



AQUA ECOTECH SDN. BHD.

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INFORMATION REQUIRED TO SIZE AQUAECO-SRORS PLANT FOR PALM OIL MILL

Company Name _____
 Mill's Name _____
 Mill's Location _____
 Mailing Address _____

FFB THROUGHPUT		2015 ⁺	2016 ⁺	2017 (Est.)	2018 (Est)
Capacity	mt / hr	_____	_____	_____	_____
Total Year FFB	mt / yr	_____	_____	_____	_____
Actual Operation		2015 ⁺	2016 ⁺	2017	2018
Max mt / hr*	mt / hr	_____	_____	_____	_____
Max mt / day*	mt / day	_____	_____	_____	_____

RAW SLUDGE Production*		* These values are very critical for sizing of system	
DECANTER HEAVY PHASE		EFB LIQUOR (If Any)	
% Total Solids	_____ %	% Total Solids	_____ %
% Suspended Solid	_____ %	% of EFB Pressed	_____ %
% Oil	_____ %	% Oil in Liquor	_____ %
Quantity	_____ m3/hr	EFB Liquor Quantity	_____ m3/hr
or % to FFB	_____ %	or % to FFB	_____ %
STERILISER CONDENSATE		TOTAL RAW SLUDGE (D HP + SC + EFB L)	
% of Suspended Solid	_____ %	% Total solids	_____ %
% Oil	_____ %	% Suspended Solid	_____ %
Quantity	_____ m3/hr	% Oil	_____ %
or % to FFB	_____ %	Quantity	_____ mt/hr*
		or % to FFB	_____ %
		BOD	_____ ppm*
		COD	_____ ppm*

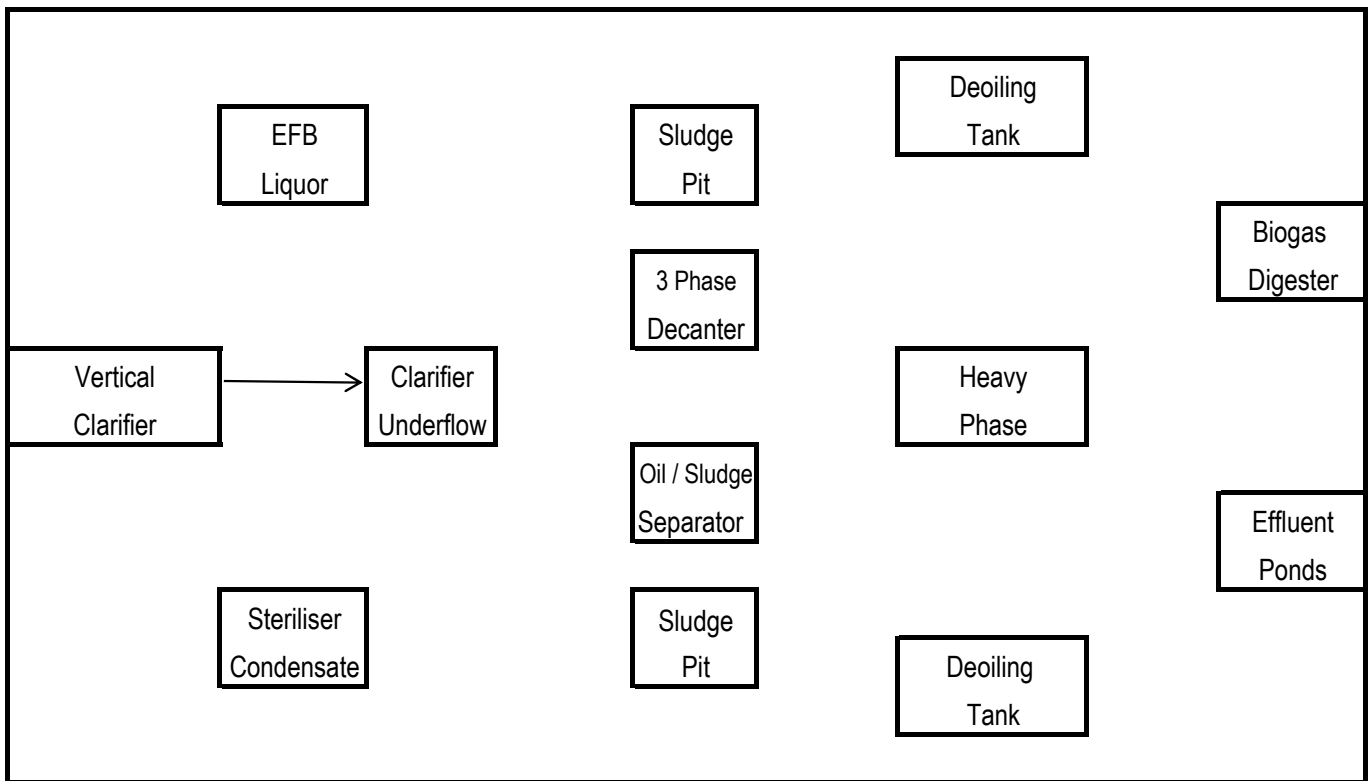
Note: Please fill in so equipment sizing and project feasibility can be calculated for mill

IF Using Sludge / Oil Searator (Centrifuge)

OIL SEPARATOR - HEAVY PHASE

% Total solids _____ %
 % Suspended Solid _____ %
 % Oil _____ %
 Quantity _____ mt/hr
 or % to FFB _____ %

Existing Pathway of Liquids - please use arrows to draw the various liquid pathway in mill
 Indicate percentage (%) or quantity, if possible



OIL RECOVERY SYSTEM

3 PHASE DECANTER

No of Units				
	Unit 1	Unit 2	Unit 3	Unit 4
Brand				
Capacity mt/hr				
In Operation				
Excess capacity				

OIL / SLUDGE SEPARATOR (CENTRIFUGE)

No of Units								
	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Capacity mt/hr								
In Operation								
Excess capacity								

Note: AQUAECO-SRORS Filtration System recycle about 40-50% extra sludge for Decanter to process. Must have a 3 phase decanter to work with AQUAECO-SRORS Plant to remove suspended solids and recover oil in Raw Sludge

DEOILING TANK (May convert to holding tank for raw sludge)

	Unit 1	Unit 2	Unit 3	
Capacity				m3
Retention Time				Hrs

Sludge Tank Capacity (for Clarifier Underflow) _____ m3

POWER

Boiler 1:	In Operation		Capacity	_____	mt/hr
	Standby		Working Pressure	_____	Bar
			Steam Temperature	_____	Deg Celcius
			Exhaust Pressure	_____	Bar
Boiler 2:	In Operation		Capacity	_____	mt/hr
	Standby		Working Pressure	_____	Bar
			Steam Temperature	_____	Deg Celcius
			Exhaust Pressure	_____	Bar
<i>If power is insufficient, solution is to upgrade single stage steam turbine to multi-stage steam turbine</i>					
Existing Steam Turbine Total Capacity			_____	Kw	
Actual operating power			_____	Kw	
*Excess Power In Mill When In Operation			_____	Kw	
*Available Power When Mill Is Not In Operation			_____	Kw	
About 250-300kw power is required to operate AQUAECO-SRORS Filtration Plant for 45mt/hr and 60mt/hr, respectively					
Another 125-160kw power is required for AQUAECO-ZEDS Evaporation system					

Common brand of Centrifugal Pumps used in the mill:

- 1) _____
- 2) _____
- 3) _____

Needs of Mill (can be more than 1)

Problem with effluent discharge parameters
 License approval due to increase mill capacity
 Zero effluent discharge requirement
 MPOB directive on Methane avoidance/capture
 Land constrain
 RSPO requirement
 Water quality or supply problem
 Others: _____

Please ✓	Remarks

Contact person for project

Name: _____
 Tel: _____
 Fax: _____
 HP: _____
 Email: _____

Mill Manager*

Name: _____
 Tel: _____
 Fax: _____
 HP: _____
 Email: _____

* Fill only one if it is the same

Remarks:

(If any)

Note:

Please fill in all the particulars requested in the form, if possible. Either email to
 If possible, please submit a layout plan of the mill to identify the location in the mill for
 AQUAECO-SRORS Plant to be installed, which will be verified with a mill visit.