

REMEDICATION PLAN AND NATURAL & COMMUNITY RESOURCE AUGMENTATION PLAN (NCRAP) of SHAH SPONGE AND POWER LIMITED

INTRODUCTION

Shah Sponge & Power Ltd has its existing steel plant at Juri village, P.O.- Hata, East Singhbhum district in the state of Jharkhand. The existing facilities of the plant include Sponge Iron Plant, Pig Iron Plant and Captive Power Plant. Now the company proposes to expand its production by installation of Steel Melting Shop along with CCM, Rolling Mill and Fly ash brick plant. The project attracts the provisions of MoEFCC's S.O. 804 (E) dated 14/03/2017 due to the installation of Induction furnaces with CCM and Fly ash brick plant without obtaining environmental clearance. The project was issued ToR by MoEFCC vide F. No 23-144/2018-IA.III (V) dated 19/11/2018 to prepare Environmental Impact Assessment Report and Environmental Management Plan (Including Assessment of ecological damage and the remediation plan and the natural and community resource augmentation plan as an independent chapter in the EIA).

The primary concern of remediation plan is to evaluate the extent to environmental damage done due to construction of fly ash brick plant and Steel Melting Shop in absence or inadequacy of environmental protection measures. The traditional knowledge of the project is being utilized to derive the extent of damage and plan remediation with time bound action plan and budgetary provision.

PROJECT DEVELOPMENT

As elaborated in the above section, SSPL has installed Steel Melting Shop along with CCM in order to utilize the existing products and manufacture finished products having good economic viability in market. Fly ash brick plant was also installed in order to utilize the fly ash and thereby converting the waste to useful product. These units were installed in order to improve the aspects of the plant for sustainable and safe operations. However, the activities pertaining to the same were carried out without obtaining prior Environmental Clearance, and hence attracts violation provisions of the EIA notification, 2006 and subsequent amendments thereto.

NEED OF THE STUDY

The specific Terms of Reference granted to the project, under the provisions of MoEFCC's notification vide S.O. 804 (E) dated 14.03.2017 regarding grant of Environment Clearance to projects in violation of the EIA Notification, 2006 and its subsequent amendments, recommended the following:

- Assessment of damage to be carried out with respect to air, water, land, ecology and other environmental attributes.
- A remediation plan and natural and community resource augmentation plan to be prepared corresponding to the ecological damage assessed and economic benefits derived due to violation.

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OBJECTIVE OF THE STUDY

The objective of Damage Assessment Report (DAR) and Natural & Community Resource Augmentation Plan (NCRAP) includes the study of affects which are caused by change in the environment due to an activity and to identify the corrective measures to compensate or replace those resources such as “Land, Biota, Air, Water and others in order to mitigate the adverse effects on such resources”. The damage is assessed based on negative changes brought onto the various environmental aspects due to the project activity.

However, any industrial activity does pose potential for environmental consequences, which can either be avoided or minimized in terms of size, scope and duration. It is based on the recognition that minimizing the environmental impact of an activity primarily entails managing the environmental consequence(s) of those activities by either avoiding them in the first place or by mitigating them to as low as reasonably practical.

To ameliorate the adverse impacts of the project, expected due to the construction of the new units as well as those that are anticipated due to its operation with scientific development of the local environment, a Remediation plan is necessary. Also, a Natural & Community resource augmentation plan (NCRAP) is required to pay for the ecological damage as well as economic benefits derived at the cost of the environment and the local community. Both of these, with respect to violation units have been elaborated in the subsequent sections.

As per the ToR, the following studies were carried out with respect to the violation activity carried out within the factory existing premises of M/s Shah Sponge & power Ltd. is an existing plant at village Bhumri (Juri), District – East Singhbhum, Jharkhand .

- Ecological/environmental damage assessment
- Remediation plan
- The natural and community resource augmentation plan

VIOLATION DETAILS

The project was visited by Officer of MoEF&CC Regional Office, Ranchi on dated 29.07.2017 and they observed that M/s SPPL has installed machines without prior environmental clearance from MoEF&CC and As per inspection report the project comes under violation due to installation of following machines without prior Environmental Clearance. The following Units were installed.

- Steel Melting Shop
- Continuous Casting
- Fly-ash Brick Plant

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Construction work of the violation units was carried out in the existing premises of M/s SPPL i.e. at Village-, Bhumri (Juri), District – East Singhbhum, Jharkhand.

The collection and analysis of data with respect to air, water, land, noise and other environmental attributes was carried out by NABL accredited laboratory and details are presented in **Chapter-3** of EIA report.

Assessment of environmental / ecological damage along with its remediation plan and NCRAP are discussed further.

NATURAL & COMMUNITY RESOURCES AUGMENTATION PLAN (NCRAP)

Introduction

A need assessment survey was carried out for the purpose to formulate the Natural and community resources augmentation plan. The need assessment survey covered the 10 Km radius study area of plant site. The augmentation plan will be multi fold in nature and will be in conjunction with the damage assessment as stated earlier.

Activities for the augmentation plan can be classified in major categories as under:

A. Natural Resource Augmentation Plan

B. Community Augmentation Plan

The detailed time line and budget for implementation of schemes under Natural & Community resource augmentation plan are provided in Table 1 and 2.

Table: 1 Natural Resource Augmentation Plan along with budget and its action plan

S.No.	Proposed Activities	First Year (Rs. Lakhs)	Second Year (Rs. Lakhs)	Third Year (Rs. Lakhs)	Total Cost (Rs. Lakhs)
1	Creation of drainage & Repair of culverts and embankments in villages	6	3	1	10
2	Road repair & maintenance	5	3	2	10
3	Creation of Cow shed in villages	3	2	1	6
4	Development of green belt along streams, ponds etc.	3	2	1	6
5	Training camps on promotion of apiculture; sericulture and fisheries	3	2	1	6
6	Construction check dam on natural water stream	5	2	1	8
7	Development of Nursery for raising samplings, training	5	2	1	8

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S.No.	Proposed Activities	First Year (Rs. Lakhs)	Second Year (Rs. Lakhs)	Third Year (Rs. Lakhs)	Total Cost (Rs. Lakhs)
	and distribution to nearby villagers				
Total		30	16	8	54

Table:2 Community Resource Augmentation Plan along with budget and its action plan

S.No.	Proposed Activities	First Year (Rs. Lakhs)	Second Year (Rs. Lakhs)	Third Year (Rs. Lakhs)	Total Cost (Rs. Lakhs)
1	Infrastructure development for training of youth	5	2	1	8
2	Entrepreneurial development program aiming make in India	3	2	1	6
3	Internship to local graduate/undergraduate students	2	2	1	5
4	Awareness program for reduction of plastic waste reduction / solid waste management	3	2	1	6
5	Provision of solar panel lighting in common areas of villages	5	2	1	8
6	Supply of Agriculture water pump sets for locals	2	2	1	5
Total		20	12	6	38

CONCLUSION

Almost no/ negligible ecological damage due to fact that only piling work, erection of steel structure, and platform on steel structure as well as roof on the steel structure was carried out. Through the summary of budgetary allocation with respect to violation activity and remediation measures suggested/recommended, natural and community resource augmentation plan, the impact on the environment and its relative damages are very low. It may be noted that since no production has been carried out even though till date, no economic benefit has occurred to the project proponent.

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**Table 3 Summary of Remediation Plan, Natural Resource Augmentation Plan and
Community Resource Augmentation Plan.**

S. No.	Aspects	Budget (Lakhs)
1	Estimated Cost on remediation plan based on the damage assessment due to violation	52,70,000
2	Natural resource augmentation plan for 3 years	54,00,000
3	Community resource augmentation plan for 3 years	38,00,000
Total		1,44,70,000

The amount of remediation plan and natural and community resource augmentation plan is estimated to be Rs. 1.447 /- Crores