

Task Performance

Hazard Analysis

Instructions:

- 1) Make a HAZOP (Hazard and Operability) analysis on your previously assigned case study.
Cases:
 - A. Beirut Explosion
 - B. Miami Bridge Collapse
 - C. Oklahoma Oil Rig Explosion
 - D. Star City Fire
 - E. Binondo Building Collapse
 - F. Kentex Manufacturing Fire
- 2) Write a proposal on safety procedures that could help prevent such disasters from recurring.
- 3) Use the format below for your final output.

Hazard Analysis

HAZOP Team Members:	Section:

INFORMATION ABOUT THE INCIDENT	
Date of Incident:	Location of Incident:
Description of Incident:	

HAZOP ANALYSIS								
Guide-word	Element	Deviation	Possible causes	Consequences	Safeguards	Comments	Action required	Allocated to:

PROPOSAL

Rubric for Scoring:

A. HAZOP Analysis	60 pts
a. Content (40 pts)	
b. Accuracy (20 pts)	
B. <u>Proposal</u>	40 pts
	100 pts

*Reading List:

- 1) Cipres, F. (2019, December). *Fire hits Star City in Pasay*. ABS-CBN News. <https://news.abs-cbn.com/news/10/02/19/fire-hits-star-city-in-pasay>
- 2) De Vera, E., & Noriega, R. (2019, April 11). *Decades old building collapses in Binondo*. Manila Bulletin. <https://mb.com.ph/2019/04/11/decades-old-building-collapses-in-binondo/>
- 3) Kaplow, L., Sherlock, R., & Homsy, N. (2020, August 7). *Beirut explosion looks like an accident — and a sign of the country's collapse*. npr. <https://www.npr.org/2020/08/07/899776352/beirut-explosion-looks-like-an-accident-and-a-sign-of-the-country-s-collapse>
- 4) NDRRMC. (2015, May). *Progress report re fire incident in Valenzuela City*. [https://ndrrmc.gov.ph/attachments/article/1452/Fire Incident in Valenzuela City 14MAY2015 .pdf](https://ndrrmc.gov.ph/attachments/article/1452/Fire%20Incident%20in%20Valenzuela%20City%2014MAY2015.pdf)
- 5) OSHA National Office Washington, D.C, & Ayub, PE, SE, M. (2019, July). *Investigation of March 15, 2018 Pedestrian bridge collapse at Florida International University, Miami, FL*. https://www.osha.gov/sites/default/files/2019-12/2019_r_03.pdf
- 6) U.S. Chemical Safety and Hazard Investigation Board. (2019, June). *Gas well blowout and fire at Pryor Trust Well 1H-9 (No. 2018-01-I-OK)*. https://www.csb.gov/assets/1/20/pryor_trust_report_final_for_publication.pdf?16477