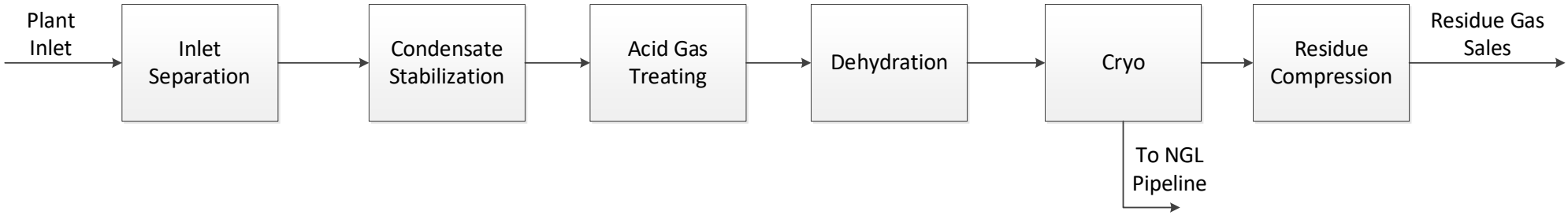
Disclaimer:

***This handout is guidance and not binding on ONRR. It does not provide legal advice and should not be construed as stating ONRR's legal interpretation or position. Any reliance on this presentation does not limit ONRR in its compliance activities or in the appealable decisions and orders it may issue*.**

The exercises below will be covered as a part of the course and don't need to be done prior.

Exercise #1



Plant Inlet Conditions:
40 lbs. water/MCF
500 psig
100 degrees Fahrenheit

Plant Outlet Conditions:
0 lbs. water/MCF
1,000 psig
120 degrees Fahrenheit

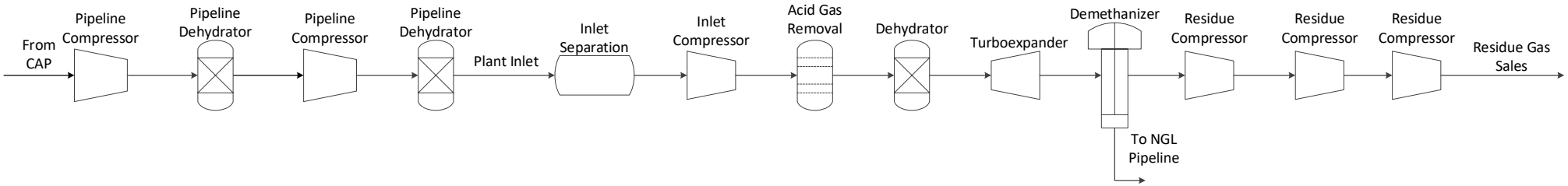
(From gas quality section of tariff) Gas shall contain no more than:

A. 2 mol % Carbon Dioxide
B. 3 mol % Nitrogen
C. ¼ grain of Hydrogen Sulfide per 100 cubic feet
D. 5 mol % total inerts (including Carbon Dioxide, Nitrogen, and Oxygen)
E. 5 lbs water/MCF

Gas Analysis:

Component	mol %
Helium	0
Nitrogen	1.204
Carbon Dioxide	4.1508
Hydrogen Sulfide	0.251
Other Inerts	0
Methane	66.875
Ethane	14.569
Propane	6.547
Iso Butane	0.951
Nor Butane	2
Iso Pentane	0.7555
Nor Pentane	0.8698
Hexane +	1.8323
Total	**100**

Exercise #2



Plant Inlet Conditions:
7 lbs water/MCF
1,000 psig
100 degrees Fahrenheit

Plant Outlet Conditions:
0 lbs water/MCF
1,000 psig
120 degrees Fahrenheit

(From gas quality section of tariff) Gas shall contain no more than:

A. 2 mol % Carbon Dioxide
B. 3 mol % Nitrogen
C. ¼ grain of Hydrogen Sulfide per 100 cubic feet
D. 5 mol % total inerts (including Carbon Dioxide, Nitrogen, and Oxygen)
E. 7 lbs H_2O/MCF

Gas Analysis:

Component	mol %
Helium	0
Nitrogen	1.204
Carbon Dioxide	1.8508
Hydrogen Sulfide	0
Other Inerts	0
Methane	68.1264
Ethane	15.0632
Propane	6.547
Iso Butane	0.951
Nor Butane	2.8
Iso Pentane	0.7555
Nor Pentane	0.8698
Hexane +	1.8323
Total	**100**