



IVON WATKINS-DOW LIMITED

BOX 144 NEW PLYMOUTH NEW ZEALAND
PHONE 88-049 CABLES: FRUITFUL TELEX 3215
TELEGRAMS: FRUITFUL TELEX NEW PLYMOUTH

26 October 1978

City Engineer
New Plymouth City Council
Private Bag
NEW PLYMOUTH

CITY ENGINEER'S DEPARTMENT	
NEW PLYMOUTH CITY COUNCIL	
Date	9.11.78
From	
Referred to	
File No.	2956

ATTENTION : Mr Wickramasinghe

*Refer to
K + plan
9/11/78*

*Copy to - bus technicals
9/11/78*

Dear Sir

The following points apply to your letter dated 12 October 1978 concerning discharge of trade wastes.

Open Yard Areas

The enclosed plan indicates the open yard areas which discharge to the sanitary sewers in order to protect the stormwater system from contamination. The total area now involved is 730m² compared to the previous area of 2232m² reported in March 1977 in our report to the Council.

On the basis of a 5 year return period for a storm of 10 minutes duration and 90mm/hr intensity, the maximum run off would be 1095 l/min and this would be through the southern discharge point on the site.

Flows

IWD has 2 points of discharge into the city sewer system. Flow measurements have revealed the following figures -

	<u>Northern Point</u>	<u>Southern Point</u>
Daily average flow	110,000 litres	420,000 litres
Max daily flow 24 hours	110,000 litres	650,000 litres
Max hourly flow and time	5.0 litres/sec. occurs twice/week anytime Mon-Fri between 7am-5pm for ½ hour.	12.0 litres/sec occurs Mon-Fri anytime between 7am-5pm.
Max flow in any continuous period of 4 hours	7,000 litres	125,000 litres
Max batch discharge	6,900 litres for ½ hour	16,400 litres for 20 minutes

Quality

Results of effluent analysis are as follows -

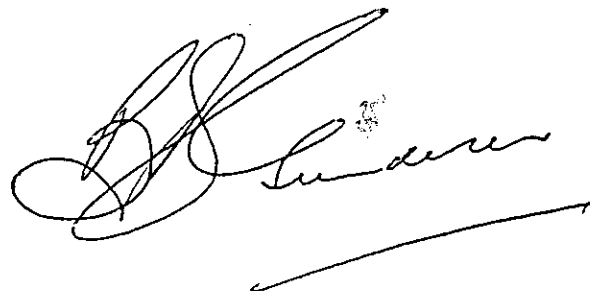
<u>Southern discharge</u>	<u>Mean (mg/l)</u>
Phenol	265
Suspended solids	115
Total Dissolved Solids	27,800
pH	7.0 - 12.5
<u>Northern discharge</u>	<u>Mean (mg/l)</u>
Total Dissolved Solids	730
pH	6.5 - 9.5

The present concentration of phenols in our effluent is not expected to be toxic to aquatic life in the receiving waters. Analyses to date of the effluent discharging from the Western Tunnel under Elliot Street reveal a phenol content one thousand times lower than expected and this would most likely be due to biological degradation in the sewer system.

We regret that the drainage crews have suffered discomfort from odours in the sewer but it is a matter of opinion where the odours are coming from and we feel phenols in our effluent would not be responsible.

Concerning the corrosive effects of our effluent discharge, concrete and asbestos cement would not be affected whereas steel sewer pipes would be classed as good for slow moving conditions and only fair for turbulent conditions.

Sincerely



B.D. Gundesen
Manufacturing Manager

13 November 1978

The Manager,
Ivon Watkins-Dow Ltd,
P.O. Box 144,
New Plymouth

Attention: Mr B. Gundeson

Dear Sir,

Re: Trade Wastes Discharges

Further to our discussions of the 8 November and your letter to us of the 26 October regarding Trade Wastes discharges I advise as follows:-

As indicated Council's consultants required information on trade waste discharges for a meeting with the Taranaki Catchment Commission and objectors to the water right application sooner than anticipated.

The company's description of trade wastes as set out in the 1974 March Report is further elaborated in your letter of 26 October, and our primary concern relates to phenols and the pH factor, which under trade waste by-laws, would, as you are aware be unacceptable.

In supplying further analysis in both the discharge at the boundary and the Eliot Street outfall (if possible) the company should include information regarding the phenoxy treatment and its ultimate objectives in reducing phenols in particular to acceptable levels.

The adoption of trade waste by-laws, which will cover standards at the company's boundary, is still under consideration. However, in relation to phenols and the pH factor these are likely to be not exceeding 5 mg/l and not less than 6 or higher than 9.

Presuming that there is no significant change in the data forwarded in March 1974 additional information on the following only would now be appreciated.

1. Statement of objectives on in plant treatment
2. pH.
3. Temperature.
4. Phenols, and soluble phenoxy herbicides.
5. Any other toxic or corrosive substances.

Note: Daily sewage flow ex Eliot Street outfall
18,000,000 l/p/d.

Yours faithfully,

W.J. McNicholas,
Chief City Health Inspector.