

**SOLVING MAJOR POLLUTION PROBLEMS:
A NEW PROCESS MODEL**

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1 SUMMARY

Existing process models describe the general social and institutional processes involved in the solution of environmental problems and in the solution of public policy problems. These existing models do not include many processes specific to pollution problems and in most cases they do not included a quantitative assessment of the likely duration and strength of the processes involved.

In this work I have proposed a process model with nine specific processes involved in the solution of major regional pollution problems. I have named the nine processes: affected party, harbinger, public concern, political action, inquiry, body of knowledge, legislation, allocation of funds, and organisational change. The processes were selected to be consistent with general processes of the literature models and to reflect actual processes that have been involved in the solution of pollution problems in Sydney since European settlement.

I have used five case studies of regional air and water pollution problems from the Australian cities of Melbourne and Sydney. The nine proposed processes were identified in each of the case study problems and were quantified by the use of indicators that measured the strength and duration of the individual process. This quantification was used to demonstrate empirically that the proposed process model provides a good approximation of the social and institutional processes involved in the solution of major regional pollution problems. It is argued that because the individual processes exist in each case study, have been quantified and are sufficiently similar, the model represents an acceptable approximation of reality.

The new model can provide a framework for a better understanding of the social and institutional process that are likely to be involved in the solution of emerging major regional pollution problems. This better understanding could lead to better planning and management of solutions to these problems.

Future research could assess the universality of the model by studying other regional pollution case studies e.g. other pollutants, other Australian cities, and overseas cities. Future research could also develop a process model for the solution of global pollution problems to provide a similar framework for understanding of the social and institutional processes involved in the solution of global pollution problems.

DECLARATION

This is to certify that this work has not been submitted for a higher degree to any other university or institution, that the work is original, and that where the work of others has been used it has been referenced in the text and to the section titled “References”.

Robert Staib