

- 1 Q. With reference to "Section 4 - Install Evacuation Life Raft and Two Fixed Platforms
2 to Allow Vessel Access" of Hydro's report on the Refurbishment of the Marine
3 Terminal at the Holyrood Thermal Generating Station (page 31 thereof), Hydro
4 relates that the provision of the secondary egress, as outlined at page 23 of the
5 Hatch report, is essential.
6
- 7 (a) To the date hereof have there been any instance in which an evacuation has
8 been required but egress via the shore arm link has been prohibited? If yes,
9 please provide details;
- 10 (b) Has there ever been a "man overboard" situation at or near that section of
11 the jetty?;
- 12 (c) Please provide copies of any incident reports filed by Hydro employees,
13 within the past five (5) years, with respect to life safety issues at the Marine
14 Terminal;
- 15 (d) Please provide a detailed breakdown of the costs associated with the
16 installation of an evacuation life raft and two (2) fixed platforms at the
17 Marine Terminal; and
- 18 (e) Please provide a detailed breakdown of all life safety components of this
19 project, including the costs of each such life safety component.
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- 22 A. (a) To date there has not been any instance in which an evacuation has been
23 required but egress via the shore arm link has been prohibited.
- 24 (b) While there has never been a "man overboard" situation at or near that
25 section of the jetty, the absence of such an event to date may be the result
26 of good fortune, and should not be construed as a predictor of future life
27 safety issues.

Holyrood Thermal Generating Station Marine Terminal Refurbishment

- 28 (c) See attached listing of safety concerns and incidents since 2007.
- 29 (d) The detailed breakdown of the cost associated with the installation of an
- 30 evacuation life raft and two fixed platforms at the Marine Terminal is
- 31 contained on page B103 of the report. The approximate cost breakdown is
- 32 shown in Table 1 below.

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34 **Table 1: Evacuation Life Raft and Fixed Platforms Cost Breakdown**

Item	Description	Qty	Units	Materials/Equipment		Contractor Installation		Total
				Unit Price	Amount	Unit Price	Amount	
1	Emergency Evacuation Vessel	2	ea	\$10,000	\$20,000	\$10,000	\$20,000	\$40,000.
2	Fixed Platforms	2	ea	\$50,000	\$100,000	\$140,000	\$280,000	\$380,000.
3	Safety Vessel/Safety Watch	200	hrs	-	-	\$180	\$72,000	\$72,000.
4	Engineering	1	Lot	-	-	-	-	\$100,000.
5	Contractor Onsite Facilities	1	Lot	-	-	-	-	\$74,400.
6	Overhead and Profit	1	Lot	-	-	-	-	\$12,000.
7	Contingency	1	Lot	-	-	-	-	\$135,680.
TOTAL:								\$814,080

- 35 (e) A detailed breakdown of all life safety components of this project is
- 36 contained on page B103 of the report. The approximate cost breakdown is
- 37 shown in Table 2 below.

Item	Description	Qty	Units	Materials/Equipment		Contractor Installation		Total
				Unit Price	Amount	Unit Price	Amount	
1	Fall Arrest System	1	Lot	\$50,000	\$50,000	\$50,000	\$50,000	\$100,000
1	Emergency Evacuation Vessel	2	ea	\$10,000	\$20,000	\$10,000	\$20,000	\$40,000
2	Fixed Platforms	2	ea	\$50,000	\$100,000	\$140,000	\$280,000	\$380,000
3	Lighting Upgrades	1	Lot	-	\$30,000	-	\$85,000	\$115,000
4	Safety Vessel/Safety Watch	400	hrs	-	-	\$180	\$72,000	\$72,000
3	Engineering	1	Lot	-	-	-	-	\$225,000
4	Contractor Onsite Facilities	1	Lot	-	-	-	-	\$101,400
5	Overhead and Profit	1	Lot	-	-	-	-	\$20,000
6	Contingency	1	Lot					\$210,680
TOTAL:								\$1,264,080

Observation Number	Observation Category	Observation Title	Date Reported
2007000285	Condition	Lack of evacuation plan Holyrood dock	1/17/2007
2007000286	Condition	Poor air quality in jetty shack at Holyrood dock.	1/14/2007
2007000958	Condition	HRD - Marine Terminal Broken Light Fixture	3/12/2007
2007002095	Condition	HRD: AED approved users list not available	5/8/2007
2007002812	Condition	HRD Shoreline walkway	6/12/2007
2007002819	Condition	HRD - Dock lights need repairs.	6/12/2007
		HRD - Review feasibility of installing a exhaust fan in tanker powerhouse at Holyrood dock	7/4/2007
2007003049	Condition	HRD - Dock pumphouse repair chairs.	7/4/2007
2007003050	Condition	HRD - Dock pumphouse MCC improvements	7/4/2007
2007003051	Condition	The tanker pumphouse at the Holyrood Dock is filthy	7/5/2007
2007003063	Condition	Insufficient numbers of Operations personnel for Marine tanker discharge	7/6/2007
2007003083	Near Miss	HRD Install proper signage.	7/13/2007
2007003128	Condition	Bird droppings on Dock at Holyrood	7/15/2007
2007003144	Condition	Alders over grown on the walkway at shoreline	
2007003878	Condition	capatians... Holyrood	9/25/2007
2007003879	Condition	Dock MCC does not have Arc Fash ratings	9/25/2007
2007004064	Condition	Foot peddles for capstans at dock	9/25/2007
		Jetty - MCC Room and Storage Area has water on the floor	11/28/2007
2007005283	Condition	Slippery stairways and Platforms at shoreline	1/15/2008
2008000182	Condition	Supply of floater suits for Operations Department not adequate.	1/24/2008
2008000327	Condition	Oil Line at the Dock not pumped out following Tanker off-loading and Tank Gauging.X	1/29/2008
2008000373	Condition	Lifting device required for shoreline capstan at Holyrood Marine Terminal	1/29/2008
2008000375	Condition	Marine Terminal requires man overboard emergency response plan	2/9/2008
2008000553	Condition	Fender missing from dock at Marine Terminal.	10/3/2008
2008005073	Loss	Holyrood capstan board walk, Ground appears to be unstable	12/1/2008
2008006284	Condition	Operations truck doesn't have an operating spotlight.	12/8/2008
2008006455	Condition	HRD dock pumphouse intake duct is too low. High potential for head bumping.	3/24/2009
2009001590	Condition	Jetty is unsanitary	7/9/2009
2009004209	Condition	Life rings provided at the jetty are attached to coiled/knoted lenglths of rope that are tangled	11/6/2009
2009006647	Condition	employee slipped on the jetty shoreline boardwalk	12/7/2009
2009007232	Loss	Safety cleats on shoreline walkway were removed by contractor and not re-installed.	1/29/2010
2010000517	Condition	Dock shack Nitrogen bottles need replacing before tanker arrives	1/31/2010
2010000545	Condition	both sets of lighting on North and South ends of dock are not wotrking	2/9/2010
2010000746	Condition	HTGS,parking lot behind ERT building. No lighting in this parking lot,	2/24/2010
2010001131	Condition	Jetty Gate lock difficult to open	2/25/2010
2010001170	Condition		

2010001336	Condition	HTGS a complete set of vhf radios are required for the marine dock .	3/3/2010
2010001569	Condition	Jetty shack sump requires to be pumped out	3/13/2010
2010002287	Condition	Inside jetty shack - - The containment oil sump level is high and needs to be pumped down	4/11/2010
2010002799	Condition	Planks loose near southern most capstan	5/6/2010
2010003887	Condition	dock sump full	6/20/2010
2010003888	Condition	Tree leaning on power line	6/20/2010
2010004538	Condition	Marine Terminal support concrete encasement severely eroded	7/31/2010
2010004776	Condition	Surface of jetty covered with sea gull guano - please clean before tanker arrives	8/16/2010
2010005118	Condition	Valve 0-N1-V107 at the dock has a severe slipping hazard if needed to be accessed.	9/2/2010
2010005545	Condition	Expired warning sign still posted	9/15/2010
2010005960	Condition	Lights out at Jetty Shack	10/3/2010
2010006549	Condition	Marine Terminal - Warm-up shelters	10/26/2010
2010006663	Condition	Jetty Sump full of water	11/1/2010
2010007493	Condition	HRD, tanker off loading, above 10 degrees. Heat tracing on line not functioning properly.	12/10/2010
2010007615	Condition	Jetty Bumpers	12/18/2010
2010007616	Condition	Jetty Storage room heater	12/18/2010
2010007617	Condition	pipe line tree growth	12/18/2010
2010007618	Condition	Jetty water Dispensor	12/18/2010
2011000672	Condition	Tanker Gangway blocked off dock causing us to have to back down a slush and snow covered dock.	1/31/2011
2011001036	Condition	Failure of fuel oil line heat tracing caused a 4 day delay in unloading cargo from tanker MT Ares.	2/21/2011
2011001310	Condition	manhole cover identification	3/6/2011
2011001311	Condition	tank farm metal scrap	3/6/2011
2011001312	Condition	Tank Farm Lumber Scrap	3/6/2011
2011001313	Condition	# 1 F.O. Tank suction heater pipe access platform	3/6/2011
2011001522	Condition	Jetty shack - - the water dispensor is missing the kettle also needs to be replaced	3/16/2011
2011001628	Condition	Dock shack items	3/22/2011
2011002406	Condition	#4 tank suction heater enclosure lighting	5/1/2011
2011002407	Condition	Dock access ramp - - overhead lighting needs repair or replacement.	5/1/2011
2011002408	Condition	lights on shoreline walkway	5/1/2011
2011002409	Condition	Dock overhead lights	5/1/2011
2011004330	Condition	South west end of dock, the bumpers are in need of repair/replacement to wood facings	7/16/2011
2011004331	Condition	Dock sump full of water - needs to be pumped out	7/16/2011
2011005369	Condition	Dock road way at turn is severely rutted	9/2/2011
2011005370	Condition	Jetty rope room and shoreline walkway need lights replaced (present lights burnt out)	9/2/2011
2011005371	Condition	Jetty deck Cleaning required	9/2/2011
2011005372	Condition	The sump in the pump room on the jetty is full and needs to be pumped out.	9/2/2011
2011006109	Condition	All lights out on poles on jetty	10/2/2011

2011006219	Condition	Dock pump room door outer steel skin has rusted through and needs to be replaced	10/10/2011
2011006951	Condition	Marine Terminal Shore Line Board Walk - Ramps have missing "rungs"	11/10/2011
2011007259	Condition	Several Lights out on jetty boardwalk	11/28/2011
2011007423	Condition	#1 F.O. Tank suction heater enclosure entrance door needs to be replaced(Present door damaged)	12/5/2011
2011007424	Condition	#2 F. O. Tank suction heater enclosure west side door inside door knob damaged	12/5/2011
2011008056	Condition	ERT signed out Jetty keys to perform an inspection at night and alone.	12/30/2011
2012000088	Condition	No vehicle readily available for ERT	1/5/2012
2012000847	Condition	Fuel Line needs support	2/3/2012
2012000848	Condition	Tank farm snow clearing	2/3/2012
2012001274	Condition	HRD- while tying up tanker on Jan 31,2012 weather deteriorated rapidly	2/24/2012
2012001724	Condition	Security Gate Jetty - Main Lock had to be cut for access to service the March 14, 2012 Tanker	3/14/2012
2012002410	Condition	Onsite tank guagers from Saybolts were on the Dock without wearing floatation jackets.	4/17/2012
2012003643	Condition	Fuel line needs supports adjusted	5/29/2012
2012004291	Condition	dock sump full of oil/water	6/23/2012
2012004353	Condition	B & W employee was not wearing high visibility clothing while walking in the plant.	6/28/2012
2012004508	Condition	weed and alder growth around light oil tanks need to be controlled	7/8/2012
2012004509	Condition	Rags on drainage screen	7/8/2012
2012004510	Condition	Pilot ladder at North end of Marine terminal needs 3 steps or rungs replaced (Present rungs broken)	7/8/2012
2012004511	Condition	Weed and alder growth around the Light oil tanks need to be cut back or chemically controlled	7/8/2012
2012004512	Condition	Pilot ladder at the north end of the jetty needs rungs repaired or ladder replaced	7/8/2012
2012005175	Condition	Dock pump room access door has hole	8/14/2012
2012005751	Condition	Jetty pump house/Mcc room - - - communications radio not working	9/21/2012
2012006220	Condition	Marine jetty.Two access holes in the jetty deck have cement filler removed. Repair.holes	10/10/2012
2012006317	Condition	Hrd. Marine therminal jetty. Fermanite fitting on pumping line. Temporary repair Line condition	10/13/2012
2012006620	Condition	Temporary guardrails not in place for entire work area at Jetty	10/22/2012
2012007163	Condition	Fire system isolation valve # 19. I.D. fallen down	11/16/2012
2012007164	Condition	#2 Fuel oil tank suction heater enclosure Lights	11/16/2012
2012007591	Condition	dock sump full	12/2/2012
2013000002	Condition	Dock pumphouse storage section lights are burnt out	1/1/2013
2013000003	Condition	Dock shack oil pump needs some heat tracing. Cold temperatures make pump hard to start.	1/1/2013
2013000125	Condition	Holyrood.Marine Therminal.North loading arm cable slack.	1/9/2013

2013000539	Condition	No sign placed on danger tape used to rope off steam leak. HTGS unit #2 3rd floor.	1/29/2013
2013000658	Condition	Dock shack personal area needs to be cleaned - - -	2/3/2013