

15 FEB 2012

OFFICE OF THE GENERAL MANAGER(M)
DIPKA EXPANSION, SECL, DIPKA AREA

3-56/2009

15/2

RdI
M

11/26
Em

SECL/GM(M)/DPK EXP/ENV/2012 / 1839

Dtd. 10.2.2012

To,

✓ The Additional Director (MOEF)
Ministry of Environment & Forest
Regional Office Western Region
Kendriya Paryavaran Bhawan
Link road No- 3, Ravishankar Nagar
Bhopal (M.P) - 462016

1081
16/2/12

D/

Subject: Six monthly report of Monitoring the implementation of Environment safeguard for the period July 2011 to December 2011 for Dipka Expansion project, Dipka Area, SECL.

Dear Sir,

Please find enclosed herewith six monthly report of monitoring the implementation of Environment safeguard for the period July 2011 to December 2011 for Dipka Expansion project, Dipka Area, SECL
Thanking you

Yours Faithfully

Encl: As above

General Manager (Mining)
Dipka Expansion project
SECL, Dipka Area

3/2/12

Copy to -

1. General Manager, SECL, Dipka Area, for kind information.
2. General Manager (Env&WBP), SECL, Bilaspur
3. General Manager(O)/(P&P), Dipka Area
4. Sr. Manager (Envt), Dipka Area
5. Sr. Manager Incharge (Civil), Dipka Expansion project.

	beds		
2005-06	34500 & 10500 Grass beds	-do-	-do-
2006-07	87000 & 30375 Grass beds	-do-	-do-
2007-08	60500	-do-	-do-
2008-09	66000	-do-	-do-
2009-10	53000	-do-	-do-
2010-11	200	-do-	-do-
2011-12	13950	-do-	-do-

28) Financial future allocation: - In process

29) Present condition of plant: - Healthy.

PART-VI

Compliance of the conditions of MoEF letter no.- J-11015 / 487/2007-1A-11(M), Dated 03/06/2006.

A. Specific Conditions

i) No mining operations shall be undertaken in 424.52 Ha forest land until forestry clearance obtained under the provisions of F.C. Act 1980.

Compliance Report :- Agreed.

ii) Prior approval of the State Government shall be taken for use of water from river Hasdeo to the tune of 885 m³/d for the mining operations.

Compliance Report :- Part of domestic requirement is being fulfilled by IWSS, Gevra Area and Gevra Area is regularly paying the water supply charge to office of the Sub Divisional Officer Hasdeo Barrage.

iii) Prior approval of the CGWA shall be obtained for using ground water (650m³/d) for the mining operations.

Compliance Report :- Approval from CGWA for 6404 m³/day withdrawal of ground water has already been obtained from Central ground water Authority, Raipur.

iv) Entire mining transportation from coal mine pit to railway siding being established within the project area shall be by closed conveyor only from there by rail/MGR to consumers. Both conveyors and railway siding shall be established within 18 months of grant of the environmental clearance. Mechanized silo loading System shall be deployed for loading of coal at railway siding.

Compliance Report :- For mining transportation from coal mine pit to railway siding and MGR a comprehensive work order has already been placed to M/S Samanta and Company vide Agreement no. SECL/BSP/CGMC/Agri/DPK/10/648 & 649 dated 19.05.010. Work is expected to complete in financial year 2012-13.

v) Top soil shall be stored in the earmarked 5 Ha area and used for green belt development and for plantation/reclamation.

Compliance Report :- Top soil is excavated and spread simultaneously on dump tops

vi) OB shall be stacked at the earmarked external OB dumpsite of 206 ha within ML area or the opencast operation of a maximum height of 90m consisting of 3 benches of 30m each the ultimate slope of the dump shall not exceed 28 degree. Monitoring and management of existing reclaimed dumpsite including slope stability shall continue until the vegetation becomes self sustaining compliance status shall be submitted to the ministry of Environment & Forest and its Regional office located at Bhopal on a yearly basis.

Compliance Report :- Mine is in development stage, OB is dumped in external and internal dump(Back filling). The details are as following:-

OB Dump No	Nature of Dump	Nature of Dump	Size (in hac)	Plantation Area in Ha	Plantation Position	Angle of Repose	Height
1&2	External	Active	75.00	41.84	Partially Planted	30-36 Degree	40 m To 63 m
3	External	Inactive	7.50	7.50	Planted	31 Degree	24 m
4	External	Inactive	5.00	5.00	Planted	33-36 Degree	15 m To 20 m
5	External	Inactive	8.00	8.00	Planted	32 Degree	24 m
6&7	External	Active	76.64	21.95	Partially Planted	33-35 Degree	36 m to 60 m
4 (Near Observation Tower)	Internal	Active	44.35	18.80	Partially Planted	33-36 Degree	15 m To 52 m (From decoaled floor)
Mine No. 2 (West)	Internal	Active	57.00	-----	-----	28-36 Degree	35 to 84 m (From decoaled floor)
Near Entry -1A	Internal	Active	23.95	15.74	Partially Planted	33-36 Degree	47 to 110 m

							(From decoaled floor)
Dipka old dump	Internal	Active	3.80	-	-	33-36 Degree	47 to 110 m (From decoaled floor)

The slope of the dumps is being maintained very approximate to 28° wherever it becomes steeper due to variation of rock conditions, the slope is maintained as per the stipulated slope by using dozer.

viii) Garland drains (size gradient and length) around the safety areas such as mine shaft and low lying areas and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites sump capacity shall also be provided adequate retention period to allow proper setting of silt material.

Compliance Report :- 3.2 KM Pacca catchment drain and 6.62 km Kachha drain has been constructed for channeling of run off water during rainy period as a Garland drain. Sump capacity and pumps for dewatering of quarry area are as per the Project Report provision which has been based on the 20 years average rain water.

ix) Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil OB and mineral dumps the water so collected shall be utilised for watering the mine area, roads, green, belt development, etc. The drains shall be regularly desilted and maintained properly.

Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper setting of silt material

Compliance Report :- 3.2 KM Pacca catchment drain and 6.62 km Kachha drain has been constructed for channeling of run off water during rainy period as a Garland drain. Sump capacity and pumps for dewatering of quarry area are as per the Project Report provision which has been based on the 20 years average rain water.

x) 3.2 Dimension of the retaining wall at the toe of the dumps and OB benches within the system check run-off and siltation shall be based on the rainfall data

Compliance Report :- Retaining wall at the toe of dead external Dump No. 3 and 5 has been constructed and fulfilling its purpose.

i) crushers at the CHP shall be operated with high efficiency bag filters water sprinkling system shall be provided to check fugitive emissions from crushing operation conveyor system which shall be closed, haulage roads, transfer points, etc.

Compliance Report :- Effective dust suppression systems have been provided like mist spray and fixed sprinklers in feeder breaker in CHP and is working satisfactorily.

xii) controlled blasting shall be practiced with use of delay detonators and only during daytime the mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders shall be implemented

Compliance Report :- Controlled blasting is done as per DGMS Stipulated rules and regulations.

xiv) An afforestation plan covering an area not less than 1001 ha shall be implemented which includes backfilled area and ext. OB dump along ML boundary green belt along road infrastructure safety zone, undisturbed, vacant land by planting native species in

consultation with the local DFO agriculture Department. The density of the trees shall be around 2500 plants per ha. An area of 723.544 ha of shall be restored for agricultural/grazing at the post mining stage.

Compliance Report :- Every year extensive plantation is being done both on plain and dump area by Chhattisgarh Van Vikas Nigam (a state government organisation) And till date about 1217500 nos of plant planted on approx 362.41 Ha area.

xv) Of the total 1002.53 ha of the quarry area, an area of 780ha of excavated area shall be reclaimed with plantation/afforestation by planting native plant species in consultation with the local DFO/ Agriculture Department. The density of the trees shall be around 2500 plants per ha. The balance 222.053 ha of decoaled the void left for the further expansion in the dip side shall converted into a water reservoir shall be gently sloped and the upper benches of the reservoir shall be stabilized with plantation and the periphery of the reservoir fenced

Compliance Report :- Every year plantation is done on the backfilled area as per area available. Till date about 87350 nos of plants has been planted on approximate 34.54 Ha backfilled area.

xvi) A Programme for conservation of the wildlife particularly the rare and endangered species schedule fauna and endangered flora and species of medicinal important found in the study area shall be formulated and implemented in consultation with the forest and wildlife Department in the state Government separate funds shall be earmarked for implementation of the various activities than there under and the status there of shall be earmarked for implementation of the various activities under and the status there of shall be regularly reported to this Ministry and the MOEF Regional Office Bhopal the project

authorities shall participate in a Regional Action plan of the state Government for conservation flora and fauna found within the study area

Compliance Report :- Every year plants of different species including fruit and flower bearing plants and medicinal plants are planted by Chhattisgarh Van Vikas Nigam . Expenditure incurred in the year 2009-10 is Rs.4292333.00 And for the year 2010-11 Rs 3244461.

- xxv) A detailed ground water monitoring action plan (along with budgetary provisions) for monitoring groundwater quality and level in consultation with the Central /State Ground Water Board be prepared and implemented. Regular monitoring of groundwater level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring of quality shall be done four times a year in pre- monsoon (may) monsoon (August) post - monsoon (November) and winter (January) seasons and for the quality in May data thus collected shall be submitted to the Ministry of Environment & forest and the central Pollution Control Board quarterly within one month of monitoring.

Compliance Report :- Piezometers have been installed at four locations. Each location having shallow & deep piezometers. The readings of piezometers recorded for January-10 to June -10 are as following-

Month	Type of Piezometer	Locations	Locations	Locations	Locations
		Pragati Nagar Snch Milan Club	Haradi Bazar College	Gandhi Nagar Trainin g Center	C.G.M.Of fice
July	Shallow	1.70	Dry	1.60	4.10
	Deep	13.20	-	4.30	6.80
August	Shallow	1.50	Dry	1.30	5.10
	Deep	10.80	-	3.80	6.50
Sep.	Shallow	2.0	Dry	1.10	4.7
	Deep	9.80	-	2.10	7.10
Oct.	Shallow	3.20	Dry	1.80	5.40
	Deep	10.60	-	3.0	7.60
Nov.	Shallow	2.40	Dry	3.40	5.0
	Deep	11.10	-	3.6	7.4
Dec.	Shallow	2.20	Dry	3.0	4.8
	Deep	11.00	-	3.4	7.2
Jan. 11	Shallow	2.8	Dry	2.8	6.10
	Deep	14.6	-	3.6	6.90
Feb.11	Shallow	3.0	Dry	3.8	6.8