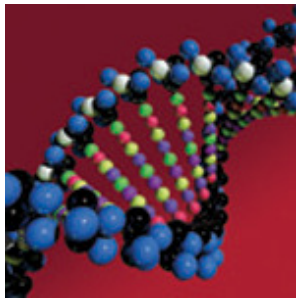


# Alternative Approaches to Environmental Aspects Assessment



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## Agenda

- Definitions of *Aspect* versus *Impact*
- Environmental *Aspect* Groups
- Options for *Assessing Significance*
- Example Contents for *Aspects Register*
- Common Gaps in *Aspects Registers*



Definition:



- **Environmental Aspect**

an “element of an organisation's activities, products or services that can *interact* with the environment”



Definition:



## ■ Environmental Impact

“any *change* in the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products, or services”



# Environmental Aspect Groups



*(the **six** ways we interact with the environment)*

- **Air Emissions**
- **Water Discharges:**
  - Surface Water
  - Sanitary Wastewater
  - Process Wastewater
- **Solid & Other Waste:**
  - Hazardous Waste
  - Non-Hazardous Waste
- **Resource & Material Use:**
  - Energy Use
  - Water Use
  - Materials
- **Land & Groundwater Contamination**
- **Other Local & Community Issues**





## Options for Assessing Significance

- 1. Numerical Risk Assessment e.g.
  - Quantity / Likelihood x Consequence
  - Those subject to legislation must be significant
  
- 2. Non Numerical Approach
  - Based upon a number of criteria
  - If one or more applies then the aspect is significant





## Assessing Significance of Aspects

- 1. Likelihood or Quantity (score 1 to 5)
  - Use Likelihood for abnormal / emergency situations
  - Use Quantity for normal everyday activities
  
- 2. Consequence (score 1 to 10)
  - Very high = 10
  - Negligible = 1





## Scoring Likelihood / Quantity

- Virtually certain incident or major emission / resource use = 5
- Very likely incident or high emission / resource use = 4
- Likely incident or moderate emission / resource use = 3
- Unlikely incident or minimal emission / resource use = 2
- Very unlikely or negligible emission / resource use = 1







## Scoring Consequences

- Severity of environmental impact
- Degree of legislation / non-compliance
- Significance of resource Implications (energy, water etc)
- Subject to corporate policy commitment / objective
- Causes complaints
- Concern of Stakeholders





## Non-Numerical Approach – Example Criteria

- 1. Is the aspect subject to legal requirements?
- 2. Is the aspect subject to a policy requirement / corporate commitment?
- 3. Is the quantity significant? (e.g. cost)
- 4. Is the aspect subject to significant public opinion or complaints?

*If any of the above answer 'yes' then automatically becomes significant*



# Pros and Cons of Numerical versus Qualitative Approach



- Numerical approach results in ratings which can help prioritise issues for action
- However, often you are comparing ‘apples’ and ‘oranges’ on the same scale
- Qualitative is easier to apply and also easier to justify reasoning to assessors
- Remember – there is always going to be an element of subjectivity and all you need to be able to do define your approach and justify it.





## Example Contents for Aspects Register

- Activity
- Aspect
- Impact
- Significance Evaluation
- Control Summary





## Common Gaps in Aspects Registers

- Contractor's Activities
- Supplier's Activities
- Employee Transport
- Fire Water
- Cleaners Floor Washings
- Compressor Condensate
- Boiler Blowdown
- Sprinkler Testing & Draindown

