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18/4/2011

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No-J-27018/8/-2010-NRCD-II
Government of India
Ministry of Environment & Forests
NATIONAL RIVER CONSERVATION DIRECTORATE

"Paryavaran Bhawan", C.G.O. Complex,
Lodhi Road, New Delhi-110003

Dated:- 6th April, 2011

To

✓
The Chairman,
Central Pollution Control Board,
"Parivesh Bhawan, East Arjan Nagar,
Delhi-110032.

Sub:- Administrative Approval and Expenditure Sanction for the demonstration/pilot project of "In-situ treatment of sewage through bio-remediation at Budha Nala, Ludhiana, Punjab" under National River Conservation Plan (NRCP) at an estimated cost of Rs.15.28 crore (Rupees Fifteen crore and Twenty eight lakh only) (including one year O&M cost).

Sir,

I am directed to convey the sanction of the President to the grant of Administrative Approval and Expenditure Sanction for the demonstration/pilot project of "In-situ treatment of sewage through bio-remediation at Budha Nala, Ludhiana, Punjab" under National River Conservation Plan (NRCP) at an estimated cost of **Rs.15.28 crore (Rupees Fifteen crore and Twenty eight lakh only)** (including one year O&M cost).

2. The break-up of the sanctioned cost is at **ANNEXURE-1**. Total duration of the project will be 12 months.

3. Administrative Approval and Expenditure Sanction for the scheme is granted subject to the following conditions:-

CPCB will be the nodal agency for implementation of the project to whom funds for the project will be released by the Ministry.

ii. Funds will be released in suitable installments to CPCB and release of funds will be considered only after receipt of Utilization Certificate in form GFR 19A duly signed by all concerned and the Expenditure Statement

[Signature]

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showing clearly the progress of implementation of works in terms of percentages.

- iii. The implementation of the scheme may be closely monitored to ensure completion of the scheme within the sanctioned cost and time. Any increase in cost over and above the sanctioned cost due to whatsoever reasons shall be borne by the firm (M/s Green Infrastructure, Pune) and G&I's liability shall not exceed the sanctioned amount of Rs.15.28 crore.
- iv. CPCB shall report back the expenditure incurred on the activities approved in the Sanction Order at prescribed intervals.
- v. The cost benefit study of the project shall be clearly brought out along with the learnings by CPCB.
- vi. CPCB shall ensure the involvement of concerned State Governments dovetailing of other pollution abatement schemes being implemented/under formulation and also their commitment in respect of O&M costs.
- vii. MoA containing all the salient conditions evolved during appraisal of the projects in various meetings shall be executed. A Third Party Inspection agency shall also be explored for the project.
- viii. The microbial consortia proposed to be used should not be genetically modified. Necessary certification in this regard need to be furnished. Genetically Modified Organisms (GMOs) and non-pathogen and indigenous nature of microbial consortia need to be verified by CPCB.
- ix. The firm concerned with the project (M/s Green Infrastructure, Pune), shall give performance guarantee for their results/outputs, especially in terms of BOD, SS and coliforms.
- x. For in-situ treatment, there should not be any major alteration/modification of the drains. However, the firm (M/s Green Infrastructure, Pune) should tie with the local departments/ authorities regarding electrical fittings, place for equipments and other infrastructure facilities proposed, if any.
- xi. CPCB will monitor the performance of the project on regular basis.
- xii. The firm (M/s Green Infrastructure, Pune) shall submit fortnightly progress/performance monitoring reports to CPCB.

Appr:

- xiii. MoEF is not liable for any unseen expenditure or loss incurred during execution of the demonstration projects due to natural calamities or any other local circumstances.
- xiv. CPCB shall obtain from the firm (M/s Green Infrastructure, Pune) a Bank Guarantee equivalent to the amount to be released against each installment, before the said installment is released. The next installment will be released only on receipt of the progress report (physical and financial) of the prior installment & requisite performance monitoring reports.
- xv. An assessment of the progress/performance of each project shall be conducted by CPCB after 3 months of commencement of the studies (after installation of demonstration set-up is complete). Subsequent release of installments will be linked to the satisfactory performance of the project.
- xvi. Any re-appropriation/re-allocation of fund within the sanctioned cost shall be allowed for demonstration of the project only with prior permission of CPCB/MoEF. However, the overall sanctioned cost of the project shall remain unchanged for each location.
- xvii. Any dispute arising during execution of the project shall be settled through negotiations with CPCB and the decision of the Chairman, CPCB shall be the final in such cases.
- xviii. The projects shall be executed in accordance with the Water (Prevention and Control of Pollution) Act, 1974 and the Environment (Protection) Act, 1986.
- xix. The samples shall be analyzed in the laboratories recognized under EPA and the data generated during the project shall not be published anywhere without prior permission of CPCB.
- xx. As suggested by the Research Advisory Committee (RAC) of NGRBA the research aspects of the project also need to be fully taken care of by CPCB. Standardization of the design parameters for the technology and preparation of protocols for achieving reliable & replicable processes would be part of the research aspects, which may be done separately by CPCB.



xxi. CPCB may also consider introducing training also for achieving continuity & replication of the outcome for river conservation schemes. CPCB may also explore developing a better indicator of bacterial quality of waste water.

xxii. A Committee constituted by the Ministry with experts from different fields of microbiology, waste water engineering, bio-technology together with MoEF representatives will monitor and evaluate the project.

xxiii. An integrated proposal shall be formulated by CPCB on research aspects of bio-remediation addressing and incorporating different issues related to optimization of the process/technology, design parameters, reliability and replicability for consideration by RAC of NGRBA.

xxiv. The issue of Intellectual Property Rights (IPR), wherever applicable, may be kept in view in all the demonstration/pilot scale projects being implemented by the CPCB.

4. Approval is also subject to the compliance conditions issued vide Addl. Secretary & Project Director's D.No.A-28011/1/98-NRCD-II dated 6-7-1998 (copy enclosed)

5. Observations/ conditions contained in the Minutes of meetings of RAC shall be adhered to by CPCB while implementing the project. CPCB's letter for choice of the firm selected for the project and the special interest purported to be served is enclosed at **Annexure-2**.

6. The expenditure of the scheme is debitable to Major Head "3435"-04.101.06.02.35-Grants-in-aid-Other Schemes-(Capital Assets)-National River Conservation Plan (NRCP) under Demand No.30-Ministry of Environment & Forests for the year 2011-2012 (Plan).

7. This issues under the powers delegated to the Ministry of Environment & Forests and with the approval of Secretary, Ministry of Environment & Forests as well as with the concurrence of IFD vide their Dy. No.752/AS(FA)/F/10 dated 23-3-2011.

Yours faithfully


(C. UPPILI)

Under Secretary to the Government of India

Copy forwarded for information and necessary action to:-

- 1) The Pay and Accounts Officer, Ministry of Environment and Forests, Paryavaran Bhawan, New Delhi.
- 2) DDO (NRCD).
- 3) Joint Director of Audit-II, Commercial, Scientific and Misc. Works, AGCR Building, I.P. Estates, New Delhi.
- 4) Shri A.B. Akolkar, Scientist 'F' & I/c PCP, Central Pollution Control Board, "Parivesh Bhawan", East Arjun Nagar, Shahdara Delhi-110032.
- 5) Principal Secretary, Department of Local Government, Govt. of Punjab, Punjab Civil Secretariat, Chandigarh.
- 6) Principal Secretary, Department of Environment, Govt. of Punjab, Punjab Civil Secretariat, Chandigarh.
- 7) The Deputy Commissioner, Ludhiana.
- 8) The Managing Director, Punjab Water Supply & Sewerage Board, Plot No.1-B, Sector 27A, Chandigarh, Punjab.
- 9) Dir.(Fin)/Dir(BS)/Dir(KCR)/DD(SS)/US (F)/US (P).
- 10) Sanction Folder/Guard File/Computer Cell.



(C.UPPILI)

Under Secretary to the Govt. India

Break-up the cost of Rs.15.28 crore for the project of "in Situ" Sewerage Treatment at Budha Nalal, Ludhiana, Punjab under National River Conservation Plan (NRCP).

Sl.No.	Item/particulars	Cost (in Rs.)
1.	Removal of debris, solid waste and clearing of weeds in Indianala .	20,26,563.08
2.	MS screen 30 m long with walkable platform and keying in the banks using natural fixation of stones/ravels, gabion and soil.	18,69,230.12
3.	Green Bridges:	1,05,70,406.40
	(a) Stream Corridor – Plantation of saplings of herbs, shrubs and trees in the form of 3-tier green belt along the banks of the stream.	
	(b) Installation of 5 Green Bridges Station.	8,54,33,801.48
	© Green Pitching	24,36,077.80
4.	Plantation of Trees, shrubs and marshland grasses near Green Bridge.	4,02,11,620.00
5.	Site Office – 900 sq. ft including storage area.	15,00,000.00
6.	IEC Component	15,00,000.00
7.	Contingencies (5%)	72,77,384.94
	TOTAL:-	15,28,25,083.82

Total Cost: Rs.15,28,25,083.82/-
Say Rs.15.28 crore

JD (1)



M. L. Sinha
Tel: 4362281

एन.डी.ए. प्रकल्प
अतिरिक्त सचिव
पर्यावरण एवं वन विभाग
(राज्य सरकार)
Additional Secretary, A.P.
National River Conservation
Directorate
(Govt. of India)

DD No. A-28011/1/98-NRCD-II

July 6, 1998

Dear Sir,

The sustainability of river Action Plans largely depends upon the capacity of the Municipalities/Corporations to operate and maintain the assets created under the Plans. Operation & maintenance of the assets created under the Ganga Action Plan has suffered significantly due to the non-availability of adequate funds with the local bodies entrusted with the task.

21. It has now been decided that unless the viability of the concerned Municipality/Corporation is established, detailed project reports of various schemes under the Action Plans for such a town will not be approved.

S/Adm
10/7/98

In order to expedite sanction of these programmes, I would request you to send the following information latest by 20.7.98 in respect of each Municipality/Corporation in the river Action Plan towns of your State:

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S/Adm (S)
10/7/98

- i) Immediate availability of land for Action Plan schemes.
- ii) a) Commitment for O&M of Action Plan assets.
b) Details of property tax recovered in each town
c) Income and expenditure statements of the last 5 years town wise and
d) Plans to reduce the deficit.
- iii) Status of constitution of Citizen's Monitoring Committee in each town.
- iv) Arrangements of maintenance of existing branch/lateral sewerage system as also that of

v) Status of maintenance of toilet complexes constructed under river Action Plans as well as other programmes of the Central State Governments.

With regards,

Yours sincerely,

(Malti Sinha)

To:

1. Shri K.S. Srigathy, Secretary (Environment), Govt. of Tamil Nadu, Chennai.
2. Shri S.P. Patnaik, Principal Secretary, Forests, Ecology & Environment, Govt. of Karnataka, Bangalore.
3. Shri K.L. Mina, Secretary, Deptt. of Environment, Govt. of Rajasthan, Jaipur.
4. Shri P.N. Narayanan, Secretary, Deptt. of Urban Development, Govt. of Bihar, Patna.
5. Shri Satyanand Mishra, Secretary, Deptt. of Housing & Environment, Govt. of M.P., Bhopal.
6. Shri P. Basu, Addl. Chief Secretary, Urban Development & Urban Housing Deptt., Gujrat.
7. Shri N.K. Hariharan, Principal Secretary, Municipal Adm. & Urban Development, Deptt., Govt. of A.P., Hyderabad.
8. Shri N.K. Arora, Principal Secretary, Deptt. of Local Govt., Govt. of Punjab, Chandigarh.
9. Shri Satish Tripathi, Principal Secretary, Environment Deptt, Govt. of Maharashtra, Mumbai.
10. Shri Srinivas Rath, Principal Secretary, Deptt. of Environment & Forests, Govt. of Orissa, Bhubneshwar.
11. Shri J.S. Mishra, Secretary, Urban Development, Govt. of U.P., Lucknow.
12. Shri N.L. Basak, Principal Secretary, Govt. of West Bengal, Calcutta.
13. Ms. Suman Swaroop, Principal Secretary, Govt. of NCT of Delhi, New Delhi.
14. Shri Virendra Nath, Financial Commissioner & Secretary, FWD Public Health Branch, Govt. of Haryana, Chandigarh.



CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment & Forests)
 'Parivesh Bhawan' C.B.D. Cum-Office Complex,
 East Arjun Nagar, Shahdara, Delhi-110032
 Tel. 22307078, 43102030, Telefax- 22307863
 Website: www.cpcb.nic.in

F. No. B-11012/1/PCP/2010-11

Date 21.03.2011

To,

The Deputy Director
 (Shri S.K.Singh)
 Ministry of Environment & Forests
 Paryavaran Bhawan, C. G. O Complex
 Lodi Road, Delhi - 110 003

Sub : In-situ Sewage Treatment-Proposals submitted by CPCB-reg.

Ref : No. J-14011/5/2010-NRCD-II, dt. 18.03.2011

Sir,

With reference to the above mentioned subject and pursuing to the observations made by I.F. Division of Ministry of Environment & Forests, the following clarifications are submitted;

(i) Adequate justification for asking the Firms (demonstrating its technology to undertake the project on single source basis).

The Central Pollution Control Board (CPCB) sought expression of interest inviting proposals from the Firms to present their technologies on In-situ bio-remediation (IST) on 01.04.2010 (vide no. B-19011/1/PCP/2009) to be applied for treating sewage flowing in drains. Through search process, the Firms already having experience were asked to respond and also open web-advertisement on 01.04.2010 was placed. CPCB scanned each technology presented by the individual Firms (Seven) and the Expert Committee on reviewing each technology, recommended that demonstration of each technology should be taken up by CPCB at-once.

The technology proposed by each Firm for demonstration on river Ganga is unique. Each technology and techniques adopted employing microbial consortia belong to each individual Firm. The Identification of microbes their permutation and combination differs in each technology and creating conducive conditions and microcosm in the sewage drain also differ variedly which makes each technology unique.

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Each Firm has given a proprietary undertaking to the effect of their technology.

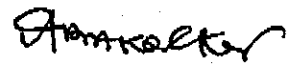
Since, each technology is innovative and there is no commercialization of these technologies by different Firms and hence, a demonstrative study has been proposed by allotting one drain to each one. CPCB will study/ monitor each technology and a comprehensive R & D study will be taken up. These in-situ demonstrative projects and the R & D study through CPCB would provide the basis for guidelines and the protocols for execution of in-situ sewage treatment at the national level.

(ii) Whether the Firm has the proprietary technology which is not available elsewhere.

The each participating Firm is using a blend of microbial consortia known exclusively to them and the techniques adopted for bringing interface between microbes and the sewage has an individual's proprietary technique and technology. A statement given by each Firm towards proprietary of technology is attached (Annexure-I to IV).

This issues with approval of Chairman, CPCB.

Your Faithfully



A. B. Akolkar 21.3.11
Scientist 'F' & I/c PCP
adaba.cpcb@nic.in

8-2011

To

Dated 19-03-2011

Shri A.B Akolkar.
Additional Director.
Central Pollution Control Board
Parivesh Bhavan,
East Arjun nagar
Shadara,
Delhi-110032,

Sub: In -Situ Sewage Treatment in Ganga Basin.

Dear Sir,

With reference to the subject mentioned above and our subsequent projects proposal we hereby provide the following information :-

US Environ Is the Sole Provider of EBB Technology (Eco-Bio Block) in India.

EBB Technology is Patented. (Patent Number:- US 6,989,266 B2/Jan. 24, 2006.)

EBB Technology will be used in Bakarganj Nala in Patna.

Thanking you
Yours faithfully



(Sunil Dalal)

For US Environ
Mob: 09311428159



Amrit Clean Water Technologies Private Limited

Dated: 21/03/2011

Central Pollution Control Board
Parivesh Bhavan, East Arjun Nagar
Shahdara, New Delhi - 110032

Kind Attn: Dr. A. B. Akolkar, Additional Director

Sub: Clarification with respect to DPR for In-situ sewage treatment at Mori Gate Nala, Allahabad.

Dear Sir,

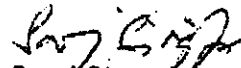
This has reference to your query regarding the products & technology that we have offered in the DPR for In-situ treatment of sewage at Mori Gate Nala, Allahabad.

We clarify as under:

- The microbes contained in the product are not genetically modified and are 100% naturally occurring. They have been selected from the nature, isolated and concentrated for their special ability to degrade a wide range of polluting compounds. The unique technology used by us in development of the product allows co-existence of different strains of microbes blended together without outcompeting each other, thereby withholding the effects.
- The consortium of microbes contained in the products is concentrated and blended with a proprietary/patented technology of Amrit Clean Water Technologies Pvt. Ltd.
- The products & technology and their corresponding application/dosage protocol and conditions furnished for In-situ treatment of sewage is a unique technology developed and implemented exclusively by Amrit Clean Water Technologies Pvt. Ltd.

Thanks and regards,

For Amrit Clean Water Technologies Pvt. Ltd.


Saroj Singh
Director

ANNEX-III



16 March 2011

Our reference: CLOVER/CPCB/2010-11/ 3196

**Prof. S.P. Gautam,
Chairman,
Central Pollution Control Board,
'Parivesh Bhawan',
East Arjun Nagar,
Delhi - 110 032**

USE OF PROPRIETARY TECHNOLOGY

Dear Sir,


This has reference to our proposal MoEF/2011/106/2, which was handed over to your colleagues during the meeting at MoEF on 28th February 2011.

We would like to state here that:

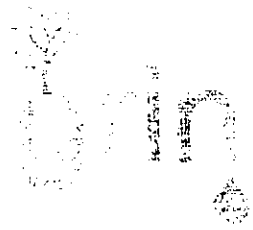
1. Bio-mimicry is a very new Science. The world is recognizing the importance of taking design and process solutions from nature to solve problems being confronted by mankind.
2. We are the only organization in the World, who has thought of using Bio-mimicry to offer a solution to carry out in-situ treatment of storm water drains. There is no other organization globally, who have thought of mimicking the 'self-cleansing process' of rivers to offer this solution.
3. Many man-hours have been invested in coming up with this unique and innovative solution. Hence, this is our sole and proprietary technology.

Thanking you,

Yours faithfully,
For CLOVER ORGANIC PVT. LTD.


(SANJAY AGGARWAL)
CEO

Clover Organic Pvt. Ltd.



Green Infrastructure
A Cleaner today, for a better tomorrow

'Ekantika', 372 /A2, Lane - B,
Koregaon Park, Pune - 411007

Email: info@gin.co.in
Web: www.gin.co.in

March 19, 2011

✓ Hon. Chairman,
Central Pollution Control Board,
Parivesh Bhawan, C.B.D, Cum-office Complex,
East Arjun Nagar, Shandara,
Delhi 110032

**Sub. : In-situ treatment of Buddha NEER Project, Ludhiana using Green Bridge Technology --
Horizontal Eco-filtration**

Ref. : Telephonic talk on 18th March 2011

Dear Sir,

With reference telephonic discussion regarding the uniqueness of the treatment technology,
hereby we confirm that -

Technology being used by us for Buddha NEER Project, Ludhiana is registered for patent by
innovator Sandeep Joshi in 2005 under the title "Unit process for Horizontal Filtration System to
Treat Water Flowing In Any Size of Any Type of Stream". (CBR no. 22005 dated April 03, 2006).

This is the unique technology and ecofert and bacterial multispecies mixtures being used for
Green Bridge technology - horizontal filtration system is proprietary of SERI of which owner is
Sandeep Joshi, a noted Environment Technologist, working on ecosystem approach of pollution
treatment from 24 years.

Thank you,

Regards.

For Green Infrastructure

Probir Sinha

Mr. Probir Sinha

C.C. Dr. A. B. Akolkar, Scientist F & I/c PCP, Central Pollution Control Board