steel Plant, Expenditure towards mitigative measures for the Remediation Plan shall be the responsibility of JVML	In case of Violation of EC for the proposed expanded 6 MTPA Cement Plant, Expenditure towards mitigative measures for the Remediation Plan shall be the responsibility of JSWCL
11	Natural and Community Resource Augmentation Plan (if applicable)	In case of Violation of EC for the 13 MTPA Steel Plant, Expenditure towards mitigative measures for the Natural and Community Resource Augmentation Plan shall be the responsibility of JSWSL	In case of Violation of EC for the proposed 5 MTPA Steel Plant, Expenditure towards mitigative measures for the Natural and Community Resource Augmentation Plan shall be the responsibility of JVML	In case of Violation of EC for the proposed expanded 6 MTPA Cement Plant, Expenditure towards mitigative measures for the Natural and Community Resource Augmentation Plan shall be the responsibility of JSWCL
3. Fin	es and penalties  Liability towards reply to Show cause Notices	In case of issuance of Show Cause Notice regarding any Environmental Issues related to the 13 MTPA Steel Plant, JSWSL shall be liable.	In case of issuance of Show Cause Notice regarding any Environmental Issues related to the proposed 5 MTPA Steel Plant, JVML shall be liable.	In case of issuance of Show Cause Notice regarding any Environmental Issues related to the proposed expanded 6 MTPA Cement Plant, JSWCL shall be liable.
13	Directions issued by CPCB SPCB	In case of issuance of Directions under The Water	In case of issuance of Directions under The Water	In case of issuance of Directions under The Water

Sl. No	Environmental Liability	Parent Company JSWSL	Transferee Company 1 JVML	Transferee Company 2 JSWCL
	е-	(Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 or The Environment (Protection) Act, 1986 related to the 13 MTPA Steel Plant, JSWSL shall be liable.	(Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 or The Environment (Protection) Act, 1986 related to the proposed 5 MTPA Steel Plant, JVML	(Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 or The Environment (Protection) Act, 1986 related to the proposed expanded 6 MTPA Cement
14	Penalty due to EIA	In case of violation	shall be liable.  In case of violation	Plant, JSWCL shall be liable.  In case of violation
	Violation	of EIA Notification, 2006 by the 13 MTPA Steel Plant, payment towards any penalty as applicable shall be the responsibility of JSWSL	of EIA Notification, 2006 by the proposed 5 MTPA Steel Plant, payment towards any penalty as applicable shall be the responsibility of JVML	of EIA Notification, 2006 by the proposed expanded 6 MTPA Cement Plant, payment towards any penalty as applicable shall be the responsibility of JSWCL
15	Penalty due to failure in Compliance to Directions	In case of failure in Compliance to Directions by the 13 MTPA Steel Plant, payment towards any penalty or any other punishment as applicable shall be the responsibility of JSWSL	In case of failure in Compliance to Directions by the proposed 5 MTPA Steel Plant, payment towards any penalty or any other punishment as applicable shall be the responsibility of JVML	In case of failure in Compliance to Directions by the proposed expanded 6 MTPA Cement Plant, payment towards any penalty or any other punishment as applicable shall be the responsibility of JSWCL
4. Cor	npensation obligations/Pun	itive Damages		
16	Due to Fines & Penalties	In case of issuance of any Fines or Penalties to the 13 MTPA Steel Plant, JSWSL shall be liable.	In case of issuance of any Fines or Penalties to the proposed 5 MTPA Steel Plant, JSWSL shall be liable.	In case of issuance of any Fines or Penalties to the proposed expanded 6 MTPA Cement Plant, JSWSL shall be liable.
	nabilitation Obligations	· · · · · · · · · · · · · · · · · · ·		·
17	R&R (If applicable)	Applicable in case of any future expansion of the project area	Not Applicable	Not Applicable

Sl. No	Environmental Liability	Parent Company	Transferee	Transferee
		JSWSL	Company 1 JVML	Company 2 JSWCL
		involving R&R		



# EC conditions compliance matrix (Specific and General EC conditions) after splitting

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial
		Transfer of EC
	KYC	Transferee Company 1 (JVML)
		D I IEGG WI G I I I I
i.	Green belt shall be developed in an area of <b>1068 ha</b> all along the periphery of the project site by September, 2024 as committed with a tree density of 2500 trees per hectare.	<b>Revised EC Condition -</b> Green belt shall be developed in 33% (111.3 ha) of the plant area (337.1 ha) all along the periphery of the project site by September 2024 with a tree density of 2500 trees per hectare.
		Compliance: In the new plant area of JVML, the present GB cover already developed is 93.5 ha (27.74 %). Remaining GB area shall be developed by September 2024.
	P. Tanada	<b>Remarks:</b> The plant area of JVML after proposed partial transfer shall be 337.1 ha. Greenbelt area as 33 % of the revised plant area is 111.3 ha.
ii.	Project proponent shall install covered sheds for coal storage in an area of 32325 sqm by June 2022 as committed.	Revised EC Condition - Project proponent shall install closed and covered silos/hoppers/bunkers for coal storage.  Compliance: JVML shall install closed and covered silos/hoppers/bunkers for coal storage.
	e-Paym	ents
	ayiii	Remarks: The proposal for coverage of
iii.	84 km long pipe conveyor shall be installed by 31/03/2024 as committed.	coal storage area is in JSWSL premises.  Revised EC Condition - Nil
		Compliance: Not Applicable
		<b>Remarks:</b> 84 km Pipe Conveyor shall be installed by JSWSL to receive Iron ore from captive mines at Sandur.
iv.	Ambient air quality shall be improved	Revised EC Condition - Ambient air
	by adopting measures like pipe	quality shall be improved by adopting

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	conveyor, use of by product gas in place of coal and covered shed. Noise levels shall be controlled by decrease in truck traffic after completion of the	measures like use of by product gas in place of coal.  Compliance: By product gases will be
	pipe conveyor.	used for improving the surrounding ambient air quality.
	e-K.	<b>Remarks:</b> Pipe conveyor and covered shed for coal storage will be installed in JSWSL premises, and the same shall be used by JVML.
V.	Environment Clearance for the township project shall be obtained from the concerned competent authority.	Revised EC Condition – Environment Clearance for the new township project shall be obtained from the concerned competent authority.
		Compliance: Environmental Clearance for the new township project shall be obtained from the competent authority Remarks: None.
vi.	PP shall control rooftop emissions from SMS 1 &2 shall be eliminated by 31/03/2022 and that from SMS 2 by installation of primary De-dusting	Revised EC Condition – Nil  Compliance: Not Applicable
	system by 31/10/2022 as committed.	Remarks: SMS1 and SMS2 are part of JSWSL, and SMS-4 which is in JVML is
		equipped with Dry GCP with Bag filters.
vii.	Junction houses in raw material handling area requiring repair and overhauling to control fugitive emissions shall be modified by March	Revised EC Condition – Nil  Compliance: Not Applicable
	2022.	Remarks: Junction houses in existing raw
		material handling area requiring repair are part of JSWSL's steel plant.
viii.	Desulfurization of Coke Oven Gas, use of low Sulphur coal, Flue Gas Desulphurization in captive power plant shall be adopted to control SO2	Revised EC Condition – Nil
	emissions.	Compliance: Not Applicable  Remarks: No coke ovens are proposed.

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
ix.	Project proponent shall install 2 additional Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in addition to already installed 4 CAAQMS.	Transferee Company 1 (JVML)  Revised EC Condition - Project proponent shall install 1 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) by 31-12-2024.  Compliance: 1 no of CAAQMS Station shall be installed within JVML plant boundary by 31-12-2024, besides OP Jindal centre.  This is in addition to 6 CAAQMS installed
X.	Following Cleaner technologies shall be adopted by PP as committed:  a) MEROS in Sinter plants to control emissions  b) Sinter cooler waste heat recovery to generate power  c) Dry gas cleaning in BF and BOF converters  d) TRT and Stove waste gas heat recovery system in BF  e) Secondary Fume Extraction system in BOF with dog houses  f) Independent FE for LRF.  g) Pipe conveyor to transport iron ore from various mines  h) 3.5 km wind curtains in coal yard i) WHRB for EAF waste heat recovery  j) Installation of Zero Power Furnace.  k) CO2 injection for pH control in SMS.  l) Single oven pressure control in Coke Ovens to control Charging Emissions along with CGT car and HPLA system.	Revised EC Condition - Following Cleaner technologies shall be adopted by PP:  a) High efficiency ESP in Sinter plants to control emissions b) Sinter cooler waste heat utilization in Sinter* Plant c) Dry gas cleaning in BF & BOF converters d) TRT and Stove waste gas heat recovery system in BF e) Secondary Fume Extraction system in BOF with dog houses f) Independent FE for LRF.  Compliance: Noted and shall be provided as follows. a. High efficiency Electrostatic Precipitator (ESP) shall be installed in the proposed Sinter plant SP-5 with PM emission within limits. b. Sinter cooler waste heat recovery shall be provided in SP-5. c. Dry GCP shall be provided in SMS4. d. TRT and stove waste gas recovery shall be provided in proposed BF5. e. FES with dog house system shall be provided in BOF of SMS-4.

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		f. Independent FES for LRF of SMS4.
		<ul> <li>Remarks:</li> <li>In the proposed SP5, recently developed High efficiency ESP shall be installed in place of MEROS.</li> <li>Due to technological compulsion, wet GCP shall be provided in BF5 along with</li> </ul>
		complete ETP/ZLD system for gas
		<ul> <li>e 84 km Pipe Conveyor shall be installed by JSWSL and utilized for transportation of Iron ore from nearby mines both for JSWSL and JVML Plant operations.</li> </ul>
xi.	of following state-of-the-art technologies for recovery and recycling various wastes generated within the plant premises shall be adopted.  i. Slag sand plant for surplus granulated BF slag  ii. Micro-pellet plant (2050 TPD) for the dust & sludge collected from air and water pollution control equipment.  iii. Mill scale briquetting plant (600 TPD) for high Fe containing sludge & dust from Mills.  iv. Waste-to-wealth plant (600 TPD) for the Dust & sludge of low Fe values through beneficiation  v. Steam Box technology for SMS slag ageing to make it suitable for use as aggregate in road making.  vi. Slag sand plant (17000 TPD) is proposed for converting steel slag to sand for sale.  vii. LHF slag briquetting plant (300 TPD) for production of briquettes to replace imported synthetic slag.	Revised EC Condition - 100% solid waste utilization by means of 1. Utilization of dust, mill scales and sludge in Sinter Plant 2. BF slag will be utilized in Cement of JSWCL. 3. Steel slag will be utilized in slag processing plant of JSWSL.  Compliance: Utilization of Dust, mill
	Powder steel slag fines for use in land reclamation and soil conditioning	

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
	ix. Carbon recovery plant - Carbon	Transferee Company 1 (JVML)
	ix. Carbon recovery plant - Carbon recovery shall be done from BF dust, BF GCP slurry and COREX Furnace GCP slurry recycled back into pellet plant	
xii.	The recommendations of the approved	Revised EC Condition – Nil
	Site-Specific Conservation Plan/Wildlife Management Plan shall be implemented in consultation with	Compliance: Not Applicable
	the State Forest Department. The	Remarks: JSW Steel limited as a principal
	implementation report shall be	lessor has prepared the integrated Site
	furnished along with the six-monthly compliance report to the concerned	specific Wild life conservation plan and submitted to Deputy conservator of
	Regional Office of the MoEF&CC	Forests. JSWSL shall implement the plan in
	regional office of the Mozi cess	consultation with the State forest
	Y 45°	department.
i.	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/	Revised EC Condition - The Environment Clearance (EC) granted to the project/activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/construe to approvals/
	consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project	consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.
	9/3	Compliance: Noted and agreed
	°C O	Remarks: None
i.	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 04 Nos. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier	Revised EC Condition - The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission as well as 01 No. Continuous Ambient Air Quality Station (CAAQS) for monitoring AAQ parameters with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time. The CEMS and CAAQMS shall be connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs
	according to equipment supplier specification through labs recognized	supplier specification through labs recognized under Environment

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	under Environment (Protection) Act, 1986 or NABL accredited laboratories.	(Protection) Act, 1986 or NABL accredited laboratories.
	e-KYC	Compliance: One number CAAQMS shall be installed by JVML behind OP Jindal center.  This is in addition to the 6 CAAQMS
		stations installed by JSWSL.
ii.	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories	Revised EC Condition - The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
	Nontraction of the Contraction o	Compliance: Fugitive emissions shall be monitored once in every quarter through NABL accredited laboratory.  Remarks: Fugitive Emission: All the raw materials are being handled by JSWSL.
iii.	Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions	Revised EC Condition - Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
	e-Paym	Compliance: Sampling facility at process stacks and at quenching towers will be provided as per the CPCB guidelines.  Remarks: None
iv.	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards	Revised EC Condition - Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards. Compliance: Noted and shall be complied  • Process bag filter- 8 Nos  • ESP-1  • Scrubber-1

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		Remarks: None
V.	The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags	Revised EC Condition - The project proponent shall provide leakage detection and mechanized bag cleaning facilities for better maintenance of bags.  Compliance: Noted and shall be complied.  Remarks: None
vi.	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly	Revised EC Condition - Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.  Compliance: Vacuum cleaners will be deployed in JVML to ensure fugitive
	7 7	emission control.  Remarks: None
vii.	Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.	Revised EC Condition - Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
	CPC GI	Compliance: Recycle and reuse of iron ore fines, coal and coke fines and other fines collected from Pollution controlling devices and vacuum cleaning devices shall be used in the process after briquetting/agglomeration.  Remarks: None
iii.	The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin	Revised EC Condition - The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.  Compliance: Leak proof trucks/dumpers will be used for carrying coal and other raw materials by covering them tarpaulin if any.
ix.	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain	Remarks: None Revised EC Condition - Nil Compliance: Not applicable

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	conveyors, land based industrial	-
	vacuum cleaning facility).	Remarks: No coke oven proposed
X.	Land-based APC system shall be installed to control coke pushing emissions	Revised EC Condition - Nil Compliance: Not applicable
	JVC	Remarks: No coke oven proposed
xi.	Monitor CO, HC and O2 in flue gases	Revised EC Condition - Nil
	of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	Compliance: Not applicable
	77 1 1 1 1 1	Remarks: No coke oven proposed
xii.	Vapor absorption system shall be provided in place of vapor compression system for cooling of coke oven gas in case of recovery type coke ovens.	Revised EC Condition - Nil  Compliance: Not applicable  Remarks: No coke oven proposed
iii.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Revised EC Condition - Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.  Compliance: Wind shelter fence and chemical spraying will be provided on the raw material stock piles.
	"btecte of	Remarks: None
iv.	Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars	Revised EC Condition - Design the ventilation system for adequate air changes as per prevailing norms for all tunnels, motor houses, Oil Cellars  Compliance: Ventilation system shall be provided with adequate air changes as per the prevailing norms for all tunnels, motor houses and oil cellars.  Remarks: None
i.	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as	<b>Revised EC Condition</b> - The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
	amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	Transferee Company 1 (JVML)  and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.  Compliance: Necessary continuous effluent quality monitoring systems will be provided and they will be connected to CPCB and KSPCB. These equipment's will be calibrated periodically as per CPCB standards  Remarks: None
ii.	The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Revised EC Condition - The project proponent shall monitor regularly ground water quality at least twice a year (pre- and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories.  Compliance: Noted and shall be complied,
		The environmental quality of ground water is being monitored through MoEF&CC accredited laboratory.  Remarks: None
iii.	The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 4 14 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 201 5 (Thermal Power Plants) as amended from time to time as amended from time to time;	Revised EC Condition – Nil  Compliance: Not applicable.  Remarks: No coke oven proposed.  However, JVML has two ETP's i.e. ETP-1 at JVML Iron Zone and ETP-2 at Mills zone.
iv.	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards	Revised EC Condition - Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards. Compliance: Noted and shall be complied, 1 (One) STP shall be commissioned by

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		JVML besides OPJC.
		Remarks: None
V.	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.	Revised EC Condition - Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.  Compliance: Noted and shall be complied, Garland drains and collection pits will be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.  Remarks: None
vi.	Tyre washing facilities shall be provided at the entrance of the plant gates.	Revised EC Condition - Tyre washing facilities shall be maintained at the entrance of the plant gates.  Compliance: Tyre washing facilities will be provided at the entrance of the plant gates.  Remarks: None
vii.	Treated water from ETP of COBP	Revised EC Condition – Nil
VII.	shall not be used for coke quenching	Compliance: Not applicable
	3/2	Remarks: No coke oven proposed
viii.	Water meters shall be provided at the inlet to all unit processes in the steel plants	Revised EC Condition - Water meters shall be provided at the inlet to all unit processes in the steel plants.  Compliance: Noted and shall be complied, Water meters will be installed at the inlet unit processes in the steel plants.  Remarks: None
i.	Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report	Revised EC Condition - Noise pollution shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.  Compliance: Noted and shall be complied. Noise levels will be monitored regularly.

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		The report will be submitted along with six month EC compliance report regularly.  Remarks: None
i.	Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.	<b>Revised EC Condition -</b> Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
		Compliance: Noted and being complied. Torpedo ladles will be deployed. Remarks: None
ii.	Restrict Gas flaring to < 1%.	<b>Revised EC Condition -</b> Restrict Gas flaring to < 1%.
		Compliance: Noted and being complied. Flaring will be maintained to be less than 1%.  Remarks: None
iii.	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	Revised EC Condition - Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
		Compliance: Noted and shall be complied, JVML will explore the possibility of laying solar panels to generate power from building roof tops and for solar light system for all common areas, street lights and parking.  Remarks: None
iv.	Provide LED lights in their offices and residential areas	Revised EC Condition - Provide LED lights in their offices and residential areas.  Compliance: Noted and shall be complied, LED lights will be used in offices and colonies.
		Remarks: None
V.	Ensure installation of regenerative/recuperative type burners on all reheating furnaces	Revised EC Condition - Ensure installation of regenerative/ recuperative type burners on all reheating furnaces.  Compliance: Noted and shall be complied, Recuperative type burners will be provided in all the reheating furnaces.

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		Remarks: None
VI W	aste management	Temarks, Tone
i.	Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.	<b>Revised EC Condition -</b> Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
		Compliance: Noted and shall be complied, Oil collection pits will be provided in Mills area.
ii.	Kitchen waste shall be composted or converted to biogas for further use	Remarks: None  Revised EC Condition - Kitchen waste shall be composted or converted to biogas for further use.
		Compliance: Noted and shall be complied, Kitchen waste if any generated will be composted or converted to biogas for further use.  Remarks: None
VII G	reen Belt	The Is
i.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.	Revised EC Condition - The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration by trees.  Compliance: Noted and shall be complied,
	raym	GHG emissions inventory for the plant will be prepared and carbon sequestration potential of plantations will be assessed.  Remarks: None
i.	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Revised EC Condition - Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
		Compliance: Noted and shall be complied, Emergency preparedness plan based on the HIRA and Disaster Management plan will

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
		be implemented.
ii.	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Remarks: None  Revised EC Condition - The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.
	RI)	Compliance: Heat stress analysis for the workmen who work in high temperature work zone shall be carried out and appropriate PPE's shall be provided.  Remarks: None
iii.	Occupational health surveillance of the workers shall be done on a regular basis and records maintained	Revised EC Condition - Occupational health surveillance of the workers shall be done on a regular basis and records maintained.  Compliance: Noted and shall be complied. Periodical health check-ups of workers will be conducted as stipulated and records are being maintained.  Remarks: None
i.	The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/20 17-IA.III dated 30/09/2020	Revised EC Condition – Nil  Compliance: Not Applicable  Remarks: Nil
ii.	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/ violation of the environmental/ forest/ wildlife norms/conditions. The company shall have defined system of reporting infringements / deviation /violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard	Revised EC Condition - The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/ deviation/ violation of the environmental/ forest/ wildlife norms/conditions. The company shall have defined system of reporting infringements / deviation /violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	shall be submitted to the MoEF&CC as a part of six-monthly report.	submitted to the MoEF&CC as a part of six-monthly report.  Compliance: JVML will have Environmental policy, which is duly approved by the board of directors.  Remarks: None
iii.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization	Revised EC Condition - A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
	A A A A A A A A A A A A A A A A A A A	Compliance: Separate environmental cell both at the plant and at company head quarter level with qualified personnel have been setup under the control of senior executive.  Remarks: None
X M	iscellaneous	Remarks: None
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Revised EC Condition - The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.  Compliance: Noted and shall be complied with. JVML will publish in two local newspapers within seven days of receiving EC.  Remarks: None
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government	<b>Revised EC Condition -</b> The copies of the environmental clearance along with salient features of the project shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the
	who in turn has to display the same for	

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
	20 Jan from the John of marine	Transferee Company 1 (JVML)
	30 days from the date of receipt.	Government who in turn has to display the same for 30 days from the date of receipt.
	e-KYC	Compliance: After receipt of EC, The copies of EC along with Salient features of the project will be submitted to the Heads of local bodies, panchayats in addition to the relevant offices of the government.  Remarks: None
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis	Revised EC Condition - The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
		Compliance: Noted and agreed, the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website will be updated the same on half-yearly basis by JVML.  Remarks: None
iv.	The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Revised EC Condition - The project proponent shall monitor the criteria pollutants level namely; PM ₁₀ , SO ₂ , NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
		Compliance: Noted and agreed Anticipated emissions from JVML are: a) Stack Emission • PM10 – 96.6 g/s • PM2.5 – 58.6 g/s • SO2 – 95.5 g/s • NOx – 79.3 g/s Remarks: None
V.	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the	<b>Revised EC Condition -</b> The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
	e-KYC	Compliance: Noted and agreed, JVML will submit the six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.  Remarks: None
vi.	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Revised EC Condition - The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.  Compliance: Noted and agreed, Environmental statement in Form V will be submitted every year to the SPCB.
	Ofectors	Remarks: None
vii.	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Revised EC Condition - The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.  Compliance: Noted and agreed, Date of
		financial closure and final approval of the project will be communicated to the RO as well as Ministry.
T7:::	The project proposent shall shide be-	Remarks: None  Paying FC Condition The project
viii.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert	<b>Revised EC Condition</b> - The project proponent shall abide by all the commitments and recommendations made in the Environmental appraisal report and during presentation to the Expert Appraisal Committee.

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC
		Transferee Company 1 (JVML)
	Appraisal Committee.	Compliance: Noted and agreed, JVML will abide by the commitments and recommendations made in the Environmental appraisal report and during presentation to the Expert Appraisal Committee.
ix.	No further expansion or modifications in the plant shall be carried out without	Remarks: None  Revised EC Condition - No further expansion or modifications in the plant
	prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).  Compliance: Noted and agreed, Without prior approval JVML will not carry out expansion or modification in the plant.  Remarks: None
х.	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the	Revised EC Condition - Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance
	provisions of Environment (Protection) Act, 1986.	and attract action under the provisions of Environment (Protection) Act, 1986.  Compliance: Noted and agreed, JVML agrees the condition and will not conceal factual data or submission of false/fabricated data, it also agrees that it may lead to revocation of the EC.  Remarks: None
xi.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory	Revised EC Condition - The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.  Compliance: Noted and agreed, that Ministry may revoke or suspend the clearance if implementation of any one of the above condition is not satisfactory.  Remarks: None

Sl. No	EC Conditions vide letter dated 29/11/2021	Revised EC Condition after Proposed Partial Transfer of EC  Transferee Company 1 (JVML)
xii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	Revised EC Condition - The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.  Compliance: Noted and agreed, JVML will implement additional specific conditions in a time bound manner.  Remarks: None
xiii.	The RO of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/ monitoring reports	Revised EC Condition - The RO of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/monitoring reports.  Compliance: Noted and agreed, Full cooperation shall be extended to the RO of this ministry for monitoring and requisite data/information/monitoring reports shall be furnished.  Remarks: None
xiv.	Any Appeal against the EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	

### **Additional Specific Condition:**

 $\label{lem:condition} \begin{tabular}{ll} Applicability of Additional specific Conditions for JVML / Compliance of Additional Specific Conditions applicable to JVML \\ \end{tabular}$ 

Sl. No.	Additional Specific Condition	Compliance
i.	The PP shall install the requisite number of CAAQMS	• One number CAAQMS shall be installed by JVML behind OP Jindal centre.

Sl. No.	Additional Specific Condition	Compliance
	linked with CPCB server at designated places.	• This is in addition to the 6 CAAQMS stations installed by JSWSL.
ii.	JVML shall undertake Village Adoption programme as committed.	<ul> <li>Village Adoption progarmme shall be undertaken by Project Proponent and approx.</li> <li>Rs. 15 Cr. has been budgeted for the same by JSWSL, JVML and JSWCL.</li> <li>10 Villages of Core Zone which will be adopted are: - Nagalapura, Anathapura, Chikantapura, Kodalu, Basapura, Talur, Madapura, Daroji,</li> </ul>
	e-KYC	<ul> <li>Joga, Lingadahalli.</li> <li>4 villages will be adopted by JSWSL, another 4 villages by JVML and remaining 2 villages by JSWCL</li> </ul>
iii.	The proposed logistics hub and truck parking yard is close to Toranagallu village, proper care must be taken to mitigate possible impacts, including wider multilayered plantation and other fugitive dust arresting measures.	Truck parking yard shall be provided with all the mitigative possible measures, including wider multilayered plantation and other fugitive dust arresting measures.
Iv.	All stockyards shall have impervious flooring and shall be equipped with dust suppression. Stock yards shall also have garland drains to trap the run off material.	• All Stockyards shall be with impervious flooring and shall be equipped with dust suppression. Stock yards shall also have garland drains to trap the run off material.
V.	Raw materials like sinter, pellets, coke etc. shall obtained through conveyer belt from JSWSL.	<ul> <li>Raw materials like sinter, pellets, coke etc. shall be obtained through Conveyor belt from JSWSL.</li> </ul>
vi.	JVML Shall operate two ETP and one STP independently.	• JVML will operate two ETP and one STP independently to treat its effluent and sewage.
vii.	80% of the finished goods shall be transported through Railways.	• 80 % of the finished goods of JVML will be transported through Railways.