

SAGE TERMINAL GAS ENTRY SPECIFICATION

The entry specification for the SAGE Terminal is tighter than the entry Specifications for the individual feeder pipes

Cricondenbar pressure	less than or equal to 106 Bara
Water content	less than 63 ppm by volume
Carbon Dioxide (CO ₂)	less than 7.85 mol% (1)
Oxygen Content	less than 7 ppm by volume
Sulphur Content	H ₂ S - less than or equal to 16.4 ppm by volume
Carbonyl Sulphide (COS)	Negligible (2)
Σ (C ₂ to C ₁₂ mol%) / (C ₁ mol%)	Max 0.27 / Min 0.19 (3)
Maximum Inlet Pressure	173.4 Bara
Minimum Inlet Pressure	That minimum pressure (in Bara) required to ensure that the Gas delivered remains in dense phase until reaching that part of the gas processing facilities where liquid condensation is intended
Sediment/metals	Negligible (2)
Mercaptans	Negligible (2)
Mercury	Negligible (2)
Duodecans	Negligible (2)
Temperature	13° C max 4° C min

Notes:

- (1) This is maximum feed gas CO₂ concentration and CO₂ mass removal that the SAGE terminal facilities were designed to process (SAGE 'Mix 2' design case at a rate of 1150 mmscfd) Feed gas with higher CO₂ concentrations may be able to be processed but could reduce overall SAGE terminal throughput capacity. The Operator will use reasonable endeavours to accept such gas from existing users, and in case of such acceptance by the Operator delivery of such gas shall not be a breach of the applicable transportation and processing agreement. New feed gas with higher CO₂ concentrations could be accepted subject to simulation to ensure existing users and other Owners' Capacity Rights are not prejudiced and may result in changes being required by the Owners to the Product Allocation Procedure

- (2) For the purposes of this SAGE gas entry specification negligible is defined as less than a concentration of the relevant species that:
- Would cause difficulties with transportation, processing, safety, facilities integrity, or meeting Sales Gas, NGL or other product specifications through the SAGE system; or
 - Would cause difficulties in facilities downstream from the SAGE system (e.g. National Grid gas distribution, NGL handling systems) with SAGE product transportation, processing, safety, facilities integrity or meeting derivative product specifications; or
 - Would impair the value or marketability of any ultimate products derived from feed gases entering the SAGE system
- (3) The ratio of ethane & heavier hydrocarbon components to methane represents the likelihood that wet feed gas to the SAGE terminal can be processed at design capacity (subject to acid gas removal capacity). Feed gas outside this range of ratios may be able to be processed but could reduce overall SAGE terminal throughput capacity. The Operator will use reasonable endeavours to accept such gas from existing users outside this range of ratios, and in case of such acceptance by the Operator delivery of such gas shall not be a breach of the applicable transportation and processing agreement. New feed gas outside this range of ratios could be accepted subject to simulation to ensure existing users and other Owners Capacity Rights are not prejudiced and may result in changes being required by the Owners to the Product Allocation Procedure

The ratios of 0.27 - 0.19 covers the range of the SAGE terminal 'Design Cases'. Other sensitivity cases were checked at reduced throughputs