PROJECT PROFILE

ON

PACKAGED DRINKING WATER / MINERAL WATER

NAME OF THE PRODUCT : **Packaged Drinking Water / Mineral Water**.

PRODUCT CODE : 224103008.

QUALITY & STANDARD : PFA Regulations and **ISI 4543:1998**.

PRODUCTION CAPACITY : Quantity - 12 Lakhs Bottles (1 Litre) (Per Annum)
Value - Rs.111.0 Lakhs.

MONTH & YEAR OF PREPARATION : February, 2009.

PREPARED BY :

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A) INTRODUCTION

It is needless to mention that water, a compound of hydrogen and oxygen is a precious natural gift which is very essential for survival of mankind including animals. The water used for portable purposes should be free from undesirable impurities. The water available from untreated sources such as Well, Boreholes and Spring is generally not hygienic and safe for drinking. Thus it is a desirable and necessary to purify the water and supply under hygienic conditions for human drinking purpose as the name implies. The mineral water is the purified water fortified with requisite amounts of minerals such as barium, iron, manganese etc., which can absorbed by human body. It is either obtained from natural resources like spring and drilled wells or it is fortified artificially by blending and treating with mineral salts. The mineral water shall be manufactured and packed under hygienic conditions sin properly washed and cleaned bottles in sterilized conditions.

B) MARKET POTENTIAL

Unfortunately sufficient safe portable water is not available everywhere in the country, either harmful chemical substances are found in the layers of earth which enter in to water or it may be contaminated due to pathogenic micro-organisms. If such water is consumed, the body suffers from water born diseases. Due to this, it has become imperative to process and bottle safe portable water for the mankind in prevailing

conditions. The demand for purified water becomes more during summer season. Although few companies have already entered in the bottling of safe portable water and mineralized water, but still huge gap is there in between demand and supply at all metropolitan cities and towns. The product is widely accepted in offices, restaurants, railway stations, airport, but stands, hospitals and to some extent in rich house-holds. So there is good scope for establishing the units for processing and bottling plain and mineralized drinking water in different parts of the country.

C) BASIS & PRESUMPTIONS

I. This project is based on single shift basis and 300 working days in a year.

II. The cost of machinery & equipment /materials indicated refer to a particular make and the prices are approximate to these prevailing at the time of preparation of this profile.

III. The cost of packaging, forwarding tax etc and installation electrification of machinery is taken @ 15% non-refundable deposits, project cost, trial production, fees etc are considered under pre-operative expenses.

IV. Depreciation has been taken as an –

a) On building @ 5%

b) On machinery & equipment @ 10%

c) On office furniture & fixture @ 20%

V. Interest on total capital investment has been taken @ 14% per annum.

VI. Minimum 40% of the total investment is required as margin money.

VII. Pay back period of the project will be 7 years, with half yearly installments.

VIII. Break even point has been calculated at the full capacity utilization.

IX. For smooth functioning of unit it is suggested that unit should have a good stock of quality raw material

D) IMPLEMENTATION SCHEDULE:

The following steps involves in the implementation of the project.

Sl. No.	Activity
I.	Selection of Site.
II.	Form of Ownership.
III.	Feasibility Report.
IV.	Entrepreneurship Memorandum
V.	Arrangement of Finance
VI.	Construction of Factory Shed & Building
VII.	Plant Erection and Electrification
VIII.	Recruitment of Manpower
IX.	Arrangement of raw materials including packaging materials.
X.	Selection of marketing channel.
XI.	Miscellaneous power and water connection, Pollution Control Board clearance etc.

Normally 1 year is required to implement the project.

E) TECHNICAL ASPECTS:

(i) Process of Manufacture:

Raw water to be processed is collected in tanks. A known quantity is pumped in to the above tank where the water is dozed with alum for coagulation with heavy metals or insoluble matters. The water after coagulation is allowed to settle for an hour. The impurities may be removed by reserved osmosis techniques also. The supernatant water is taken to the chlorination tank where primary disinfection is brought about by bubbling chlorine gas. The water is then passed through sand filters for trapping of undissolved impurities. The water after sand filteration is passed through carbon filters for removal of odour, colour and also for dechlorination. It is then passed through series of micro fillers comprising

5 micron, 1 micron and 0.4 micron filter followed by ultraviolet disinfection system for terminal disinfection. Packing is done in PET bottles of 1 litre capacity through an automatic rinsing, filling and capping machine fitted with an ozone generator. The bottle after capping are shrink wrapped (optical) and packed in corrugated boxes of one dozen each.

(ii) Quality Control and Standards:

The plain drinking water has to be bottled in pet bottle as per IS:14543:1998.

(iii) Motive Power: 50 HP

(iv) Production Capacity (Per Annum):

Quantity:	:	12 lakh bottles (1 Litre) Per Annum
Value	:	Rs. 111.0 Lakhs

(v) Pollution Control:

The unit will not create any pollution problems. However, entrepreneur should obtain NOC from concerned State Pollution Control Board.

(vi) Energy Conservation:

Suitable measures should be adopted to use electricity

F) FINANCIAL ASPECTS:

A) Fixed Capital:

(i) Land & Building:

		Area	Amount (Rs. In lakh)
1.	Land – Total covered area required for filtration	500 sq. mtr. @1200/ sq. mtr.	**3.00 lakhs**
2.	**Building** Raw Material Storage, Packaging Material Storage, Machinery, Spare parts, Store Finished Goods, Office, Quality Control Lab. Toilet, electrical Switch Room and misc.	400 sq. mtr. @ 5000/sq. mtr.	**20.00 lakhs**
3.	Boundary Wall and Civil work on gate etc.		**1.00 lakh**
		Total:	**27.00 lakhs**

(ii) Machinery & Equipment:

Sl. No	Particulars of Machines	Qty. (Nos.)	Amount (Rs. lakh)
1.	Sand Filter	1	0.80
2.	Chlorination Tanks made of S. Steel with Electronic Doser	2	1.50
3.	Alum Treatment Tanks with Electronic Doser	3	1.50
4.	Activated Carbon Filter	1	0.80
5.	Reverse Osmosis Plant 2000 Lit.	1	8.00
6.	Micron Filters	3	0.60
7.	Ultra violet Disinfectant System	1	0.50
8.	Ozone Generator	1	3.50
9.	Raw and purified water collection tanks with motor & accessories	4	2.00
10.	Automatic Rinsing Filling and Capping Machine	1	8.00
11.	Shrink Wrapping Machine for Bottle – 0.15	1	0.30
12.	Miscellaneous Tools & Equipments, Pipeline etc. Plastic Crates etc.	1	2.00
13.	Laboratory Testing and Quality Control, Micro-Biological Instruments etc.		2.00
		Total:	**31.50**
	Electrification and installation charges @10% of Plant & Machinery.		3.15
		Total:	**34.65**

(iii) Other Fixed Assets:

		(Rs. In lakh)
i)	Cost of furniture, Furnishing and official accessories.	1.00
ii)	Cost of Deep Bore Tubewell for Water Reservoir	1.50
iii)	Security Deposit to electricity Deptt. Etc.	1.00
iv)	Preliminary & Pre-operative expenses including Company Formation, Project Preparation, technical Consultancy, Travelling Expenses, Interest during construction period, Start-up Expenses etc.	1.50
v)	Delivery Van & Contingency etc.	5.00
	Total:	**10.00**

(iv) Total Fixed Investment:

		(Rs. In lakh)
1.	Land & Building	27.00
2.	Plant & Machinery	34.65
3.	Other fixed assets	10.00
	Total:	**71.65**

B) Working Capital (Per Month):

(i) Salary & Wages:

Sl. No.	Designation	No.	Rate	Total (Rs.)
1.	Marketing-cum-Purchase Manager	1	10000/-	10,000/-
2.	Accountant-cum-Operator	1	4000/-	4,000/-
3.	Chemist-cum-Production Supervisor	1	6000/-	6,000/-
4.	Skilled Workers	1	4000/-	4,000/-
5.	Un-skilled Workers	4	3000/-	12,000/-
6.	Sweeper	1	3000/-	3,000/-
7.	Chowkidar	1	3000/-	3,000/-
8.				6,000/-
			Total:	**46,000/-**

(ii) Raw Material:

Sl. No.	Item	Qty.(MT)	Rate (Rs.)	**Value (Rs. lakh)**
1.	PET / PVC Bottled including cap labels etc.	1.00 lakh Bottles of 1 lit. size	3.60	3.60
2.	Chemical and Reagents etc.	L.S.		0.50
3.	Corrugated Boxes, Strips, Tap etc.	L.S.		1.00
			Total:	**5.10**

(iii) Utilities:

1.	Power, Electricity & Fuel.	50,000/-
	Total:	**0.50**

(iv) Other Contingent Expenses (P.M.):

1	Postage & Stationery	500/-
2	Telephone/Fax charges	500/-
3	Consumable Stores	1,000/-
4	Repairing & Maintenance	1,000/-
5	Transport charges	2,500/-
6	Advertisement & Publicity	500/-
7	Insurance & Taxes	300/-
8	Sales Expenses	3,200/-
9	License & other fees	500/-
10	Miscellaenous Expenses	1,000/-
	Total:	**11,000/-**
	Say:	**0.11**

(v) Working Capital / Total Recurring Expenditure (P.M.):

		(Rs. In lakhs)
1.	Salary & Wages	0.46
2.	Raw Materials	5.10
3.	Utilities	0.50
4.	Other Contingent Expenses	0.11
	Total:	**6.17**

(vi) Total working capital for 3 months 6,17,000 X 3 = Rs. 18,51,000/-

= **Rs. 18.51 Lakhs**

C) TOTAL CAPITAL INVESTMENT:

(Rs. In Lakhs)

I.	Fixed Capital	71.65
II.	Working Capital for 3 months	18.51
	Total:	**90.16**

FINANCIAL ANALYSIS:

i) Cost of Production (Per annum)

Sl. No.	Particulars	Value (Rs. In Lakhs)
1.	Working Capital for one year	74.04
2.	Depreciation on Building @ 5%	1.05
3.	Depreciation on machinery and equipment @ 10%	3.15
4.	Depreciation on Furniture & others @ 20%	2.00
5.	Interest on Total Capital Investment @ 14%	12.62
	Total: -	**92.86**

ii) Turnover (Per Annum)

Item	Value (Rs. In Lakhs)
By Sale f 12 lakh bottles (1 litr.) (1.00 lakh crates of 12 bottles @ Rs.100/- per crate (factory premises)	**120.00**
Sales Commission, Marketing expenses LS	9.00
Net Sales	**111.00**

iii) NET PROFIT (Per annum) Before Taxation:

Turn Over	(-)	Cost of Production	=	**Rs. 18,14,000/-**
1,11,00,000/-	(-)	92,86,000/-		**(Rs. 18.14 Lakhs)**

iv) NET PROFIT RATIO: (Per Annum): 16.34%

v) RATE OF RETURN (Per Annum): 20.12%

vi) BREAK EVEN POINT: 54%

Names & Address of Machinery & Equipment Supplier:

M/s Aquafilter
8/636 Rajani Khand , Sharda nagar Lucknow

Mob -8604558300, 8604158000

Email- aquafilter.india@gmail.com

Website – www.aquafiler.co.in

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