



جامعة الجميع الذكية
EVERYONE'S SMART UNIVERSITY

Everyone's Smart University

Assignment 1 (Spring 2021)

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Section

**Master of Project
Management**

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Project Risk Management

Instructions:

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Introduction

In this assignment, I chose 4 Risks that ARAMCO exposure during the work in GAS PRODUCTION PLANT. We will answer these questions for each risk

1. Why is this a risk?
2. What type of risk is it?
3. What is the likelihood of the risk? How great is the impact?
4. What strategy or policy does the company use to manage the risk?

Risk #1: Exposure of Hydrogen sulfide (H₂S).

- 1- Hydrogen sulfide (H₂S) is a colorless, flammable gas at ambient temperature and pressure. It is toxicity, irritant and an asphyxiant gas and instantly deadly when ambient reaches 100 ppm (Part per Million)
- 2- It is a Hazard Risk (Health and Safety)
- 3- It is highly likelihood in Gas-oil separation plant (GOSP), and its impact are also high because of the fast toxicity and dead.
- 4- **There are many strategies or polices, one of them is** for each work, it should release Work Permit, that is to be sure the work place is measured by gas detectors and record that in the checklist of gases measures.

Risk# 2: Gas Leaks in Plants

- 1- Gas leaks is the one of risk that may occur during the process of production of this Natural gas. Because it is a flammable gas, when there is a leak of gas in pipelines, it may cause fire and even explosions.
- 2- It is a compliance and hazard Risk:
 - a. Compliance because the explosion may affect the environment and there are obligations to keep the environment clean.
 - b. Hazard as explosion harms the people affected.
- 3- It is highly likelihood and highly impact if the explosion occurs.
- 4- **There are many strategies or polices, one of them is** the plant deigned if there is a leak in pipeline, it closes that region and routes the gas to another line

and releases that gas to the gas flare and fires it to prevent the load of gas inside the pipelines and avoid explosion.

Risk #3: Radiation

- 1- During the project of pipeline construction, it should be an inspection on each joint by X-Ray to check any defects. However, this process is very dangerous. This device they will emit radiations around some ranges, so it harms our body
- 2- It is a compliance and hazard Risk
 - a. Compliance because Radiation may affects the environment and there are obligations to keep the environment clean.
 - b. Hazard as Radiation harms the people affected.
- 3- It is high likelihood during process, and the impact is high only if the exposure has exceeded the limit
- 4- **There are many strategies or polices, one of them is** for Supervisors and people around this area: prohibit to enter the ranged area while process, only allow the workers assigned. And the people work inside this area, they have a device with unique ID to measure the accumulative radiation for that person, and if he reaches the limits, he stops work for awhile until their bodies recover from that radiation.

Risk#5: Body Harm by Particles or Objects

- 1- During the works in projects, there many Object and particles that may cause accidents and harm our body. These particles or objects like stones, ash, nails, ...etc.
- 2- This risk is Hazard
- 3- The likelihood is low to high, the impact is also low to high
- 4- ARAMCO takes strategy to protect people from that as:
 - a. Everyone has to wear PPE (Personal protective equipment) like (Helmet, Sunglass, safety shoes, antifire resistance shirt)
 - b. For every area, they are a sign clearly identify what type of work is there so that every will know what risks may cause from that area.