

# ACMA Excellence Awards

## Excellence in Health, Safety, and Environment (HSE)

### Definitions and formulas

$$x^2 + \frac{b}{a}x + \left(\frac{b}{2a}\right)^2 = -\frac{c}{a} + \left(\frac{b}{2a}\right)^2$$

$$\left(x + \frac{b}{2a}\right)^2 = -\frac{c}{a} + \frac{b^2}{4a^2}$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2 - 4ac}{4a^2}$$

**ACMA**

2020

## Definitions / formulas for HSE Category

1. Employee Satisfaction score ( UOM = % ) **Total Employee satisfaction score for that year out of 100%**

2. Energy cost as a % of sales ( UOM = % )

**Total Energy cost for that year**

**=-----X 100**

**Total sales for that year**

3. Hazardous waste disposed / year (Tonnes OR Kilo lit)  
(UOM= Qty ) **Total hazardous waste disposed in that year in Tonnes or Kilo litters**

4. Highest noise level inside company ( UOM = db) **Highest noise levels in db in that year**

5. No of near-miss accidents ( UOM = Nos ) **Total number of incidences (where accidents just missed) in that year**

6. Medical expenses/ year/ employee ( For accidents / first aids / medicine) ( UOM = Rs. Lakhs ) **Total expense for accidents , First aids and medicine in that year**

7. Total absenteeism

**Total absent man-hours for that year ( Authorized + Unauthorized )**

**= ----- X 100**

**Total man hours for that year**

## Definitions / formulas for HSE Category Contd...

8. Use of Non conventional Energy as a % total energy ( UOM = % )

**Total Non conventional energy used in that year**

$$= \frac{\text{Total Non conventional energy used in that year}}{\text{Total Energy used in that year}} \times 100$$

**Total Energy used in that year**

9. % Waste water treated inside plant ( UOM = % )

**Total waste water treated inside plant in that year**

$$= \frac{\text{Total waste water treated inside plant in that year}}{\text{Total waste water generated in that year}} \times 100$$

**Total waste water generated in that year**

10. % employee using safety PPEs ( UOM = % )

**Total employees using safety PPEs in that year**

$$= \frac{\text{Total employees using safety PPEs in that year}}{\text{Total employees required to use safety PPEs in that year}} \times 100$$

**Total employees required to use safety PPEs in that year**

11. % Leaking machines (Oil, Coolant, gas etc.) ( UOM= % )

**Total leaking machines in that year**

$$= \frac{\text{Total leaking machines in that year}}{\text{Total number of machines in that year}} \times 100$$

**Total number of machines in that year**

12. % of employees awarded by you for HSE improvements ( UOM = % )

**Total employees awarded for HSE improvements in that year**

$$= \frac{\text{Total employees awarded for HSE improvements in that year}}{\text{Total number of employees in that year}} \times 100$$

**Total number of employees in that year**

## Definitions / formulas for HSE Category Contd...

13. No of outside people (contractors/ visitors) met with an accident inside plant ( UOM = Nos. ) **Total Number of people met with an accident other than employees in that year**
14. Safety audit score ( UOM = % ) **Average Safety audit score for that year out of 100%**
15. Total man-days lost due to accidents ( UOM = Days ) **Total man-days lost due to accidents in that year ( For these days employees could not work )**
16. Trees in the total area of plant (do not consider bushes) (UOM = Trees/ acre )

**Total number of trees inside plant campus in that year**

= -----

**Total plant area in acre ( Built up & open ) in that year**

17. 5 S average score ( UOM = % ) **Average 5 S score for that year for entire plant in that year out of 100%**
18. Average illumination levels at night for working areas ( UOM = Lux ) **Average lux levels at night across plant in working areas in that year**
19. Awards received for HSE ( UOM = Nos ) **Total number of awards received for HSE in that year**
20. HSE related training man-hours/man / year ( UOM = Hrs )

**Total training man-hours for HSE in that year**

=-----

**Total employees in that year**

## Definitions / formulas for HSE Category Contd...

21. Improvements related to HSE/ Employee/ Year ( UOM = Nos. )

**Total number of HSE related Improvements in that year**

= -----

**Total number of employees in that year**

22. No of Legal notices/ Court cases/ penalty related to HSE ( UOM = Nos. ) **Total number of Legal notices/ Court cases/ penalty related to HSE in that year**

23. Max height for material storage ( UOM = Feet )  
**Maximum height for material storage in plant in that year**

24. Mock drills conducted in a year ( UOM= Nos. ) **Total Mock drills conducted in that year**

25. Sales ( Total :Domestic + Export + Aftermarket ) ( UOM = Rs. Cr.) **Total sales for that year in Rs. Cr**