

ITEM	6
MANAGER'S REPORT NO.	17
COUNCIL MEETING	90/03/05

RE: PROPOSED INSTALLATION OF A VAPOUR RECOVERY
SYSTEM FOR CHEVRON TANK TRUCK LOADING RACK
AT 355 NORTH WILLINGDON, BURNABY

ACTING MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Planning & Building Inspection be adopted.

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TO: MUNICIPAL MANAGER

DATE: 1990 FEBRUARY 28

FROM: DIRECTOR PLANNING &
BUILDING INSPECTION

SUBJECT: PROPOSED INSTALLATION OF A VAPOUR RECOVERY
SYSTEM FOR CHEVRON TANK TRUCK LOADING RACK AT
355 NORTH WILLINGDON, BURNABY

PURPOSE: TO PROVIDE COUNCIL WITH INFORMATION ON PRELIMINARY PLAN
APPROVAL APPLICATION #9547.

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RECOMMENDATION:

1. THAT this report be received for the information of Council.

1.0 INTRODUCTION:

The Planning and Building Inspection Department has received a Preliminary Plan Approval application (#9547) from Chevron Canada Ltd. for the installation of a vapour recovery system for the existing tank truck loading rack at 355 North Willingdon.

This report is submitted consistent with the long-standing direction of Council to report on proposed oil storage or processing facilities in the Municipality.

2.0 BACKGROUND INFORMATION:

It will be recalled that recently Council received a report on Preliminary Plan Approval #9360 for proposed modifications to the Fluid Catalytic Cracking Unit at the Chevron Refinery. (Item 20 Manager's Report #55).

One of the conditions of P.P.A. #9360 was Chevron's undertaking to install a vapour recovery system in connection with the existing North Burnaby Tank Truck loading rack.

In the course of discussions with the oil company's representatives during the approval process, Chevron gave its commitment to construct the vapour recovery system by Mid 1991. The current application (P.P.A. #9547) has been submitted in accordance with this commitment.

3.0 GENERAL INFORMATION:

- 3.1 Chevron's current P.P.A. application (#9547) involves a 1.8 million dollar installation of a vapour recovery system at the existing tank truck loading rack. Installation of this equipment is part of the hydrocarbon emission reduction program which Chevron initiated concurrent with issuance of P.P.A. #9360 on 1989 September 18.

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3.2 The hydrocarbon vapours generated at the tank truck loading rack have been identified as the source of several neighbourhood odour complaints.

One of the primary sources of these hydrocarbon vapours occurs at the point of discharge during the transferring of petroleum products.

Vapours are released through the tank vents if splashing occurs within the tank which promotes vapour production.

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3.3 The proposed vapour recovery system is based on absorption of hydrocarbons on an activated carbon bed followed by regeneration of the carbon bed with air and recovery of the stripped hydrocarbons into a circulating gasoline stream. The proposed facilities will substantially reduce these hydrocarbon emissions. Chevron has indicated that the recovery rate of the subject system is 98%.

3.4 As a part of the installation of this facility Chevron has agreed to employ the following:

- a) All new pumps will be fitted with mechanical seals rather than packing.
- b) All new electric motors will be of high efficiency, quiet design.
- c) An adequate spare equipment stock will be maintained on-site to ensure a highly reliable operating factor.

3.5 This project has no effect on refinery throughput capacity. Its sole purpose is to reduce hydrocarbon emissions to the atmosphere.

3.6 Chevron's anticipated completion for this project is mid 1991.

4.0 MUNICIPAL DEPARTMENT REFERRALS:

This application was referred to the Burnaby Fire Prevention Bureau and the Environmental Health Departments for review and comment. Their comments are as follows:

4.1 Fire Prevention Bureau

"Installation of this facility to be done in accordance with good Engineering practise. Detailed structural drawings to be submitted to the Fire Prevention Office for approval."

4.2 Environmental Health Department

1. A detailed plan of the vapour recovery system along with a summary of its operation, generation of by-product and subsequent disposal (if any), and emergency procedures in an event of system failure must be provided to this Department.
2. The vapour recovery system shall be capable of collecting all organic vapours and gases, with a vapour return or disposal system capable of processing such vapours or gases so as to prevent their emissions to the atmosphere at an efficiency of at least 95% by weight (Requirements as per Santa Barbara County Air Pollution Control District - Rules and Regulations).

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3. All pipings, valves and fittings must be vapour tight.

5.0 CONCLUSION:

The installation of this proposed Vapour Recovery System will substantially reduce hydrocarbon emissions to the atmosphere from tank truck loading operations. This project has no effect upon refinery throughput capacity and represents a necessary step in the fulfillment of a condition of a previous P.P.A.

Chevron's application has been reviewed by and has received favourable comments from the Environmental Health and Fire Departments. The Planning and Building Inspection Department will continue to work with Chevron to ensure that this proposal satisfies all other relevant Bylaw requirements prior to issuance of Preliminary Plan Approval.

This report is submitted for the information of Council.


A. L. Parr,
DIRECTOR PLANNING &
BUILDING INSPECTION

TA/ds
Attachment
cc: Chief Public Health Inspection
Chief Fire Prevention Officer

SEE FACET B-26

PLAN 49050

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PLAN 49048
PLAN 49049
PLAN 49050
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M3

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+ PLAN + 49045 +

CHEVRON 43
4483

L.187

+ + +

APPROXIMATE LOCATION OF
TANK TRUCK LOADING RACK

M7

4329	4331	4333	4335	4337	4339	4341	4343	4345	4347	4349	4351	4353	4355	4357	4359	4361	4363	4365	4367	4369
										Bik. 27	1	2	8	2						
										23				20						

4336	4344	4352	4360	4368	4376	4384	4392				
				F	H	J	L	M			
				Bik. 22			9	1	3	5	

4335	4343	4351	4359	4367	4375	4383	4391				
PLAN				Q	9	1	3	5			
U				S	O	N					

4330	4332	4336	4340	4344	4348	4352	4356	4360	4364	4368	4372	4376	4380	4384	4388	4392	4396	4400		
				10	B	C	14	37	38	17	18									
				1282	10812	1282	21541	1282												

4327	4331	4335	4339	4343	4347	4351	4355	4359	4363	4367	4371	4375	4379	4383	4387	4391	4395	4399	4403	4407
				1282	10577	PLAN	1282													
				26	W1/2	E1/2	22	19												

4400	4408	4416	4424	4432	4440	4448	4456	4464	4472	4480	4488	4496	4504	4512	4520	4528	4536	4544	4552	4560	4568	4576	4584	4592	4600
										6	10	13	15	18											
PLAN 1282										10287	PLAN	1282													

4405	4413	4421	4429	4437	4445	4453	4461	4469	4477	4485	4493	4501	4509	4517	4525	4533	4541	4549	4557	4565	4573	4581	4589	4597	4605
				33	A	30	27	25	22	19	19														
PLAN 1282				74630	1282	16058	PLAN	1282																	

4404	4406	4410	4414	4418	4422	4426	4430	4434	4438	4442	4446	4450	4454	4458	4462	4466	4470	4474	4478	4482	4486	4490	4494	4498	4502
				3	1	2	6	B	D	C	12	15													
1282				74630	1282	16058	PLAN	1282																	

4405	4409	4413	4417	4421	4425	4429	4433	4437	4441	4445	4449	4453	4457	4461	4465	4469	4473	4477	4481	4485	4489	4493	4497	4501	4505
				34	32	30	28	26	23	20															
15417				PLAN	Bik. 20	1282																			

Date:
90-FEB-28

Scale:
1:2000

Drawn By:



SKETCH SHOWING APPROXIMATE LOCATION OF PROPOSED NEW VAPOUR RECOVERY SYSTEM AT CHEVRON'S EXISTING TANK TRUCK LOADING RACK.
355 N. WILLINGDON.
P.P.A. # 9547