

ITEM	5
MANAGER'S REPORT NO.	8
COUNCIL MEETING 95/02/20	

1995 February 15

TO: CITY MANAGER

FROM: DIRECTOR PLANNING AND BUILDING

SUBJECT: 3100 UNDERHILL AVENUE
PRELIMINARY PLAN APPROVAL #11480

PURPOSE: To provide information to Council on the use of a double seal system versus a dome type top for the proposed storage tank located at Imperial Oil Limited's Loughheed Terminal at 3100 Underhill Avenue.

RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

This department prepared an information report for Council on 1995 February 13 with regards to a Preliminary Plan Approval Application to permit the construction of a new 19,600 barrel oil storage tank and associated piping in an existing tank lot area for Imperial Oil Limited.

Council adopted the information report with a request for further information as to the use of a double seal cover versus the use of a dome top.

The applicant has noted that dome roofs such as those used at the Trans Mountain storage facility in Burnaby are normally selected because the stored product, such as crude oil, contains either hydrogen sulfide or mercaptans. Hydrogen sulfide is a possible health hazard and mercaptans, even in small quantities, can emit an offensive odour. The dome roof is used to collect vapours (much like a fume hood) which are treated before release to the atmosphere.

The proposed tank at Loughheed Terminal will be storing premium gasoline only. This product does not contain either hydrogen sulfide or mercaptans. The fixed cone roof with floating cover design is widely accepted as the current standard in tank emission control for storage of this type of product, and the GVRD's Air Quality Management Plan for the Fraser Valley recommends the use of floating covers with double wiper seals for this type of service.

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The applicant proposes to use a Sandborn brand floating cover in the fixed cone roof tank. The floating cover has double wiper seals around the perimeter to keep vapours in the liquid phase and to reduce emissions.

Our Environmental Health Department has concurred with the suitable use of a floating cover as proposed and indicates as follows:

"The purpose of a dome roof is to collect noxious gases such as hydrogen sulphide and/or mercaptans which are normally found in crude oil. However, since the proposed above ground storage tank is to be used only for premium gasoline - which does not normally contain these noxious gases - a dome roof would not be required."

Unless otherwise directed by Council, this department will continue with approval and issuance of the PPA.



D. G. Stenson
DIRECTOR
PLANNING AND BUILDING

PJA:hr

cc: Director Engineering
Chief Environmental Health Officer