GUIDELINES FOR ENVIRONMENTAL MANAGEMENT IN MINERAL STACK YARDS AND RAILWAY SIDINGS

16th April -2010



STATE POLLUTION CONTROL BOARD, ORISSA

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII, Bhubaneswar – 751 012, INDIA

GUIDELINES FOR PROCESSING OF CONSENT APPLICATION FOR MINERAL STACK YARDS AND RAILWAY SIDING

Transportation, storage, loading and unloading of minerals at Stack-yards / Railway sidings have considerable air pollution potential. These activities have been brought under consent administration of the Board under RED category as per Board's Resolution No. 3369 dt. 16.2.08. Applications for grant of consent to these activities are to be disposed of by concerned Regional Offices as per the delegated power vide letter No. 2186 dt. 31.1.08. The Board issued guidelines to regulate stack-yards and railway siding in April 2008. The Board received certain submissions from various stakeholders indicating certain ambiguity and operational difficulties in implementing the guidelines. Thus to further streamline it and to make it implementable, a consultative meeting with all stakeholders was convened on 31.10.09 and their views were considered. In order to facilitate timely disposal of applications and to make the procedure uniform, the following guidelines are issued. These guidelines superceed the guidelines issued in April 2008 vide Board's letter no.9718 Dt. 24/04/08 and the additional guidelines issued vide Board's letter no.17924 Dt. 29/10/09

1. **DEFINITION**:

1.

- i) Stack-yard : Stack-yard means mineral stack yard over an area, which is used to receive, store either for a short period or long period, load / unload and dispatch minerals from the site and requires a trading license under Orissa Mineral (Prevention of Theft, Smuggling and Illegal Mining and Regulation of Possession, Storage, Trading and Transportation) Rules 2007.
- ii) Railway-siding: A railway-siding is a place/ area which is used to receive, temporarily store and load / unload material in the rakes and dispatch materials.
- iii) Cluster of stack-yards : A cluster of stack-yards means a group of stack-yards having at least one common boundary, who enter into an agreement among them to remain collectively responsible to maintain the pollution control system while operating the stack-yards.

2. **APPLICABILITY**:

- i) The railway-sidings ,stack-yards and clusters of stack-yards of minerals, which are already established and operating prior to the date of Board's Resolution i.e 16.2.08 are required to only obtain consent to operate from the Board.
- ii) Railway-sidings ,stack-yards and clusters of stack-yards, which are established after the date of Board's Resolution i.e 16.2.08 or, to be established thereafter are required to obtain consent to establish first and then consent to operate from the Board.
- iii) For cluster of stack-yards the proponent will apply separately depositing prescribed fee for each stack-yard and submit all the application in a single bunch along with original agreement and undertaking that, they will remain collectively liable for complying to the conditions stipulated by Board. Violation of any condition by any one member of the cluster of stack-yards shall be treated as a violation.
- iv) Mineral stack-yard or railway-siding located inside the premises of industry / mines which are already covered under consent administration will not require separate consent.
- v) The consent granted under section 25 of Water (Prevention & Control of Pollution) Act. 1974 and section 21 of Air (Prevention & Control of Pollution) Act. 1981 shall be subject to Trade License issued under Orissa Mineral (Prevention of Theft, Smuggling and Illegal Mining and Regulation of Possession, Storage, Trading and Transportation) Rules 2007.
- vi) The applicant can make application for consent to operate for a minimum period of one year; however the validity of consent shall be co-terminus with the financial year.

3. APPLICATION FORM:

The applicant shall apply for consent to establish and consent to operate (as applicable) in the prescribed form of the Board alongwith additional information in the format as per **Annexure-I**.

4. SITING CONSIDERATIONS (MINERAL STACK-YARD):

Consent to Establish applications for mineral stack-yards shall be considered on the basis of the following site suitability criteria.

- The boundary of proposed site shall be at an aerial distance of at least 100 meter from State/National Highway.
- ii) The boundary of the proposed site shall be at an aerial distance of at least **500 meter away from** Schools, Colleges, Hospitals, Archeological monuments, and other sensitive areas.
- iii) It shall be ensured that run-off during rain from the proposed site, any water body, which is used by local people, remains at minimum possible level.
- iv) Location of the stack-yard should be such that there is no public inconvenience for parking or movement of vehicles.
- v) The applicant for consent to establish shall obtain a NOC from Sarpanch following a gram sabha if it is proposed in a rural area or obtain NOC from the concerned ULB in case of urban area.
- vi) In case of new cluster the proposed site shall conform to the above stipulations for siting as a whole.

5. ENVIRONMENTAL ASSESSMENT:

a) Check list of Environmental Issues:

The following issues shall be taken into consideration for environmental assessment.

- i) Siting of facility and proximity of nearby dwellings.
- ii) Compatibility of the activities with surrounding land use.
- iii) Need for isolating the operational areas or any additional precautionary measure to be undertaken.
- iv) Likelihood of the materials proposed to be handled to create dust nuisance.
- v) Proposed dust control measures.
- vi) Storm water management system and disposal practice.
- vii) Possibility of discharge to nearby water bodies.

- viii) Bunding of storage area and its appropriateness.
- ix) Impact on nearby residents, beyond normal working hours.

b) Standard conditions (RAILWAY SIDING AND MINERAL STACK YARDS) :

The following conditions may be imposed for pollution control while granting consent to establish / consent to operate for railway siding and mineral stack-yards. These conditions are only indicative and not exhaustive.

House Keeping:

- All entry points, internal roads and loading/unloading areas must be adequately compacted for movement of heavy vehicles by using low permeability material and be cleaned regularly to minimize potential of dust generation and off-site impact.
- A boundary wall of at least 3 meter height shall be constructed along the periphery of the mineral stack-yard to prevent the dust particles from being air borne and / or getting carried away with surface run off to nearby water bodies.
- 3. The height of material stack within storage areas must be kept below the height of the boundary wall at all times to prevent the material from being air borne.
- 4. All mineral storage areas containing fines or dusty materials must be either:
 - covered with tarpaulins when not in use, or
 - fitted with Water Sprinkling / Dry fog systems.
- 5. Green belt of at least one row of trees shall be developed along the boundary of material storage yard., in case of stack-yards and railway siding which are located in close proximity to villages and residential areas, a green belt of adequate width between the habitation and the stack-yard is recommended.

- 6. Planting of trees all along the connecting road and regular grading of such road shall be carried out to prevent generation of dust due to movement of dumpers/trucks.
- 7. Adequate care shall be taken to prevent creation of ruts and pot holes in the connecting roads.
- 8. Proper house keeping at the material storage areas, loading & dispatch areas, service facilities, etc., shall be practiced.

Air Pollution Control:

- 9. Dust suppression arrangement shall be provided on approach road by using water sprinklers / mobile water tanker.
- Wheel wash facilities are to be provided to minimize transfer of mud from unpaved approach roads to main paved and/or public roads.
- 11. At the material storage areas, atomized stationery mist spray of water or conditioning of material with water shall be practiced to prevent dust getting air borne during loading/unloading.
- 12. Sprinkler systems must be maintained and be kept in a good operable condition at all times.
- 13. Appropriate transfer chutes shall be provided at material discharge points at material storage areas, loading points etc., to minimize the discharge height and spread of air borne dust.
- 14. Appropriate preventive measures shall be taken for control of fire hazards at the stack-yard / Railway-Siding handling coal.
- Smoke emission from heavy duty vehicle operating in the stackyard / Railway-Siding shall conform to the standards prescribed under the Motor Vehicle Rules, 1989.
- 16. Ambient Air Quality inside the premises shall conform to the National Ambient Air Quality Standard prescribed for industrial and mixed used area under the Environment Protection Act, 1986.

Water Pollution Control:

- 17. Domestic effluent shall be discharged to soak pit through septic tank constructed as per BIS specifications.
- 18. Garland drain shall provided along the boundary wall at the appropriate places depending upon the slope of the area, inside the mineral stack-yard. Provision shall be made for collection of wash water from the garland drain and the water, so collected shall be treated in a sedimentation tank for further use inside the premises for green belt or water sprinkling etc. In case of a cluster, a common facility shall be developed, operated and maintained by the cluster operators.
- 19. In case the wastewater contains any substance which is harmful to the environment, the same shall be treated to remove the substance so as to meet the prescribed norms.

Good Operating Practice:

- 20. Speed limit of dumpers/trucks inside the premises shall not exceed **10 kmph**.
- Occupiers of the stack-yard / Railway siding shall ensure that vehicles used have valid "Pollution Under Control (PUC)" certificate.
- 22. During transportation of material by trucks / tippers / wagons through public roads, the vehicles shall be properly covered with tarpaulin sheets.
- 23. Provisions of the E(P) Act, 1986 and the relevant rules framed thereunder, shall be applicable where necessary.

The concerned Regional Officer may stipulate site specific additional conditions, if he feels so, after assessing ground reality and local conditions.

c) Annual Return:

Every operating mineral stack-yards and Railway sidings shall submit an annual return to concerned Regional Office in the prescribed format as per **Annexure – II** by **31st May every year** incorporating the quantities and types of materials handled during the preceding financial year (i.e. **1st April to 31st March**). Stack-yards in a cluster shall prepare individual returns and submit those in a single bunch.





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ADDITIONAL INFORMATION

A.	Mine	eral Stack yard	d		B.	Railv	vay Si	iding			
Tick	approp	oriate box									
1. G	ENE	RAL INFORI	MATION:								
1.1	Nam	e of the appl	licant	:							
	Fath	er's/husband	d's name	:							
	Desi	gnation									
1.2	Maili	ng Address		:							
	e-ma	il		:							
	Telep	ohone No.		:							
	Mobi	le phone No									
	Fax			:							
1.3	Does	the activity r	elate to :								
	1.3.1	New				Yes			No.		
	1.3.2	Expansion				Yes			No.		
	1.3.3	Existing				Yes			No.		
2.	SITE	DETAILS :							_		
	2.1	Area of Mine	eral Stack-ya	rd /Rai	lway S	iding	in		S	q.m/Sq.	ft/Acre.
		✓ Encl : Pa	atta and/or of	ther re	levant	land o	docum	nent.			
	2.2	Site	Plot and		Villag	е		Tehsil		Dist	rict
		Address	Khata no								

2.3	Name of the person/ company	
	(owner of the company)	

2.4 Distance from the following features (Within 500 m radius.)

Features	Distance	Details
Human settlement /		
villages		
Schools / Colleges		
National/state highway		
Hospitals		
Rivers / Streams / Ponds		
Other sensitive area		

[✓] Indicate these feature in the site map :

- 2.5 Length of approach road from nearest Highway (NH/SH) / Railway connectivity / port :
- 2.6 Category of approach road to be used for transportation:
- 2.7 Name of the villages through which approach road from NH/SH passes

3. ACTIVITY DETAILS:

3.1 Type of material to be handled:

SI. No.	Type of material	Qty. per year.	Maximum storage quantity at any point of time
1.			
2.			
3.			
4.			

3.2 Mode of transpor

Incoming mode : By truck/Tipper

: By rake,

By tractor

: Any other means.

Outgoing mode : By truck

: By rake,

By tractor

: Any other means.

- 3.3 Manner of loading / unloading :
- 3.3.1 Manual Loading:
 - ✓ Maximum daily receipt of material:
 - ✓ Maximum daily dispatch of material:
 - ✓ Nos of people to be engaged for loading/unloading :
- 3.3.2 Mechanized loading / unloading :

Type of machines	Nos.	Capacity
Loader, Dumper		
Stacker reclaimer		

4. ENVIRONMENTAL MANAGEMENT PLAN:

SI. No.	Environmental issues *	Already practiced if applicable	Proposed
01.	Air pollution		
	(fugitive dust emission)		
02.	Water Pollution		
	(Run off Water Management)		
04.	Plantation		
05.	Others		

[* As applicable]

CHECK LIST FOR DOCUMENTS

1.	Revenue site map indicating all features.
2.	Patta/ Lease deed/ Agreement/ and other relevant land documents if any in support of proof of ownership.
3.	NOC from the local bodies
4.	Permission from Railway authority for railway siding.

Verification: The data and information given in this form are true to the best of my knowledge and belief.

Date : Signature of Applicant*
With full name & address

Place:

[* Owner or occupier]

Given under the seal of organization onbehalf of whom the applicant is signing

ANNEXURE – II

ANNUAL RETURN

Name of the unit :								
Address	:							
Telephone No :								
E-mail :								
Consent ord	Consent order No. : Consent valid upto :							
Annual Retu	Annual Return for the year ending 31 st March:							
Months	Type of material *	Opening stock (MT)	Receipt	Dispatch	Closing	Remark		
April		(****)						
May								
June								
July								
August								
September								
October								
November								
December								
January								
February								
March								
* Attach s	eparate sheet for ad	ditional mat	erial.					
ا مسائلات ما	that the above wetve	: f th		_				
	that the above retur		-	n				
Date :			CICNIA	TUDE*				
Place :			SIGNA	TURE*				
1 1400 .			DESIG	NATION				
				[* Own	ner or occu	ıpier]		