



LAS COOL SORPTION (PTY) LTD

Environmental and Vapour Recovery Specialists

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Vapour Recovery Unit Questionnaire - VRU

Company/client data

Client/Company:

Terminal location:

Contact person:

Address:

Phone:

Fax:

E-mail:

Homepage:

Truck and railcar loading

Truck loading

Number of loading bays:

Number of loading arms per rack - top loaded:

Loading hours per day:

Number of loading arms per rack - bottom loaded:

Does the loading facility collect return vapours from service stations?

Railcar loading

Number of loading racks:

Number of loading arms per rack - top loaded:

Loading hours per day:

Number of loading arms per rack - bottom loaded:

Loading logistics

Cross-loading:

Is cross-loading used?

Typical daily percentage of loaded gasoline vs. diesel (%)

Maximum number of arms which can load simultaneously: Trucks

Railcars

Product supply per arm for top loading: (m³/min)

Product supply per arm for bottom loading: (m³/min)

Directors: M C Venter (Chairman); B P Nieman; D A Slogrove (Managing); *M R Hansen; Z Jali
*Danish



A LAS-OIL Company



Maximum pump capacity - all products (m³/hour)

Average tank volume - truck or rail car (m³)

Time for loading one truck or rail car

arrival to departure included (Minutes)

Maximum numbers of trucks or rail cars loaded in one hour

Volume of product loaded daily (m³)

Volume of product loaded yearly (m³)

Detailed loading volumes (gasoline + diesel):

Trucks

Railcars

m³ / 3 minutes peak (m³)

m³ / 15 minutes maximum (m³)

m³ / 1 hour average (m³)

m³ / 4 hours maximum (m³)

m³ / day maximum (m³)

m³ / day average (m³)

m³ / year (m³)

Ship and barge loading

Loading logistics

Number of jetties:

Volume of product supplied to each jetty: (m³)

Average tank volume of loading vessels: (m³)

Quantity of product loaded daily: (m³)

Quantity of product loaded yearly: (m³)

Storage tanks

Tank filling logistics

Max. Total product feed pump flow (m³/hr)

Max. batch size of product delivery (m³/hr)

Minimum time between batches: (min)

Volume of product loaded yearly: (m³)

Number of tanks:

Size/volume of tanks: (m³)

Quantity of product loaded yearly: (m³)



Additional site information

Vapour concentration

Expected maximum concentration of gasoline vapours: Vol. % HC

Absorbment

A circulation flow of fresh gasoline is normally used to absorb the recovery vapours in the VRU

Is fresh gasoline available on-site?

Summer

Winter

Gasoline Reid Vapour Pressure - RVP (MPaA)

Auxiliaries

Electrical power

Voltage (V)

No. of phases

Frequency (Hz)

Maximum allowance for direct start of motors (kW)

Compressed air

Is compressed air at > 600 kPa and a dew point -40°C available on-site?

For refinery installations only

The use of a high-boiling point product (+C7-liquid) as absorbent can reduce VRU investment costs significantly

Is a high-boiling point absorbent available on-site?

Summer

Winter:

Absorbent Reid Vapour Pressure - RVP, (Bar a)

Additional information regarding location, terminal/harbour facilities etc.

What is the local price for gasoline?

What is the local price for electricity?

Where in the distribution chain is tax added?

Name:

Date: