

# PAAVAI ENGINEERING COLLEGE

(Approved by AICTE and Affiliated to Anna University) (Accredited by National Board of Accreditation, New Delhi & NAAC (UGC) with 'A' Grade)

Paavai Nagar, NH - 7, PACHAL, NAMAKKAL - 637 018.Tamil Nadu © 04286-243038, 58,88 & 98 Fax: 04286-243068 Email: pecprincipal@paavai.edu.in website: http://pec.paavai.edu.in

#### Waste Water Recycling:

A Waste Water Treatment plant is located at the back side of men's hostel of Paavai Engineering College. It is to treat a total volume of waste water generated 4,50,000 lit/day. Treated water is used for gardening purpose for our Institutions & some agricultural lands of our neighbouring areas. Sludge produced from this treatment plant is used as manure.



Waste water recycling plant





Waste water recycling plant

PRINCIPAL PAAVAI ENGINEERING COLLEGE NH-7, PACHAL POSt, NAMAKKAL Disi



# PAAVAI ENGINEERING COLLEGE

(Approved by AICTE and Affiliated to Anna University) (Accredited by National Board of Accreditation, New Delhi & NAAC (UGC) with 'A' Grade)

Paavai Nagar, NH - 7, PACHAL, NAMAKKAL - 637 018. Tamil Nadu

• 04286-243038, 58,88 & 98 Fax: 04286-243068 Email: pecprincipal@paavai.edu.in website: http://pec.paavai.edu.in

The following are the components of Waste Water Recycling plant:

- 1. Bar screen chamber
- 2. Grit chamber
- 3. Collection tank
- 4. Aeration tank
- 5. Treated sewage collection tank
- 6. Roots blowers & Diffusers
- 7. Raw sewage transfer pump
- 8. Bio-mass recirculation pump.
- 9. Sludge drying pump
- 10. Pressure sand filter & Activated Carbon Filter
- 11. Filter feed pump

Bar Screen chamber =>It is used for the Removal of floating materials. The size of the Screen Chamber is length = 2m, width = 1m and Depth = 1.5m.

Grit Chamber => It is used for the removal of Grid particles or Inorganic particles such as Sand Gravel, Slit and glass materials .The size of Grid Chamber is 2.0m length, 2.0m width, 2.0m depth.

Equalization tank => It is used for Neutralizing the characteristics of waste water. The size of Equalization tank is 15m length, 3.5m width, 3m liquid depth.

Activate Sludge Process => It can be used for the Removal of BOD from waste water. Hydraulic detention time is 20 hrs. Size of the tank is 15m length, 15m width and 3m liquid depth.

Sludge drying beds is used for dewatering of sludge with the help of sunlight. Size of the sludge drying beds is  $3m \times 2m \times 1.5m$ .

### **Benefits of Water Recycling:**

- 1. It mainly helps in reducing water scarcity around the campus.
- 2. It can be used for creating or enhancing wetlands.
- 3. During this process, electricity and soil amendments are generated.
- 4. The recycled water can be mainly applied to agricultural and domestic purposes etc.
- 5. It reduces waste water discharges by reducing and preventing pollution of water.



PRINCIPAL PAAVAI ENGINEERING COLLEGE NH-7, PACHAL Post, NAMAKKAL Disi

#### Waste Water Recycling Bills:

Sewage Treatment Plant Civil Work Order

1949, 25 2519 deiteren ... FROM STANES, OTH FRY 10 1844 1019885 Marujyu Technology Larujya Tech ogy India Pvt Ltd nin, Office : 306, Aaalefhanvman Koll Birc H. Paneer Negar, Mugazos : Vile;1 mnai - 600 037. . : (91) 44-42655133 d Offer Co A 12/18 Naga' Viest. VO.Pe - 500 040 d la FAX MEASORS -- 04886- 843068 28/05/10 Te The Chairmann Pavei Engineeing College, Namakkal. Dear Sir, Sub: Authorization of - Mr.K.Murugan Civil Engineer. We are here by authorizing Mr.K.Murugan Civil Engineer S/O.Mr.V.Karupaiah to look after all the STP Plant civil work at Pavai Engineering College. Thanking you, Yours faithfully, - - . For Marujyu Technology India Pvt Ltd, Por cm ۱ Authorized Signatory, PRINCIPAL PLAVALENGINEERING COLLEGE . W.7 PACHAL Post. M. 21 Dian 1

#### **Bill for Sewage Treatment Plant Construction**

Marujyu Technology

FROM ISTARIET OR

14

rak (D. 1944 Aroses)

Marujyo Technology India Pvt Ltd Regd, Otice : 169/20, Jawanar Colony, dm Avenue, Anna Nagar Wast, Chenna : 640 040 5-Mati, marm n@a/telmail.in Admin Office -No. 3/6, Asalalinsmmen Koll Street. V.G. Penner Nagar, Mugappair West, Chemnir - 600 037 TEL . 191) 44-42855133

16-Sep-10

To

.

.

.

The Chairman

**Pavai Engineering College** 

Namakkal

Dear Sirs,

Sub : Election of Sewage Treatment Plant

Kindly refer to your talk with Mr.Xavier.

We request you to kindly release the payment against the supply of Mech equipments as sought to enable us to depute our personal for the ejection and commissioning of the Plant.

We will complete the crection of the plant within 15days of the commencement.

	Kindly do the ne	edhu!		
	Thank you	CERTIFICE		
1		ES. 200009	To bal Value of Centractio.7, 40,01 (Escept vat 41) boo	08
	Yours truly	15: 20:07.10 000gccol	To tal Value 1 ( )	C.A
			1 Parts and a week a second and a	0 <del>0</del>
	For manipu Techn	ology India Pvt Lfd	Harann Barton Le	. 000
	( man lette	er nu	W. Value of Muchiney Site 3 10.3100 buryht & Site 3 (2) 1100 Less * a line 2101	),000
		) ngy	Lew bulle ( bulle 2,0	0,500
93 L	aduna	0/	10 1. d - 1 (h. 2,00)	,000/5 kh(-)
•	34	PHE CIPAL	Recommended for the 2,00. Recommended for two b	June 19
	90 24.7.	PHI: SHARE COLORING	Vi.e.	2011/10.
	·24-7.	ADDPT POLLUTION STANDARDS	SAVE ENVIRONMENT.	
	22	and	Jun .	
		C In 1		
		/		

#### **Bills for Sewage Treatment Plant Accessories**

~	Marujyu Te	chnology	Adi No. V.G Chi Tasi	arujyu Technolog win Office : .36, Asalahaumman . Paceer Negari, Mug onnar - 600 037 . (91) 44 - 42619133 ud : medmin@airialm.	ogeppeir West, 33	
	TAX	(INVOID		ce No: 154 Date: 1 Mar 2 Page:	2	
- N	avai Engineering Colle I-C. Rotary Neger, emiskai Rood, Sejeurem	90,	5T No; N NO ;	864704 dt 26 33791024365	d9/2005	
The Chairma	637 4 In	100				
Qty ]	Description		Unit	Price 11	Amount 7	
	Electrical Panel Contactor wh	Pretay	Set.	R4- 8.500.00		
	Air illower Oit sead		(18)	Ph. 1.850.00	Rs. 3,700.00	
122	Johnson pemp coupling set		No	Pla. 000.00	Ra. 3.600.00	
24.262 and 0.000 cm	Johnson Pump Bap valve Pressure geoge range 0 - 7 be	0.0000000	No	Rs. 550.00	Prs. 1,100.00	
•		and open	F40 -	Ru. 649.00	Пв. 1,370.00 <sub>э</sub> с.	
F 148%		n	<u> </u>			
Marupu Techn	atom trate and the second	T.	- AL	Net Total Yax Total Yotal Due	Ra. 15,270.00 Ra. 2,214.15 Ra. 17,484.15	
R. R. Comment		2				

Bill for Amount spend to Civil Labour (Sewage Treatment Plant)

		1	TP	avai Engineeri	val Engineering College Statement					
1817181	22ic	Amt Received	Details	0 y	labour through Marupu	For Mech	Your Work Order No			
10000	20-May-10	200000	Clis/652/CLG	Mr.Marizaam	100000	200000	Civil work order for #59,30,000/- (Work Order dt. 17.5.10)			
1	29-Mey-10	20000	Cash	Mr.Murugan	20000		and the second ly ark areas			
1	7-Jun-10	75000	Cash	Mr.Murupen	75000		Magone Cont to Mr. Muman			
1	12-Jun-10	25000	Cash	Mr. Murugan	25000		Madena Sont to Mr. Ma			
Į	16-Jun-10	25000	Cash	Mr.Murugan	25000		B 9110 10 - 3480-00			
l	19-Jun-10	25000	Cash	Mr.Murugan	25000		100 100			
l	26-Jun-10	25000	Cash	Mr. Murugan	75000	7				
L	2-Jul-20	25000	Cash	Mr. Murusan	25000	7				
L	10-Jul-10	50000	Cash	MV. Murupan	Socoo	-	3. 11-10 = 2845-00			
L	27-Jul-10	25000	Cash	Mr. Murusan	25000	/				
L	31-84-10	40000	Cash	INT. MUCUDAT	40000					
L	7-Aug-10	25000		Mr. Munugan	25000		and the second s			
L	16-Aug-10	50000	Cash	Mr.Murugan	50000		R-12-10 = 20.000 - 000			
L	21-Aug-10,	50000	Cash	Mr.Murugan	\$0000	1				
	28-Aug-10	25000	Cash	Mr.Murugan	25000	/	39 305"- 150			
	4-Sep-10	50000	Cash	Mr.Murugan	50000	1				
	17-Sep-10	40000	Cash	Mr.Nandha Kumar	40000	7				
	23-Oct-10	25000	Cash V	Mr.Shankar	25000	/				
	4-Oct-10	200000	CLG/CR/Namakkal	Mr.Nandha Kumar	B	200000				
E	3-Nov-10	200000	CLG/CR/Namakkal	Mr.Nandha Kumar		200000	· · · · · · · · · · · · · · · · · · ·			
	otal Received	1250000		39305	m + 750000	500000	+ 1, pn,000 0n 17-11-10			
		ot Order Value			Civil Total	Mech Total	6,00,000 - 10 -			
		1669600			900000	769600	R.			
	mount Due	419600		Civil Due	150000		y · ·			
		10		Mechanical Due		(269800)	Down and the second state of the			
			14		1.10,645.0	1,69,6	P. Ran R. M. Marken ()			



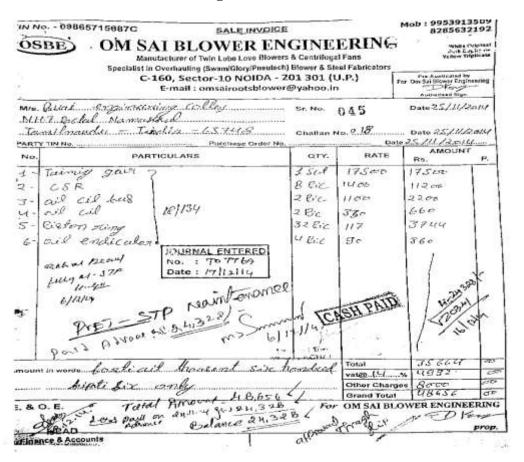
### OM SAI BLOWER ENGINEERING

C-160, Sector-10 NOIDA - 201 301 (U.P.)

Mob : 9953913509, 8285632192, E-mall : omsalrootsblower@yahoo.in

	SERVI	CE INVOICE						
OM SAI BLOWER ENGIN	EERING	Supplier's Ref	Daled	-				
>160, Sector-10, Noida	OSBE-20131119 19 Nov-2013							
Disit. GautamBudh Nagar	Moda/Terms of Pa	yment						
Fin No.09865715687C, Pan No.	CMZPS0844M	100% Advance	-					
Jttar Pradesh - 201301		Buyer's Ref						
Contact :09953913509,8285632	192	K/a: DR.E.PAPP	PAN JI					
E-Mail : omsalrootsblower@y	ahoo.in	Despatch Ibrough AT YOUR	b Destination					
		WORK	- FRANDI CI	.99. 00				
Invoice to		Terms of Deilver	y : By Courle	rs				
Paavai Institutions Nh-7, Pachal, Namakkal-637018 Tamil Nadu, India								
K/a: K/a: DR.E.PAPPAN JI Mob. No; 09965543688								
SI De No.	escription of Goods		Quantity	Rate	Amount			
7 1 SERVICE CHARGES F	OR AIR BLOWER	<del></del>	01 NO	6000.00	6000.00			
2 CONVEYANCE CHAR			01 NO.	2000.00	2000.00			
15/14								
NOTE: THIS IS A CO		Total Am	₹8000.00					
TERMS & CONDITIONS		E						
Payment : 100% Advance		DAIL	6ALV					
Our Bank Details; Bank of India Branch: E-52b.Sector-9 Nolda IFSC CODE; BKID 0007114 Ac No:-711420110000844 Validity 15 Days Company's VAT TIN We Assure you of our Best Sec	09865715607C vices at all times.	PAID For Om Sal Blower Engleen SHOT OF BLOWERS & Centrifucal Fond			_			
SUBJECT TO NOIDA JURISDICTION								
Manutacturer of Twin Lobe Love Blowers & Centrifugal Fans								
Specialist in Overhauling (Swam/Glory/Pneutech) Blower & Fabricat								
Fravelling Zop. Pocchurd Dr	for Advance	W. 2000/=						
(1) ED # 13/11	12013 1	PAAVAI ENGIN HUT, PACHAE P	ICIPAL EERING ( ost: NAMI	OLLEGE	ı .			

	Mob : 9953913509, 820	the second se						
OM SAL BI	OWER ENGINEERING	TATION Supplier's Ref.	Dated					
C-160, Secto	r-10. Noida	OSBE-20141121	1					
Distt: Gautam	nBudh Nagar	Mode/Terms of Paymer	nt	120.200				
Tin No.09865 Uttar Prades!	5715687C, Pan No.CMZPS0844M	100% Advance Alongwith Purchase Order						
	53913509,8285832192	Buyer's Ref.		9				
	airootsbiover@yahoo.in	Despatch through Destination						
		AT YOUR WORK	Chennal					
Invoice to	SINEER COLLEGE	Terms of Delivery : B	y Counters					
CHENNAI K/A; MR. SR			2.5		2 85			
10.	Description of G	icods	Quantity	Rate	Amount			
1	Timing Gear		01 Sets	17500.00	17500.00			
2	Csr Mu		08 Nos	1400.00	11200.00			
. 3	Oil Seal Bush	0	02 No.	1100.00	2200.00			
- 4	Oil Seal		0% No.	330.00	660.00			
5	Piston Ring A. \III	× ~ ~	32 Nos	117.00	3744.00			
6	Oil Indicator		04 Nos	360.00	360.00			
				. 90.00				
	× ~		1 1	1				
	1	1						
·	1	ov.						
		PEINCIPAL	Taxable Amount		35664.00			
)	PAAV)	ACHAL PORT NAMAKK	UP VAT @ 14	1%	4993.00			
		Service Char	. 8000.					
		-10 C	Total Net Payable		. 0 48657.			
ERMS & CO	NDITIONS .	~			E.			
	Advance & Balance After Completion	of the work		200				
	Sector-9 Noida		1	For Om S	al Blower Englee			
SC CODE; B	KID 0007114	Avan = 24,328	£7	87 87				
c No:-711420	110000844			~ <u>B</u>				
alidity : 15 D	lays	CASH F	PAID					
ompany's VA	T TIN: d98657158 u of our Best Services at all times.	87C			0			
er august you			i		Authorised Signa			
	SUB	JECT TO NOIDA JURISI	DICTION	1.				



#### **Bills for Sewage Treatment Plant Accessories**

TV TENED

