

PROJECT PROFILE ON SULPHUR POWDER

PART-I

NAME OF THE PRODUCT : **SULPHUR POWDER**

QUALITY & STANDARD : Indian Standards Institution has laid down Specification for Sulphur – IS: 8851 – 1978.

PRODUCTION CAPACITY : Sulphur Powder
Quantity 600 M.T. (Per Annum)

Value Rs. 1,20,00,000/-

**MONTH & YEAR
OF PREPARATION** : **December, 2011.**

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PART-II

INTRODUCTION:

Sulphur powder is widely used in agricultural insecticides and fungicide in the dust forms or in the form wettable sulphur in spray mixture alongwith other insecticides. Sulphur powder is also used in the manufacture of fertilizers, rubber vulcanization, medicines and explosives and in the manufacture of other chemicals. Sulphur powder is applied as insecticides in crops like tobacco, rubber, groundnuts, chilies, cumin seeds etc.

Sulphur has been used since ancient times to treat certain medical conditions. It is used for its cleansing properties in the treatment of infections. Other medical uses include the elimination of parasites like ticks and fleas. The treatment of certain skin problems such as scabies and dermatitis and the treatment of bacterial infections. Sulphur drugs are available as lotions, ointment creams and soap. Oral medications called sulphonamides, are administered in tablet or syrup form.

Sulphur powder is used in industry for the manufacture of numerous products. For example it is used to make tyres. Sulphur is added during manufacturing to make the rubber hard and to prevent it from melting during warmer temperature. Other rubber products include latex gloves, pencil erasers and automobile bumpers. Sulphur powder is used in process of manufacturing other common items such as matches, adhesives, synthetic fibres, paper products, plastics, water treatment chemicals and storage batteries.

Sulphur powder has an ignition temperature of approximately 190 degrees Celsius and there is a potential for explosion when there is a dust cloud from handling sulphur. In addition, static from the particles can result in ignition. It should

be stored in well ventilated areas to reduce the risk of fire of explosion. Although ground sulfur is nontoxic when inhaled or ingested, it can cause irritation to your eyes, skin and lungs. For your safety, wear personal protective equipment, such as goggles and breathing apparatus, when working with sulfur powder.

MARKET POTENTIAL:

The need of insecticides and pesticides in the country can be visualized from the size of land devoted to the production of crops. In countries where modern agriculture is being practiced, the amount of chemicals needed for the crop is enormous. To improve the productivity of agriculture more fertilizers and more pesticides and other chemicals are needed. To improve the supply of agro chemicals to the country's agriculture sector, one option would be to produce the essential chemicals here at home. And the demand for the major chemical input is sufficient to absorb the production volume of medium agro-chemicals such as sulphur powder. The raw material for Sulphur Powder is rock sulphur which is imported through MMTC. The unit can be set up in Kanpur as there is a good concentration of rubber industry, fireworks, safety matches etc. Now the rock sulphur powder is available with Indian Petro Chemical in sufficient quantity.

BASIS & PRESUMPTIONS:

1. The estimates are drawn for a production capacity generally considered techno-economically viable for model type of manufacturing activity.
2. The information supplied is based on a standard type of manufacturing activity utilizing conventional techniques of production at optimum levels of performance.
3. Costs in respect of land building, machinery and equipment, raw materials and the selling prices of the finished products etc. are those generally prevailing at the time of preparation of the project profiles and may vary depending upon various factors.
4. Whereas some names of manufacturers/suppliers of machinery and equipment, raw materials etc. are indicated at the end of the profile, these are by no means exclusive or exhaustive.
5. Rate of interest for fixed and working capital @ 15% per annum.
6. Margin money 25%.

QUALITY SPECIFICATION / STANDARDS:

Indian Standards Institution has laid-down Specification for Sulphur – IS: 8851 – 1978.

IMPLEMENTATION SCHEDULE

It will take one year to complete all the formalities before starting the commercial productions.

TECHNICAL ASPECTS**Process of Manufacture:**

The process of manufacturing sulphur powder requires simple equipment mainly size reduction and material handling equipments. The size reduction equipment mainly used are jaw crusher and the Raymond mill. The other accessories are feed hopper, a bucket elevator and screening equipment. The raw sulphur is feed into the hopper of the jaw crusher where it is crushed to the feed size required by the crushing roll mill. The crushed material coming out of the jaw crusher is to be fed to the roll mill for further grinding. (In sulphur grinding, there is a danger of explosion). Two important factors basically determine explicability. These are concentration of dust in the air, and particle size of the dust. Various steps are taken to prevent dust explosion and these are included in the equipment. They are (a) reduction of the air present in grinding system and (b) use of inert gas.

PRODUCTION CAPACITY (Per Annum):

Sulphur Powder <i>Quantity</i>	600 M.T. (Per Annum)
Value	Rs. 1,20,00,000/-

POLLUTION CONTROL:

This industry does not create any kind of pollution and as such there is no need to take any preventive measure for pollution control. The sulphur powder is an explosive item, hence licence from Fire Department is required for production purpose.

FINANCIAL ASPECTS:**(A) Fixed Capital****(i) Land & Building:**

Land (Rented) 1000 Sq. Mtrs.		(Per Month)
Built up area, office, working shed, stores etc. (400 Sq. Mtrs.)	Rs.	12,000/-

(ii) Machinery & Equipments

Sl. No	Machinery Description	Imp/ Ind	Qty Nos.	Value (In Rs.)
1.	Pulverizer roller type equipped with cyclone separator, dust collector, attached with blower, capacity 300 Kg/Hr of 200 mesh size.	Ind.	1	7,50,000/-
2.	Electric Motor 25 HP plus Starter, Amp Meter, Volt Meter and other Electrical Accessories.	Ind.	2	80,000/-
3.	Magnetic Separator for separating Iron (Manually operated)			10,000/-
4.	Bag stitching machine	Ind.	3	3,000/-
5.	Weighing Balance		1	10,000/-
6.	Miscellaneous Tools and Equipment/ Accessories.		1	50,000/-
7.	Installation & Transportation charges @ 10%			50,000/-
8.	Office Furniture			20,000/-
9.	Testing equipments			20,000/-
Total:				10,94,000/-

(B) Working Capital (per month)**(i) Staff & Labour (Per Month):**

Sl. No.	Personnel	No.	Rate(Rs.)	Amount (In Rs.)
1.	Manager	1	5,000/-	5,000/-
2.	Clerk-cum-Typist	1	4500/-	4,500/-
3.	Peon / Watchman	1	3500/-	3,500/-
4.	Skilled Workers	1	10000/-	10,000/-
5.	Unskilled Workers	4	4500/-	18,000/-
Total:				41,000/-
	Perquisites @ 15% on the total salary			6,150/-
Grand Total				47,150/-

(ii) Raw Material (Per month):

Sl. No	Item description	Ind/ Imp	Qty.	Rate (Rs.)	Value (In Rs.)
1.	Raw Sulphur	Ind.	50 MT	13000/-	6,50,000/-
2.	Polythene Lined Jute Bags	Ind.	1000 Nos.	12/- each	12,000/-
				Total:	6,62,000/-

(iii) Utilities: (Per Month)

1.	Power	Rs.	12,000/-
2.	Water Plus Domestic light etc.	Rs.	1,000/-
	Total:	Rs.	13,000/-

(iv) Other Contingent Expense (Per Month):

1.	Repair & Maintenance	Rs.	10,000/-
2.	Postage, Stationery, Telephone etc.	Rs.	4,000/-
3.	Travelling & Transportation	Rs.	1,00,000/-
4.	Misc. Expenses	Rs.	15,000/-
5.	Advertisement & Publicity	Rs.	25,000/-
6.	Rent	Rs.	12,000/-
7.	Insurance	Rs.	10,000/-
	Total:	Rs.	1,76,000/-

(v) Total Recurring expenses (per month):

i.	Staff & Labour	Rs.	47,150/-
ii.	Raw Material	Rs.	6,62,000/-
iii.	Utilities	Rs.	13,000/-
iv.	Other contingent expenses	Rs.	1,69,000/-
	Total:	Rs.	8,91,150/-

(vi) Total Working Capital for 3 months: 8,91,150/- X 3 = Rs.26,73,450/-
Say= Rs.26,73,500/-

(C) TOTAL CAPITAL INVESTMENT:

1.	Fixed Capital	Rs.	10,94,000/-
2.	Working Capital for 3 months	Rs.	26,73,500/-
	Total:	Rs.	37,67,500/-

FINANCIAL ANALYSIS:**(1) Cost Of Production (Per Annum)**

1.	Total Recurring Expenditure	Rs.	1,06,93,800/-
2.	Depreciation on Plant & Machinery @ 10%	Rs.	85,000/-
3.	Depreciation on tools, fixtures, testing equipment @ 20%	Rs.	8,000/-
4.	Interest on Total Capital Investment @ 15%	Rs.	5,65,175/-
	Total:	Rs.	1,13,51,975/-
	Say:	Rs.	1,13,52,000/-

(2) Turn Over(per year) by Sales

Products	Quantity (Nos.)	Rate (Rs.)	Value (Rs.)
Receipt by sale of Sulphur Powder	600 MT	21000/ MT	1,26,00,000/-

(3) Net Profit (per year)
(Before Income Tax)

Annual Turnover	(-)	Cost of Production		
1,26,00,000/-	(-)	1,13,52,000/-	Rs.	12,48,000/-

(4) Percentage Return on Total Investment:

<u>Profit/annum X 100</u>	<u>12,48,000/- X 100</u>	=	33.1%
Total Capital Investment	37,67,500/-		

(5) Percentage Return on Sales :

<u>Profit/Annum X 100</u>	<u>12,48,000/- X 100</u>	=	9.9%
Sales Per Annum	1,26,00,000/-		

(6) Break Even Point/Analysis:

1.	Depreciation on Tools, Fixtures & Testing Equipments @ 20%	8,000/-
2.	Depreciation on Plant & Machinery @ 10% p.a.	85,000/-
3.	Interest on loan @ 15% p.a.	5,65,175/-
4.	Rent per annum	1,44,000/-
5.	40% salary and wages	2,26,320/-
6.	40% of other expenses	7,87,200/-
	Total Fixed Cost:	18,15,695/-

Break Even Point:

<u>Fixed Cost X 100</u>	<u>18,15,695/- X 100</u>	=	59.3%
Fixed Cost + Profit	18,15,695/- + 12,48,000/-		

7. Names and Addresses of Plant & Machinery Suppliers:

1.	M/s Pooja Scientific Instruments, 205, 2 nd Floor, Gupta Plaza, M Block, Vikas Puri, Delhi – 110018. Phone: 11 – 25597545, 45534147 Fax: 11 25623126
2.	M/s Palhan Engineering Industries, Nakodar Road, Near Kala Sanghiya Railway Crossing, Industrial Area, Kapurthala, Punjab. 144 601. Phone: 1822 – 232095 Fax: 1822 232095.
3.	M/s Rajco Scientific & Engineering Products 36/1, Ground Floor, Ashok Nagar, New Delhi 110 018. 11 25130328, 25595857 25529384 Fax: 11 25130329 25529384
4.	Advanced Technology Inc. Atico House No. 5309, Grain Market, Near B. D. Senior Secondary School, Ambala – 133001. Phone: 720 6699349 Fax: 171 4007717

5.	Ylemparto, New Delhi 25/34, Anand Chamber, East Patel Nagar, New Delhi 110 008. Phone: 11 42484588
6.	Scientific International, New Delhi 1590, Madarsa Road, Behind Oberoi Glass House, Kashmere Gate, Delhi – 110 006. Phone: 11 47016655 27552087 Fax: 11 27553276.

10.Names & Addresses of Raw Material Suppliers:

Raw material is locally available.

PSB*MSME-DI KANPUR*Dec.2011*