**Applicant:** Your Company Name

**Inventors:** Names in the order of contribution (highest contributor’s name will be first. Author’s must be listed under the EHS division)

**Chemical Product Formula:**

**Chemical Product Name:**

**Process Title:**

**EHS Summary:**

1. List the wastes generated and their quantity of generation.
2. What the current regulations for the above waste materials. (Limits to which it can be disposed in the environment)
3. Describe the treatment procedure for wastes with block diagram. Your chemical plant must be a zero liquid discharge plant.
4. Are there any safety concerns for the chemicals. Give exposure limits: Time Weighted Average (TWA) for 8 hours and short-term exposure limit (STEL) for 15 minutes.

**References:** Provide reference for a material safety data sheet/industrial safety report/weblink.

**List the contributions of each author:**

* (Example) Author 1 determined the waste generation quantity.
* Author 1 and 2 carried out the literature search and found the current regulations.
* Authors 1, 2 and 3 found necessary treatment steps and prepared the block diagram.
* Author 4 obtained TWA and STEL data.

**Sign the pdf and upload.**

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| --- | --- | --- |
| Name | Roll No | Signature |
| CEO Name |  |  |
| First author Name |  |  |
| Second author Name (if any) |  |  |
| Third author Name (if any) |  |  |
| Fourth author Name (if any) |  |  |

1. Are there any safety concerns for the chemicals. Give exposure limits: Time Weighted Average (TWA) for 8 hours and short-term exposure limit (STEL) for 15 minutes.

|  |  |  |  |
| --- | --- | --- | --- |
| **Chemical** | **Health Concerns** | **TWA (ppm)** | **STEL (ppm)** |
| **Acetaldehyde** | Irritation of eyes, nose, and throat; respiratory problems; cancer | 100 | 150 |
| **Formaldehyde** | Severe irritation of eyes, nose, and throat; cancer | 0.75 | 2 |
| **Methanol** | Headache, nausea, vomiting, blindness; can be fatal | 200 | 250 (Some countries have a lower TWA) |
| **Ethylene Glycol (Residual)** | Nausea, vomiting, kidney damage; can be fatal | 25 | 50 |
| **Pure Terephthalic Acid (Residual)** | Skin, eye, and respiratory irritation | 1.472 | - (Not established for most countries) |