

Chemistry - PI 24

ENVIRONMENTAL MONITORING AND CONTROL - BHWP

Objectives:

1. Briefly describe, by drawing a simplified flowsheet and discussing the equipment, how H₂S and heat are removed from the effluent water from the G-S process.
 2. State the purpose of adding propane to the flare stack of the BHWP.
 3. Explain why SO₂ monitors as well as H₂S monitors are located around the BHWP by giving two sources of SO₂ at BNPD.
 4. Given a 1980 or later NGD Environmental Summary, briefly describe the sulphur emission performance for both water and airborne emission at BNPD (for the Summary year) centering on limits and excursions.
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References:

1. RNTC Course 438
Lesson 438.21-1, pages 4-8; 11-12.
 2. NGD Annual Environmental Summary (1980 or later), RMEP.
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Here's What To Do:

1. Obtain the two references and use them while you fill in the three worksheets.
2. Discuss your worksheet results with a colleague; if you have problems check with the course manager.
3. Have the course manager initial your worksheets.

WORKSHEET #1

1. Draw a simplified diagram showing how heat and H₂S are removed from G-S process effluent water (waste).

2. Explain the purpose of each vessel.

Date: _____

Course Manager: _____

WORKSHEET #2

1. Why is propane added to the BNPD flare stack?

2. Give two sources of SO₂ from BNPD.

Date: _____

Course Manager: _____

WORKSHEET #3

1. BNPD Sulphur Emission

(a) To Air - Limits:

- Performance:

(b) To Water - Limits:

- Performance:

(c) Excursions: (give extent and reasons and corrective actions).

Date: _____

Course Manager: _____

P.D. Dodgson