

## Questionnaire

### CO<sub>2</sub> Recovery/Grape Fermentation

*Please provide the following information to assist us in preparing our proposal for you:*

Company: \_\_\_\_\_

Name: \_\_\_\_\_ Position: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_ Telefax: \_\_\_\_\_ E-Mail: \_\_\_\_\_

#### A. MASH (MOST) SCHEDULE

1. Type of grapes (please check): \_\_\_ Red \_\_\_ White
2. Net volume each mash or extract into closed fermenter: \_\_\_\_\_
3. Average number of mashes per week into closed fermenters: \_\_\_\_\_
4. Number of days mashing is operating per week: \_\_\_\_\_

#### B. FERMENTATION CYCLE

1. Total net volume of available closed fermenters: \_\_\_\_\_
2. Operating pressure of closed fermenters: \_\_\_\_\_

If mash is started in open fermenters, then transferred to closed fermenters, or some procedure other than complete fermentation in closed fermenters is employed, what is the procedure? Please describe in detail, indicating lengths of time in vessel and extract gravity going in and out.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. Total length of fermentation cycle: \_\_\_\_\_  
Temperature of fermentation: \_\_\_\_\_
4. Gravity of extract when yeast is pitched: \_\_\_\_\_
5. Length of air blow-off period: \_\_\_\_\_
6. Length of CO<sub>2</sub> collection period: \_\_\_\_\_
7. Gravity of extract at end of collection period: \_\_\_\_\_
8. Gravity of extract at end of fermentation: \_\_\_\_\_
9. Give weight of real extract in grams per litre for each type of grape fermentation: \_\_\_\_\_  
\_\_\_\_\_
10. Furnish typical gravity-vs-time curve: \_\_\_\_\_

C. EXISTING GAS COLLECTING AND STORAGE EQUIPMENT

1. Low pressure booster compressor? \_\_\_ Manufacturer: \_\_\_\_\_  
 Capacity: \_\_\_\_\_ Speed: \_\_\_\_\_  
 HP: \_\_\_\_\_ Discharge Pressure: \_\_\_\_\_
2. High pressure compressor? Number: \_\_\_ Manufacturer: \_\_\_\_\_  
 HP: \_\_\_\_\_ Discharge Pressure: \_\_\_\_\_  
 Bore: \_\_\_\_\_ Stroke: \_\_\_\_\_  
 Speed: \_\_\_\_\_
3. Gas storage tank volume per tank: \_\_\_\_\_ Number of tanks: \_\_\_\_\_
4. CO<sub>2</sub> liquefaction capacity/hour: \_\_\_\_\_
5. CO<sub>2</sub> evaporation capacity/hour: \_\_\_\_\_
6. Liquid storage tank capacity: \_\_\_\_\_
7. Purification equipment? \_\_\_\_\_ Type: \_\_\_\_\_

D. ANTICIPATED USE OF CO<sub>2</sub>

1. Winery – Beverage:..... %  
 Bottling Lines: ..... %  
 Other: ..... %  
 Tank Counterpressure: .... %
2. Industrial/Commercial: ..... %

**UTILITIES**

- A. Power: \_\_\_ Volts, \_\_\_ Phase, \_\_\_ Cycle, \_\_\_ Wire
- B. Control: \_\_\_ Volts, \_\_\_ Phase, \_\_\_ Cycle
- C. Direct across-the-line starting on motors to and including \_\_\_ HP is permitted.
- D. Cooling water maximum temperature: \_\_\_°F \_\_\_°C
- E. Auxiliary Coolant – Brine: ..... % Alcohol Water: ..... %  
 Glycol: ..... % Chilled Water: ..... %  
 Maximum Temperature: .....°F \_\_\_°C
- F. Maximum allowable fermentation pressure: \_\_\_\_\_
- G. Steam Pressure – Maximum: \_\_\_ Minimum: \_\_\_  
 Available seven (7) days per week? \_\_\_\_\_
- H. Winery ammonia head pressure – Minimum: \_\_\_\_\_  
 Maximum: \_\_\_\_\_