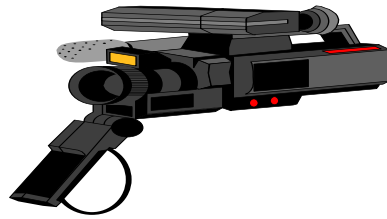


# Time Lapse Video Study

## Project Description

A time lapse video recorder is set up on the west side of Okanagan Lake overlooking the City of Kelowna. Video footage is recorded 24 hours a day, 7 days a week. Environment Canada



Mountain Weather Services Office, the Regional Air Quality Committee and the Okanagan Air Quality Technical Steering Committee are particularly interested in those days that have meteorological conditions that favor bad air pollution episodes. The data is taken and used for education purposes, for scientists to confirm meteorological predictions and to analyze daily pollutant development and transport. CHBC Television News plays portions of the previous week's time lapse film on Friday newscasts. Hopefully, there can be clips of poor air quality episodes to show on this web site in the future.

Funding for this project came from the Canadian Petroleum Products Institute (CPPI) Clean Air Research Fund.

## Project Background

Time lapse video study is beneficial because it allows the viewing time of long-term dynamic events to be reduced to a more practical time period. The videos can also be viewed at various speeds, in order to enhance the media. Time lapse video study has been used for many applications and projects, and in other regions, has been used to study the development and transport of pollutants.

In the Central Okanagan, localized airflow and air mass stability, which influence air pollution episodes, is for the most part unknown. However, the weather patterns combined with local topography and population growth, make air pollution a high risk in the Okanagan Valley. More information needs to be obtained to understand the current problem and the potential for future problems.

Completing a time lapse video study for areas in the Central Okanagan would be very beneficial for several groups including the Okanagan Air Quality Technical Steering Committee (O.A.Q.T.S.C.), City of Kelowna, Regional District of Central Okanagan and the BC Lung Association. The data obtained can be used to:

- Confirm meteorological predictions
- Analyze daily pollutant development and transport
- Effectively educate the general Public on air pollution in the Okanagan airshed.