

ASTON UNIVERSITY
Sustainable Development
CASE STUDY

YEAR 1

DESIGN OF A:

CHLORINE-VINYL CHLORIDE-PVC
PLANT

Structure:

Single discipline - Chemical Engineering

8 day intensive, 5 MEng Students

Final presentation as a public enquiry
with an invited audience

Student Roles:

Each student was assigned, by drawing lots, to present and defend a different point of view:

The Company

The Local Council

The Environmental Activist

The Local Residents

The local Newspaper (who acted as chairman)

Students working methods

Students working as a team to provide a simplified technical design.

A high proportion of the time dedicated to the understanding of the environmental and social aspects of the construction, operation and long term effects of the plant and the products, including the different methods of disposal of the PVC products.

Tutor's Roles:

Tutors present during the 8 days

Regular meetings with the students.

To provide the initial remit of the project.

To provide some of the missing information.

To provide multi-disciplinary information.

To provide a list of relevant web sites.

To provide general advice to arrive at a reasonable conclusion within the time available.

General Conclusion

The students achieved a high degree of understanding of the social issues and of the many, sometimes contradictory, points of view which can be generated from the same common information