

# **The Groundhog's New Clothes**

## **Case Abstract**

This case integrates professional ethical dilemmas in the context of a quantitative production planning problem. The pedagogical objectives are for students to increase their awareness of ethical dilemmas specific to operations research and management science, understand outcomes and trade-offs of the decisions, and develop the reasoning ability to justify a final solution to the situation. The dilemmas are embedded in a production planning problem that simultaneously gives students practice in technical analysis such as optimization. This emphasizes the role of mathematical models and other forms of quantitative analysis in decision environments that include qualitative concerns such as worker loyalty and environmental responsibility that cannot be modeled explicitly.

While the technical analysis required to produce the aggregate production plan is important, the students' justification of their recommendations is of equal interest. The case asks the students to identify the stakeholders who will be affected by the decision and to determine how they will likely be affected by each alternative. The students must decide whether the potential cost savings justifies laying off workers and using a potentially environmentally-irresponsible supplier.

This case fits easily into a junior-, senior-, or Master's-level course in manufacturing systems, operations management, or optimization modeling. It is appropriate for a written assignment (either individual or group) as well as class discussion. Neither the students nor the instructor needs prior formal ethics instruction. Teaching notes provide background material on the ethical decision-making process and ethical theories as well as additional questions to generate class discussion.