



Room 2006, 20th floor, Murray Building, Garden Road, Central, Hong Kong
Tel: 848 2551 Fax: 845 3489
香港中環花園道美利大廈20樓2006室 • 電話: 848 2551 傳真機: 845 3489

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for information

New Airport Projects Co-ordination Office Presentation to the Advisory Council on the Environment 24 April 1995

Progress Report on Environmental Protection Measures of ACP Projects - NAPCO's Role in Environmental Co-ordination

NAPCO provides a co-ordination role in environmental matters for ACP projects. One aspect of this role has been the preparation and implementation of ACP Procedure 312 - Environmental Co-ordination, which outlines project compliance with the applicable environmental standards, rules and regulations of Hong Kong and guidelines for conducting environmental monitoring and audit.

Within the environmental co-ordination role, NAPCO:

- participates with government departments and branches in the development of environmental guidance;
- liaises with EPD on consistency in environmental policies affecting ACP projects;
- promotes early resolution of environmental concerns with works agents and EPD;
- encourages close cooperation with non-Works Branch entities with regard to environmental protection issues;
- encourages the adoption of cost-effective environmental protection measures; and
- provides information to LegCo, ExCo, District Boards and the public concerning the environmental issues associated with ACP projects.

The forthcoming presentation from each of the ACP projects will focus on the Status of the EIA Implementation Schedule planned and agreed with each project proponent and EPD.

The EIA studies conducted for the ten ACP projects during 1991-94 have generally demonstrated an expectation of acceptable environmental performance for projects when they are operational. However, the EIAs predicted that impacts due to construction, while generally temporary may be severe at times; others may not be severe but extend a longer period of time (in excess of a year). As part of the EIA process, direct measures for mitigation of impacts were addressed in project design and construction specifications. Where appropriate, conditions have been placed in construction contracts to minimise impacts on air and water quality and ambient noise.

All ACP projects are monitored during construction by either the project office resident site engineer staff, a consultancy to a franchisee or, in the case of West Kowloon Project Area, a consultancy to EPD (Environmental Project Office or ENPO) funded by the project proponent. Monitoring requirements are site specific and follow recommendations outlined in respective EIAs; these generally encompass air, water and noise.

Environmental compliance requirements are inserted into the contract documents administered by the Works agents. Each project office is required to submit monthly reports to EPD that include results of environmental monitoring and audit of the works in progress. This information forms the basis of evaluating the actual impact of project works on the local environment as compared with the predicted impacts in the EIA. It is at this working level between EPD and the Works agents that compliance issues are addressed and mitigation measures are assessed.

NAPCO chairs an Environmental Working Group that is comprised of representatives from each ACP project office as well as EPD to discuss relevant and applicable environmental issues and regulations.

New Airport Projects Co-ordination Office
April 1995

North Lantau Expressway

Presentation to the Advisory Council on the Environment on 24 April 1995

Progress Report on Environmental Protection Measures of ACP Projects - North Lantau Expressway

North Lantau Expressway (NLE) consists of three contracts: Tai Ho, Yam O and Tung Chung sections. During the project design stage and preparation of EIA Reports environmental mitigation measures were identified to minimise impacts on air and water quality and noise due to construction activities. The contract documents incorporated appropriate environmental protection requirements and guidelines for implementing mitigation measures. The following are some of the mitigation measures being undertaken and implemented :

Air Quality

Mitigation of dust undertaken during the design and implementation phase include:

- water spraying on haul roads
- limit vehicle speed
- use of marine fill
- use minimum practical charge for blasting
- enclose/cover stockpiling materials

Water Quality

The following mitigation measures are required under all contracts and implemented:

- liquid and solid wastes are collected and delivered to landfill site
- chemical wastes are collected and delivered to the Chemical Waste Treatment Facility at Tsing Yi
- marine dredging, transportation and dumping are carried out in accordance with agreed procedures under close supervision.

Noise Control

Mitigation of noise at source by:

- silencing of equipment,
- use of quieter equipment
- proper siting of equipment,
- proper maintenance of equipment,
- scheduling noisy operations during day time.

Air conditioners have been installed at the Buddhist Youth Camp in accordance with the EIA.

Environmental Monitoring and Audit (EM&A)

EM&A of air and water quality and noise control of construction activities is carried out by a team of 8 full-time resident site staff. Regular and frequent testing and monitoring have been carried out in accordance with standard procedures prepared by NAPCO. Monthly reports are submitted to EPD. Coordination meetings with EPD and NAPCO are held monthly at both office and site levels to review environmental issues.

Central Reclamation, Phase I - Engineering Works

Presentation to the Advisory Council on the Environment

24 April 1995

Progress Report on Environmental Protection Measures of ACP Projects - Central Reclamation, Phase I - Engineering Works

A focused environmental impact assessment study of the Central Reclamation Phase I was completed in October 1992.

The water quality modelling indicated that some deterioration in water quality is likely in the vicinity of Star Ferry, but the effect would not be severe. The study proposed a number of mitigation measures to reduce pollution loads entering the water bodies. These include regular desilting of trunk sewer, relaying of some sewers and realigning the proposed stormwater outfall. Special measures for dealing with removal of contaminated mud is required.

The study has indicated that there would be no air quality problems with construction activity and construction noise problem could be overcome with the provision of quiet equipment and other noise mitigation measures.

Water Quality

Contract clauses have been specified to govern the construction equipment, the working method and disposal of contaminated mud at East Sha Chau as recommended, in addition to require the compliance with a set of recommended water quality objectives at all times.

Regarding the recommended mitigation measures, desilting of trunk sewer and some relaying of the sewers have been carried out. Further sewerage improvements and realignment of stormwater outfall will be done shortly. Some of the mitigation measures will however be implemented in conjunction with the Central, Western and Wanchai West Sewerage Master Plan for cost-effectiveness. This will also minimise disturbance to the general public.

Air Quality

Dust suppression measures such as vehicle wheel washing, water spray, etc. are undertaken during construction. To date a sizeable part of the reclamation (the east and west bunds) has been completed and the air quality has met the recommended objectives.

Noise Control

A noise limit of 75dB(A) on construction noise from the project has been imposed under the contract. Monitoring has shown that generally there has been no problem.

Environmental Monitoring and Audit (EM&A)

Appropriate monitoring of water and air quality as well as noise levels of the reclamation work is undertaken by MTRC, to whom the Government has entrusted the construction stage project management.

**West Kowloon Reclamation
Presentation to the Advisory Council on the Environment
24 April 1995**

**Progress Report on Environmental Protection Measures of ACP Projects -
West Kowloon Reclamation**

A Comprehensive Construction Environmental Impact Assessment (EIA) Report for the West Kowloon Reclamation was completed in January 1991. The Assessment considered the following key areas of potential impact :

- (a) Noise emitted from plant used for dredging, reclamation and other construction works together with associated road traffic noise;
- (b) Effect on air quality resulting from dust and black smoke generated by construction activities;
- (c) Effect on water quality resulting from construction activities, the phasing of the reclamation and other works in the vicinity, including the West Kowloon Sewerage scheme; and
- (d) Effect on water quality of dredging and subsequent disposal of marine sediments.

The mitigation measures proposed were incorporated into contract documents for implementation as contractual obligations. .

Air Quality

Majority of land formation and reclamation works have been completed in December 1994. Mitigation measures employed to control dust include the deployment of water bowsers on haul roads, the restriction of vehicles to designated haul roads, the introduction of wheel washing bays at exits from the site and the paving of major haul roads. TSP monitoring was carried out every six days.

Water Quality

Marine sandfilling under both UA9/91 and CV91/02 were completed. Reclamation of the area south of the Jordan Road ferry pier under CV93/11 will only start in August 1995.

The water quality problem at the old WSD saltwater pumping station at Ferry Point has been resolved after the successful commissioning of the new WSD saltwater intake in December 1994. The odour problem caused by the temporary drainage channel is likely to be prevalent at least until August 1995, after which the flow can be diverted into the new culvert.

Noise Control

Noise control measures were implemented through the use of silenced equipment or quiet working methods and, in particular areas, specific limitations on the plant noise level.

Following the completion of majority of the land formation and reclamation works in December 1994, noise generated from the dredging and sandfilling activities is no longer significant. In response to a request by ENPO, the UA16/92 Contractor has supplied a vibrating hammer to replace the drop hammer initially used for piling adjacent to Ferry Point.

Environmental Monitoring and Audit (EM&A)

An Environmental Project Office (ENPO) was set up in August 1992 to carry out environmental monitoring and audit based on data collected from the Monitoring Stations set up on site. Environmental quality performance limits have been agreed with EPD for air, noise and water quality. ENPO reports on a monthly basis to a steering group formed by PM/KDevO, NAPCO, EPD, HyD and CED.