FILE NAME: Oil Industry and American Petroleum Institute (API)

DATE: 1954 Mar

DOC#: API178

DOCUMENT DESCRIPTION: The Medical Bulletin - Men on Construction - Three Categories

THE MEDICAL BULLETIN

VOLUME 14 MARCH, 1954 NUMBER 1

CONTENTS

MEN ON CONSTRUCTION

DR. A. WARD GARDNER and
MR. A. H. GREEN
Esso Petroleum Company, Ltd.

FOREWORD BY DR. D. C. RENNIE

In considering the following report it is felt that a short description of the decisions reached at the start of construction and the overall arrangements made for medical attention, would be of interest.

The first question to be decided was the form the medical attention should take and the responsibility for carrying this out.

Fawley is a rural area 17 miles from the main Southampton hospitals, with one local General Practitioner and three residents some 4 to 5 miles away. It was estimated that some 6,000 men would be employed at the peak period. The Medical Department to the present Refinery was made responsible for the whole Medical Scheme for the construction period and for the camp, which was to be built.

This arrangement had three big advantages:—

1. The existing X-Ray and other ancillary equipment would be available for all employees, Contractors or otherwise.

2. The staff engaged could be offered a permanent job with pension, since the Refinery population would increase as the construction population fell. This enabled us to get staff who were keen on industrial medical work and wanted to remain in it. We got a far better type therefore than the man who was merely taking a temporary job for the sake of the money.

3. The Medical Officer already with the Company, knew the area, the hospital and health authorities, and the local practitioners, and could, therefore, make necessary contacts straight away.

Under paragraph 1 either duplicate equipment and staff would have had to be acquired and extra accommodations provided, or considerable time be lost sending many cases unnecessarily to hospital for X-Ray, Laboratory checks, etc.

Under paragraph
young enthusiastic
Diploma and wanted

Under paragraph 3

(a) Local hospita
assistance particula
operations and the p
carried out by the
advantage to the run

(b) The Camp wh
Doctor and a hospita
the Medical Officer
blessing. Again this
point of view and
Department.

(c) The local Doc
contacted and undert
for members in the
This functioned well
to which they were e

This Report gives
further remarks are n

1. The Safety Engi
Inspector, and thus
Acts and the relevan
as the main Contrac
and could not be expe
This gentleman coop
and thereby added to

2. The Doctor appo
able man. The fact th
available within min
gave a feeling of safe

Lastly I would like
done at considerable
heights, even up to

VEHICULAR ACCIDENTS: (a) vehicles colliding,

(b) vehicles colliding with men,

(c) men falling whilst attempting to board or leave moving vehicles.

WELDING: (a) arc-eye,

(b) metal fume fever. A few cases of this, due to welding or flame cutting of galvanized metal, were seen. In each case, the welder did not know there was any connection between the fever and his work.

X- AND GAMMA RAYS: All pressure vessels had the welding checked by radiation photography, and the supervision of the crews was undertaken. 1,000 milligrams of radium was in use at one time, although radioactive isotopes are now being used as a gamma ray source. The normal radiation protection methods were employed. The selection of personnel, blood counts, test films, results, etc., were the medical responsibility. Supervision of crews on the job and methods of work were the responsibility of the supervisor of welding. No effects of X- or gamma radiation were observed in persons employed in this work.

Remote risks: (a) ASBESTOS: From sawing insulation material. As a risk amongst construction workers asbestosis is a theoretical possibility. The insulation used consisted of 85% magnesia, 15% asbestos in block form. This was applied to the various structures and wired on. A very small quantity of dust was produced in this operation. Wet asbestos containing pug was used to fill in cracks and to mould round flanges. No dust arose from this.

(b) *EFECTS OF PITCH AND TAR:* Electrical conduit pipes coated in pitch were used. On warm sunny days men handling this pipe were seen with tar erythema ("smarts"). A few cases due to