SUMMARY

Preventive Maintenance concepts were studied so that the best applicable system could be choosen for the Clayblock Plant at Trinidad Aggregate Products, Longdenville under study. The Factory organisation, maintenance methods and equipment were analysed. There are many unique features associated with the Clayblock Factory, which necessitate a unique approach to Preventive Maintenance.

A manual Preventive Maintenance System was first developed and implemented. All systems and methods involved in developing the systems are explained.

Two approaches to computerising the PM System at TAP were considered:-

(a) Utilizing a package program.

(b) Developing an inhouse computerised system.

Various factors were considered in evaluating both proposals including cost, advantages and disadvantages of either alternative.

A survey was done on existing available computerised programs and this is discussed at length. Generally it was found that :-

(a) PM is a module of a total maintenance system.

(b) Most were inflexible.

(c) A few offered a comprehensive package and some were developed for specific industries.

(d) There is a 'hidden' cost factor with respect to training, program configuration and access code which could in some packages almost double the cost of the total investment.

The Media-Flex Software System available from ACME Visible Records Ltd was found to be the best packaged system for TAP. On the other hand, using Ashton Tate's DBase 111 a PM model was investigated and the estimated cost to develop and implement this model was compared to the cost of a package program.

The estimated cost of acquiring and implementing the Media-Flex Software package was calculated to be $ 52,760.00. The estimated cost to develop and implement an inhouse computerised PM Program was $39,080.00.

Both alternatives were evaluated over an eleven month period. Since the inhouse system would take longer to develop and implement than the package system, it was discovered that the maintenance savings lost as a result, would make the inhouse system more expensive by $19,630.00. However, because of the distinct advantages of the inhouse system over the package system, it was recommended that the inhouse system be developed and implemented.

The potential savings to be obtained with the implementation of a computerised PM Program was calculated to be $82,150/year.

Improvements of the computerised system, future developments and implementation have been discussed and recommendations made.