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LAMPIRAN 1

CREW LIST

NO.	Nama	Jabatan	D.O.B	LIZAH KEPELAHAN		BUKU PELAJAR		NOMOR	EXPIRY	SIGN ON
				TARUN	NOMOR	TGL.	NOMOR			
1	Rusnanto	Mister	30/Jun/72	6200663794N10109	29 Jun 2009	Y 012286	74 D42 2017	A 1845813	10-Jun-17	11 Juni 2015
2	Naufal	Chief Officer	28/Nov/84	6200406644820109	09 Dec 2009	Y 066786	04 Jun 2016	A 8655030	23-Jul-19	08 Juni 2015
3	Firmansyah Suwarnah	2nd Officer	5/May/82	62001437467830405	20 Sep 2005	W 948465	26 Jun 2016	A 7944107	15-Apr-19	08 Juni 2015
4	Charonyanto Hero Kalipadang	3rd Officer	9/Jul/88	6200262423330411	22 Mei 2011	B 064690	19 Mei 2016	A 921403	22-Apr-18	05 Agt 2015
5	Riswinda Ajirogo	4th Officer	7/Jan/92	6201471373330114	12 Sep 2014	X 030307	06 Mar 2017	A 8458160	16-Mar-17	24 Jun 2015
6	Budoyo Sumu Jamiko	Chief Engineer	24/Oct/78	6200442930710115	04 Mar 2011	X 063244	18 Sep 2017	A 9217762	21-Agt-18	21 Mei 2015
7	Dawang Yulianto	2nd Engineer	12/Jun/84	6200475991720311	28 Nov 2011	Y 020053	08 Feb 2016	A 5942327	13-Agt-18	06 Jun 2015
8	Abdi Agus AMF	3rd Engineer	17/Jun/83	620011579720211	28 Mar 2011	D 088363	19 Jun 2018	A 5260242	22-Mei-18	24 Jun 2015
9	Abdani Fauzi	4th Engineer	23/Oct/92	62001641491730115	29 Apr 2015	A 094158	09 Apr 2017	A 2438142	16-Mar-17	29 Jul 2015
10	Atas Yulianto	Electrician	12/Apr/81	6200471386010711	15 Jul 2011	B 034657	23 Jun 2016	A 747124	29-Jan-19	04 Feb 2015
11	Heri Kristianto	Bowstain	26/Apr/72	62005784160201	30 Nov 2001	Y 076950	05 Dec 2016	A 8231411	23-Mei-19	04 Mei 2015
12	Yoppy Juellen Wendo	Pumpman	24/Apr/71	62001093833300704	23 Apr 2004	Y 077474	04 Mar 2016	A 2630071	05-Agt-17	01 April 2015
13	Paulus Lekabena	AB	6/Feb/60	6200032654N60202	31 Jan 2002	V 075900	04 Nov 2015	A 1710205	07-Dec-16	05 Agt 2015
14	Baharia Wijaya	AB	1/Feb/64	6200488423060608	01 Sep 2008	W 042439	21 Mar 2016	A 8048454	13-Mei-19	03 Apr 2015
15	Ellan Nuryadin	Ordinary S	10/Nov/78	6211418364403144	07 Agt 2014	D 004926	15 Sep 2017	A 7413004	16-Oct-16	11 Mar 2015
16	Cipto Budiyono	Ordinary S	16/Jun/69	6200540089330715	24 Aug 2015	A 008712	28 Oct 2018	A 2536798	16-Mar-19	12 Sept 2015
17	Sukro	Ordinary S	28/Apr/71	62010475184010712	21 Dec 2012	B 034165	14 Jun 2018	A 3649148	21-Feb-19	05 Feb 2015
18	Denny Erichson Faugdale	Foreman	11/May/84	62040508372160702	09 Agt 2002	D 016559	24 Oct 2017	A 8941786	18-Dec-18	12 Sept 2015
19	Abdul Hamid	Other	28/Sep/71	620070534160201	22 Oct 2001	X 065547	27 Jul 2017	A 4859784	20-Feb-18	31 Agt 2015
20	Rolly Sinatupang	Other	9/May/75	62011061312160703	17 Feb 2003	B 034056	11 Jun 2016	A 0395555	18-Nov-19	07 Jan 2015
21	Mulyadi	Other	17/Jul/72	6200110186160709	04 Nov 2005	X 058027	15 Jul 2017	A 03942646	13-Agt-19	12 Sept 2015
22	Arjadi	Cook	4/Apr/83	6200380176107112	19 Nov 2012	B 068389	08 May 2016	A 8637299	07-Oct-19	19 Mar 2015
23	Syah Indra	Cook	10/Dec/75	620030653040112	20 Feb 2012	C 043471	18 Feb 2017	A 0619104	17-Mar-20	21 Jun 2015
24	Sanamudi Husori	Messboy	22/Mar/71	6201115399860710	13 Oct 2010	X 025695	15 Mar 2017	A 8801691	08-Sep-19	01 Apr 2015
25	Ruben Toding	Cadet Deck	21/Dec/75	6202412784010313	12 Oct 2012	C 086100	26 Aug 2017	A 4122232	31-Agt-20	31 Agt 2015
26	Sunaji	Cadet Deck	10/Jun/63	620040707501012	12 Oct 2012	C 086100	02 Jun 2017	A 7898572	10-Apr-19	12 Sept 2015
27	Layicha Nori Febrina	Cadet Deck	4/Feb/94	6200131808010714	23 Apr 2014	C 061838	05 Jun 2017	A 8544011	13-Jun-19	04 Oct 2014
28	Muhammad Kadiphi	Cadet Engine	24/Jun/93	6200218080010714	28 Mar 2014	D 060776	28 Apr 2017	B 0913911	23-Apr-20	07 Jan 2015
29	Reinbar Sapta Putra	Cadet Engine	9/Oct/1995	62110529001044	30 Jan 2013	C 061910	06 Jun 2017	A 8190615	19-Agt-20	19 Agt 2015
30	Herdimanng Widiamoko	Cadet Engine	31/May/94	6202415967010310	30 Jan 2013	C 061910	06 Jun 2017	A 8190615	16-Mei-19	07 Dec 2014

PERTAMINA
 Datang Dari : Cilacap
 Tujuan : Balongan
 Tanggal Tiba : 25-09-2015

Passpor
 Pelabuhan : Dumai
 Tanggal : 25 Sep 2015
 Naik/hoda,

Capt. Rustanto
 NP.747188

LAMPIRAN 1 SHIPS PARTICULARS

PERTAMINA		SHIP PARTICULARS	
Name Of Vessel	G E D E	Call Sign	P N Z P
Flag / Port	INDONESIA / JAKARTA	MMSI	525008066
Ship No.	JEH107C - 001	Inmarsat F Tel / Fax	870-773165404
IMO - Class Number	9 4 5 5 7 8 9	Sea Area	A1 + A2 + A3 (MF/HF)
Builder	Jiangsu Eastern Heavy Industries, co. Ltd	Inmarsat C	452502075
Keel Laid	18. Dec. 2009.	Email	pnzp@amosconnect.com
Launched	18. Dec. 2010.	Class :	+A1, Oil Carrier, (E), +AMS, +ACCU, VEC, TCM, AB-CM, CSR, ESP, SPMA, CPS
Delivered	19. May. 2011.	BKI - ABS	
Last Drydock	n/a - NB		
OWNER	PT. PERTAMINA (PERSERO) Jl.Merdeka Timur no.1A, Jakarta Pusat- 10110		
Technical Operator	PT. PERTAMINA (PERSERO) Shipping-Marketing and Trading Directorate Jl. Yos Sudarso no. 32 - 34 Jakarta Utara, Jakarta		
CONTACT	Commercial Fleet Manager : Toha Miharja (toha.miharja@pertamina.com)		
GRT	63,005	L.O.A.	244.5 mtr
NRT	24,134	L.B.P.	233.0 mtr
Summer Deadweight	88,312 MT	Breadth (max)	44.0 mtr
Lightship	21.110 Ton	Depth	21.5 mtr
Displacement (Design)	109,422 Ton	Summer Draught	12,700 mtr
Displacement (Scantling)	129,741 Ton	Scantling Draught	14,800 mtr
LCG	103.75 mtr	VCG	12.64 mtr
Engine	WARTSILA 7RT-Flex 58T-B	SMCR Speed	15.70 kts
HP / KW / RPM	20,753 / 15,260 / 105 RPM	CSR+15%S.M.	15.00 kts
Maker	(QMD) Qingda diyao warsila	Prop Dia / Pitch	Dia 7.15 mtr / Pitch 4.724 mtr
Anchors	2 x 10.125 kg, chain 90 mm	Anchor Chain Length	Port 13 Shckls / Stbd 13 Shckls
Mooring Winch	8 sets x 59.8 MT	Windlass Brake	69.0 MT
Bow Chain Stopper	2 x 250 T SWL, 76mm chain	Winch Brake	65.0 NT
Mooring Tails Fitted 16x	Nylon 11 M / 80 mm BS 94.5 T	Mooring Rope Additional	Nylon Rope x 220 M x 80 T
Cargo gear Cranes	Manif. 2x15 T, Wing Midship	Mooring Wire 16 x	Galvanize Steel WR (FC) x 69 T
Cargo Oil Pumps (turbine)	3000 m3 x 150 mlc x 3 sets	Provision Crane	2 x 5.0 T SWL
Cargo Stripping Pump	250 m3 / h x 130 mlc x 1 set	Ballast Pump (Motor)	1500-m3 x 35 mlc x 2 sets
Eductor Pump	300A x 300 A x 350 A x 1 set	Ballast Capacity	41,713.9 m3
Max Loading Rate	1 Arm 3.000 m³/hr / 3 Arm 9.000 m³/hr	Suez GRT/NRT	65,059.36 T / 58,931.62 T
Max. Temp. Loaded	68° C or 150.8° F	HFO Capacity 100% (full)	3300 m3
		MDO Capacity 100% (full)	200 m3
		Fresh Water Cap. 100%	850.2 m3
	Parallel body ballast = 229.83 m		Parallel body at SDWT = 239.96 m
Manifold per side:	3 x 20" JIS + 2 x 16" Vapour	Bridge to Stern	40300 mm
Bow to cntr Manifold	121260 mm	Bridge to Bow	204200 mm
Manifold to Ship rail	4400 mm	Bridge to Center Manifold	74640 mm
Manifold to Ship side	4600 mm	Stern to Center Manifold	123240 mm
Top of rail to center manifold	2100 mm	Centre to Centre	2500 mm
	Draft	Freeboard	Displ
	Meters	Meters	Tonnes
	DWT	DWT	Tonnes
	Meters	Meters	Tonnes
Lightship	3.124	18.193	21,110
Tropical(FW)	13.250	8.067	114,713
Summer FW	12.985	8.332	112,160
Tropical	12.965	8.352	111,968
Summer	12.700	8.617	109,422
Winter	12.435	8.882	106,883
Normal Ballast Condition	12.435	8.882	106,883
	MANOEUVERING:	RPM	Ahead Speed (kts)
		Ahd / Astn	Laden / Ballast
	Emergency Full	105 / 73.5	15.7 / 16.4
	FULL	74 / 65	15.2 / 16.0
	HALF	58	12.6 / 13.5
	SLOW	42	4.9 / 7.7
	DEAD SLOW	32	3.0 / 5.6
	TPC	95.94 MT SDWT	
	FWA	330 mm	

CAPT. RUSTANTO

LAMPIRAN 3
TRANSKIP WAWANCARA

A. DAFTAR RESPONDEN

1. Responden 1 : Juru Mudi
2. Responden 2 : *Pump man* (Operator pompa)
3. Responden 3 : Mualim I
4. Responden 4 : Mualim III

B. HASIL WAWANCARA

Wawancara ini dilakukan saat penulis melaksanakan praktek laut di MT.Gede, selama 04 Oktober 2014 sampai 11 Oktober 2015. Berikut adalah hasil wawancara dengan respondennya :

1. Responden 1

Nama : Alex
Jabatan : Juru mudi

Tanggal wawancara : 29 September 2015

1) Sudah berapa lama, bapak bekerja di atas kapal ?

Jawab :

Saya bekerja di atas sudah berjalan 5 tahun ini

2) Apa yang bapak ketahui, mengenai ruangan tertutup ?

Jawab :

Ruangan tertutup yaitu ruangan yang kurang ventilasinya

3) Pernahkah bapak mengalami kecelakaan kerja di dalam ruangan tertutup ?

Jawab :

Tidak pernah, tapi saya pernah melihat teman saya mengalami kecelakaan kerja di dalam ruangan tertutup. Saat melakukan pencucian tangki, dia tidak mengikuti *safety meeting* yang dilakukan oleh Mualim I. Dia langsung memulai pekerjaannya, padahal mualim I belum memberikan ijin kerja, dan dia mengalami sesak nafas karena kekurangan oksigen.

4) Apakah bapak tahu kalau sebelum melakukan kerja di dalam ruangan tertutup, harus dipastikan terlebih dahulu kandungan atmosfernya menggunakan *gas detector* ?

Jawab :

Tidak tahu, Sebelumnya saya tidak tahu cara pengoperasian *gas detector*, selama saya bekerja diatas kapal para mualim yang menggunakan alat tersebut. Kami hanya disuruh langsung bekerja saja saat mereka memastikan ruangan tersebut sudah aman.

2. Responden 2

Nama : Pranoto

Jabatan : Pumpman

Tanggal wawancara : 29 September 2015

1) Bagaimana kronologis kecelakaan kerja yang anda alami ?

Jawab :

Saat itu mualim I memerintahkan saya untuk mengganti lampu di dasar kamar pompa. Seperti biasa saya mengetes kandungan udara di dalamnya, alat *gas detector* menunjukkan *error* kemudian saya coba lagi lalu indikator di *gas detector* menunjukkan angka yang sesuai tanpa mencobanya lagi saya memutuskan untuk masuk. Dengan menyalakan perangan yang belum berjalan selama 5 menit saya melapor ke perwira jaga dan saya masuk ke dalamnya. Saat sampai dasar lantai saya merasa kelelahan dan badan saya terasa lemas dan pusing kemudian saya melapor kepada crew yang berjaga diluar dan segera dilakukan pertolongan.

- 2) Apakah anda sering mengalami hal tersebut ? jika tidak ,apa yang menyebabkan hal tersebut terjadi ?

Jawab :

Selama saya bekerja di kapal, baru kemarin saya mengalaminya menurut saya itu karena kecerobohan saya sendiri yang tidak memastikan dengan benar bahwa ruangan tersebut siap untuk dimasuki. Selain itu saya kira ada sedikit kerusakan di *gas detectornya* sehingga pembacaannya tidak akurat.

- 3) Apakah anda tahu cara penggunaan *gas detector* ?

Jawab :

Saya tidak benar-benar paham akan pemakaiannya saya selama ini belajar secara otodidak, kebiasaan saya melihat para mualim saya menggunakannya. Saya pikir alat tersebut bisa digunakan kapan saja,

ternyata harus dikalibrasi terlebih dahulu dipastikan bahwa alat siap digunakan, agar pembacaannya lebih akurat. Selama saya bekerja di atas kapal tidak semua kapal memberikan familiarisasi tentang penggunaan *gas detector*, baru di atas kapal ini saya diajarkan cara pemakaian dan mengkalibrasinya.

4) Pelajaran apa yang dapat anda peroleh dari kejadian tersebut ?

Jawab :

Banyak hal yang dapat saya ambil sebagai pelajaran. Bahwa saat saya bekerja, saya tidak boleh mengandalkan kebiasaan saya yang biasanya bekerja di dalamnya dan tidak terjadi apa-apa. Walaupun kita sudah biasa bekerja di ruangan tersebut tapi kita harus tetap memastikan bahwa ruangan tersebut sudah aman untuk dimasuki.

3. Responden 3

Nama : Naufal

Jabatan : Mualim 1

Tanggal wawancara : 02 Oktober 2015

1) Bagaimana peran penting sebuah *safety meeting* yang dilakukan sebelum melaksanakan kegiatan di dalam ruangan tertutup, yaitu dalam hal kerja harian di dalam ruang pompa, pengecekan tangki *ballast* dan tangki muatan di atas MT.Gede chief?

Jawab :

Safety meeting diadakan agar seluruh awak kapal mendapatkan informasi berkaitan adanya kegiatan-kegiatan yang akan dilaksanakan

nantinya, serta pengarahan dan pelatihan terhadap awak kapal. Pelatihan disini meliputi pengenalan alat-alat keselamatan dan demonstrasi penggunaan alat-alat tersebut. *Safety meeting* diatas kapal juga menyangkut perencanaan dan pembagian tugas-tugas yang nantinya dibentuk untuk menangani pekerjaan di dalam ruangan tertutup serta tugas-tugas penanggulangan bahaya jika terjadi saat kegiatan tersebut berlangsung nantinya.

- 2) Dalam sebuah penanganan pekerjaan di dalam ruangan tertutup, peran serta perwira dan awak kapal senior lainnya adalah memberikan pengarahan terhadap prosedur memasuki dan bekerja di dalam sebuah ruangan tertutup kepada awak kapal yang lain. Pengarahan-pengarahan apa saja yang dilakukan diatas kapal ?

Jawab :

Saya tekankan agar tindakan awak kapal yang belum mengenal betul resiko bahaya yang dapat terjadi dalam penanganan ruangan tertutup tidak boleh mengambil keputusan sendiri tanpa sepengetahuan awak kapal senior. Tindakan pengarahan ataupun peringatan-peringatan sangat penting agar tidak terjadi kecelakaan saat pekerjaan berlangsung, pengarahan tersebut diantaranya penggunaan alat keselamatan secara benar, tindakan penyelamatan, penanggulangan bahaya, kondisi ruangan tertutup apakah sudah benar-benar bebas gas ataupun dalam keadaan memaksa untuk tetap dimasuki walaupun belum bebas gas

maka awak kapal harus meningkatkan kewaspadaan terhadap bahaya yang terkandung di dalamnya dengan melaksanakan prosedur-prosedur yang benar.

- 3) Bagaimana meningkatkan pengetahuan personil di atas MT.Gede terhadap pengenalan dan penggunaan serta fungsi-fungsi dari alat-alat keselamatan atau *instrument* lainnya yang digunakan dalam penanganan ruangan tertutup ?

Jawab :

Untuk meningkatkan pengetahuan personil di atas kapal terhadap pengenalan dan cara penggunaan serta fungsi dari alat-alat keselamatan yaitu secara rutin dan berkala pada saat diadakan *safety meeting* maka peralatan keselamatan kerja hendaknya dijelaskan cara pengoperasiannya dan pembacaan. Pembacaan disini ditujukan ada alat-alat pengukur contohnya *multie gas detector* dan *personal gas detector* serta alat-alat keselamatan lainnya seperti penggunaan *safety harness*, *stretcher*, *breathing apparatus* dan peralatan kerja lain yang harus digunakan nantinya. Dalam kesempatan tersebut awak kapal harus memperagakan alat-alat keselamatan sehingga suatu saat dapat menerapkan pengetahuan yang telah didapat.

- 4) Bagaimana tindakan kontrol/pengendalian yang dilakukan oleh perwira di atas kapal maupun awak kapal senior terhadap kinerja anak buah

kapal ?

Jawab :

Tindakan kontrol yang dilakukan oleh perwira di atas kapal terhadap kinerja anak buah kapal yaitu dengan mengecek penggunaan alat-alat keselamatan serta meninjau kegiatan yang sedang berlangsung, serta peringatan-peringatan apabila terdapat personil yang bertindak tidak sesuai prosedur.

5) Bagaimana pendapat mualim I tentang kejadian yang dialami oleh *pumpman* di kamar pompa kemarin ?

Jawab :

Menurut saya hal tersebut terjadi karena *pumpman* yang ceroboh tidak benar-benar melaksanakan prosedur yang sudah diterapkan di atas kapal. Faktor lain yang berpengaruh yaitu kualitas dari gas *detector* yang abal-abal, maksudnya kualitas dari alat tersebut yang sangat rendah karena sering tidak akurat dalam pembacaannya padahal sudah sering dikalibrasi.

6) Bagaimana upaya antisipasi terjadinya kecelakaan kerja di dalam ruangan tertutup, dimana kecelakaan kerja tersebut dapat disebabkan oleh kurangnya pengetahuan awak kapal dan keadaan ruangan tertutup yang dimungkinkan mengandung resiko membahayakan terhadap keselamatan awak kapal ?

Jawab :

Kecelakaan kerja yang dapat terjadi di dalam ruangan tertutup yang disebabkan oleh kurangnya pengetahuan yang dimiliki awak kapal maka hal tersebut dapat ditekan oleh peran serta perwira dan awak kapal senior untuk memberikan pengarahan dan mengadakan pengawasan serta peringatan-peringatan terhadap awak kapal yang belum memahami betul prosedur-prosedur dalam memasuki dan melakukan pekerjaan di dalam sebuah ruangan tertutup yang dicurigai mengandung bahaya. Tindakan antisipasi terhadap ruangan yang dimungkinkan mengandung resiko yaitu dengan jalan mengadakan ventilasi yang cukup dan secara terus menerus diadakan, pengecekan kadar gas dan oksigen secara berkala, apabila dalam keadaan memaksa untuk memasuki ruangan yang belum bebas gas, maka penggunaan alat-alat keselamatan seperti alat bantu pernafasan harus benar-benar tersedia dan dikerjakan oleh awak kapal yang dinilai mampu. Pada saat tersebut tindakan pengawasan dan komunikasi harus tetap dijalankan antara awak kapal yang berada di dalam ruangan tertutup dan awak kapal yang ditugaskan berada di luar ruangan tertutup.

- 7) Di atas MT. Gede hal-hal yang berkaitan dengan keselamatan kerja telah diatur dalam sistem keselamatan dari perusahaan. Bagaimana sistem tersebut berjalan agar tujuan-tujuan yang kita inginkan dapat tercapai ?

Jawab :

Sistem keselamatan kerja yang telah dibuat sebagai ketentuan-ketentuan dari perusahaan dan harus diterapkan di atas kapal. Dalam pelaksanaannya tersebut hal yang perlu diperhatikan dan menjadi keberhasilan suatu organisasi adalah orang-orangnya dan peralatan yang menunjang. Apabila orang-orang tersebut menjalankan tugasnya sesuai petunjuk dan tersedia peralatan yang memadai maka tujuan yang didapat lebih maksimal.

- 8) Bagaimana jika ruangan yang akan digunakan untuk bekerja dianggap masih belum aman, sedangkan pekerjaan tersebut harus tetap dilakukan?

Jawab :

Harus ditekankan, bahwa personil yang masuk ke dalam tanki-tanki atau ruangan tertutup lainnya harus benar-benar *gas free*, apabila ada ruangan yang tidak bebas gas ataupun kekurangan oksigen hanya dapat diijinkan dalam keadaan luar biasa dan apabila sudah tidak ada pilihan yang dapat dilakukan. Keputusan seperti ini dilakukan karena waktu yang sempit dan tidak memungkinkan untuk diadakan pencucian sebuah tanki (tank cleaning), pembebasan gas, dan ventilasi terhadap sebuah ruangan.

- 9) Bagaimana cara anda sebagai *safety officer*, untuk mengingatkan keselamatan kerja selama di atas kapal ?

Jawab :

Untuk selalu mengingatkan keselamatan kerja di atas kapal tanker, saya

tidak bosan-bosannya mengingatkan mereka tentang penggunaan gas detector sebagai dasar bekerja diatas kapal. Saya selalu memerintahkan setiap crew yang bekerja di dek harus membawa portable gas detector, karena jika terdapat gas berbahaya yang mampu menimbulkan kebakaran atau ledakan bisa segera diidentifikasikan.

4. Responden 4

Nama : C. Herro Kalapadang

Jabatan : Mualim 3

Tanggal wawancara : 02 Oktober 2015

1) Bagaimana pendapat ted tentang kecelakaan kerja yang terjadi di kamar pompa kemarin ?

Jawab :

Menurut saya kecelakaan kerja ini terjadi dikarenakan kebiasaan seseorang yang selalu menganggap bahwa keadaan sekarang masih sama dengan kemarin, sehingga mereka berfikir tidak perlu dilakukan pengetesan udara lagi sebelum masuk ke kamar pompa karena masih aman seperti kemarin.

2) Lalu bagaimana tindakan yang dilakukan para mualim untuk mengantisipasi hal tersebut, agar tidak terulang kembali ?

Jawab :

Tindakan kami sebagai para mualim yaitu dengan mengadakan *safety meeting* terlebih dahulu sebelum melaksanakan kerja di dalam ruang

tertutup, agar para crew tahu bahaya-bahaya yang ditimbulkan dan penanggulangannya.

- 3) Karena anda sebagai mualim III yang bertanggung jawab tentang alat-alat keselamatan, apa saja yang anda persiapkan untuk mencegah terjadinya kecelakaan kerja si ruangan tertutup ?

Jawab :

Dengan melakukan perawatan terhadap alat-alat yang menunjang pekerjaan di dalam ruangan tertutup, seperti *Breathing Apparatus*, EEBD dan alat-alat keselamatan lainnya berada di tempat yang semestinya. Serta memastikan bahwa alat-alat tersebut siap digunakan jika terjadi bahaya darurat.

- 4) Bagaimana sisingkatkan pengetahuan awak kapal terhadap alat-alat keselamatan yang ada diatas kapal?

Jawab :

Usaha meningkatkan pengetahuan awak kapal tidak hanya dengan pengarahannya yang sifatnya penjelasan saja, tapi disini para awak kapal harus dicoba untuk memperagakan atau mendemonstrasikan alat-alat keselamatan serta prosedur yang benar dalam penggunaan dan perawatan alat-alat tersebut.

- 5) Bagaimana menurut anda bekerja dengan aman di dalam ruangan tertutup ?

Jawab :

Bekerja dengan aman di dalam ruangan tertutup yaitu dengan memastikan segala prosedur memasuki ruangan sudah dilakukan dengan benar dan memastikan segala alat-alat keselamatan berada di tempatnya serta mengetahui cara pemakaiannya. Selain itu komunikasi dan koordinasi adalah hal sangat penting dalam melakukan pekerjaan.



LAMPIRAN 4

GAMBAR PENYELAMATAN KORBAN



Gambar 5.1 Pengiriman *strecher* ke dalam kamar pompa



Gambar 5.2 *Strecher* sampai di dasar kamar pompa



Gambar 5.3 Korban segera diselamatkan menggunakan *strecher*



LAMPIRAN 5

KEGIATAN *SAFETY MEETING*



Gambar 5.4 *Safety Meeting* yang dilakukan setiap satu bulan sekali



Gambar 5.5 *Safety meeting* sebelum mengawali kerja



Gambar 5.8 Mualim I memastikan *life line* dan *safety harness* terpasang dengan baik

LAMPIRAN 7

PERSIAPAN SEBELUM MASUK KE RUANGAN TERTUTUP



Gambar 5.9 Menyiapkan *breathing apparatus* dan *gas detector* di sekitar mulut tangki



Gambar 6.0 Melakukan pengecekan atmosfer di dalam tangki



Gambar 6.1 Membaca kandungan atmosfer menggunakan *multi gas detector*



Gambar 6.2 Membawa *personal gas detector*

LAMPIRAN 8

FAMILIARISASI GAS DETECTOR SETELAH DRILL



Gambar 6.3 Peralatan yang disiapkan



Gambar 6.4 Mualim 3 mengoperasikan *multi gas detector*



Gambar 6.5 Mualim I menjelaskan cara pengoperasiannya



Gambar 6.6 Seluruh Crew memperhatikan dengan seksama penjelasan mualim I

LAMPIRAN 9

FAMILIARISASI ALAT-ALAT KESELAMATAN



Gambar 6.8 Famliarisasi *breathing apparatus*



Gambar 6.9 Familiarisasi EEBD (*Emergency escape breathing device*)



Gambar 7.0 Familiarisasi *Rescucirator*



LAMPIRAN 10

PROSEDUR SEBELUM MASUK KAMAR POMPA



Gambar 7.1 Prosedur yang tertulis di pintu sebelah kamar pompa

LAMPIRAN 11

BERITA ACARA PERBAIKAN *PERSONAL GAS DETECTOR*



PT. PERTAMINA (PERSERO)
DIREKTORAT PEMASARAN DAN NIAGA
GEDE / PNZP

BERITA ACARA
No. 215.../F303C2/2015

Perihal : Perbaikan dan renew sertifikat kalibrasi Personal gas detector

Pada tanggal 24 Juni 2015 pada saat kapal sandar di SPM Balongan dilakukan pengecekan terhadap personal gas detector yang tersedia diatas kapal . Dari hasil pengecekan tersebut ditemukan 3 personal gas detector perlu dilakukan repair (penggantian sensor + renewed sertifikat kalibrasi) dan 2 personal gas detector lainnya hanya perlu di renewed sertifikat kalibrasinya.

Demi kelancaran operasional kapal serta untuk keselamatan crew kapal, kami sarankan supaya alat tersebut segera direpair dan dikalibrasi ulang.

Demikian berita acara ini dibuat dan supaya segera ditindak lanjuti.
Atas perhatian dan kerja samanya kami ucapkan terima kasih.

Pelabuhan : Balongan Terminal
Tanggal : 25 Juni 2015

Menggetahui
Nakhoda


PT. PERTAMINA
DIREKTORAT M&T
GEDE
Capt. Rustanto
NP. 747188

Saksi :

1. Naufal / Mualim I : 

LAMPIRAN 12

SHIPBOARD FAMILIARIZATION CHECKLIST



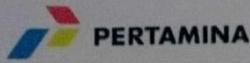
SHIPBOARD FAMILIARIZATION CHECKLIST

Vessel name : MT.GEDE Place & date of joining : _____

Seafarer's name : _____ Rank : _____

PART A : REF STCW A-VII/1 : To be carried out within **24 hours** of joining vessel

NO.	FAMILIARISATION REQUIREMENTS	TICK
1.	A guide tour of the entire vessel has taken place	
2.	Ship's emergency signals and procedures understood Emergency Alarm Signal : 7 short and 1 long Fire Alarm : _____ : Continuous ringing of the ship's alarm for at least 10 seconds followed by PA Abandon Ship : _____ : Verbal order by Master	
3.	Specific emergency, muster and boat station and duties understood: Identify muster station and individual designation in case of: 1. Fire 2. General Emergency 3. Oil / Chemical spill	
4.	Emergency exits and escape routes from accommodation & workplace are known	
5.	Location and operation of life rafts and lifeboats understood	
6.	Location and operation of all fire fighting & safety equipment (including emergency fire CO ₂ and other smothering system installation / release points, and fire flaps & dampers etc.)	
7.	Familiar with locations and proper use of: 1. lifejackets 2. Immersions suits 3. BA sets (or Gas Mask) for escape 4. EEBD	
8.	Familiar with location of medical / First Aid facilities 1. Medical locker 2. Stretcher in pump room 3. Oxygen resuscitator 4. First Aid kit / Bridge / Engine room / others 5. BA sets	
9.	Familiar with the operation of Bridge/Engine room equipments for appropriate personnel - Officers to refer appropriate checklist S-18.1 or S-18.2.	
10.	Familiar with operation of machinery on deck (cranes, winches, windlass, hydraulic, equipment, etc.) for appropriate personnel	
11.	Documentation: Location of ships safety training manual, safety management manual, sitting of muster, emergency & boat station lists, manufacturers, Operating manual, Ships safety plan for appropriate personnel	
12.	Understanding closing and location of : 1. Fire doors 2. Watertight doors 3. Weather tight doors	
13.	Watch keeping procedures and arrangements for appropriate personnel	
14.	Safety procedures with which seafarer has been familiarized.	



SHIPBOARD FAMILIARIZATION CHECKLIST

15.	Emergency procedures and arrangements with which the seafarer has been familiarized.	
16.	Environmental protection procedures and arrangements with which seafarer has been familiarized.	
17.	Enclosed Space Entry familiarization 1. Correct use of checklist. 2. Understanding the test requirements on Oxygen, HCL and Toxic gas 3. Correct use of dagger to test particular kind of toxic gas 4. Compiling and updating Dragger tube list 5. Calibration and use of gas meters 6. Enclosed Space entry procedure familiarization checklist read and complied (pg 3 and 4)	

To certify that the above listed item's have been briefed and will be observed.

Date of Training _____ Seafarer's Signed : _____

Safety Officer : _____ Master : _____

PART B : REF STCW 1/14, A-I/14, B-I/14 ; To be carried out within 14 days of joining vessel

18	Understanding specific duty for individual newly joined crew: 1. Assigned duties and responsibilities 2. Report to who. 3. Understanding of EOHS Manual	
19	Familiar with : 1. Ship's arrangements, 2. Installations 3. Equipments 4. ship's characteristic 5. Environmental protection 6. Ship specific watch keeping and safety 7. Ship Security system (ISPS) 8. Ship's safety system	
20	Cargo Operating System 1. Pipeline Systems 2. Fratio Pump Operation Procedures (parallel pumping)	
21	Other matters - Please state.	

To certify that the above listed item's have been sighted and understood.

Date of Training _____ Seafarer's Signed : _____

Safety Officer : _____ Master : _____

SHIPBOARD FAMILIARIZATION CHECKLIST

Enclosed Space Entry Procedure familiarization Checklist
Definition

Enclosed space is defined as a space that has the following characteristics:

- Limited openings for entry and exit.
- Unfavorable natural ventilation.
- Not designed for continuous worker occupancy.

Enclosed Spaces include, but are not limited to:

Cargo Tanks	Double Bottoms	Fuel Tanks	Ballast Tanks
Pump Rooms	Cofferdams	Void Spaces	Duct Keels
Inter-barrier spaces	Engine Crankcases	Sewage Tanks	

Enclosed Space Entry Procedure:
1. Risk Assessment (S-20)

Prior to entry into an enclosed space, a risk assessment should be completed to identify the potential hazards and to determine the safeguards to be adopted. Company form S-20 should be used.

2. Enclosed Space Entry Permit (S-12)

Company form S-12 to be duly completed.

Following to be taken into consideration when completing the above mentioned form:

A. Pre-Entry Preparations

Space to be prepared for entry by ensuring that it has been:

- Cleaned.
- Thoroughly ventilated.
- Segregated from other spaces by blanking off or isolating all connecting pipelines and electrical power equipment.
- Adequately illuminated.
- Rescue and resuscitation equipment has been tested and made available for immediate use by the entrance of the space.
- Efficient means of communication has been established.

Persons entering the space have received proper training.

Cadets are not allowed to enter into enclosed spaces, unless accompanied by the responsible officer.

B. Atmosphere Tests Prior Entry

Space shall never be entered until the atmosphere within the space has been tested using the appropriate equipment which has been properly calibrated and checked for correct operation.

The appropriate atmosphere checks are:

- Oxygen content is 21% by volume.
- Hydrocarbon vapor concentration is less than 1% LEL.
- No Toxic gases are present.

SHIPBOARD FAMILIARIZATION CHECKLIST**General Guidelines for Gas meter Calibration**

Instrument Type	Span Gas to be used for calibration
Oxygen Analyzer	99.99% Nitrogen
Combustible Gas Meter	Iso-Butane 0.9% (50%LEL)
Tank Scope	Butane 8% Vol.
Multi-gas meter	Multi Gas(O ₂ : 12%, LEL: 50% LEL, H ₂ S: 25ppm, CO: 50ppm)

N.B. The above table is only for general guidance, appropriate span gas as per manufacturer's instructions to be used for the calibration each instrument.

Toxic Gases

Toxic gases should be suspected taking into consideration the contents of the space.

A proper and up to date inventory of toxic gas detector tubes available onboard shall be maintained at all times.

A completed record of consumption of toxic tubes used in each space should be maintained.

These consumption records must tally with the enclosed space entry permits.

The used tubes to be labeled with the tank identity and the date on which it was used and kept in the safe custody of C/O for further verification, if required.

Examples:

- In case of a Cargo tank, check the MSDS of the previous cargo carried in that particular cargo tank. Appropriate toxic gas detector tubes should be used to detect any toxic gases.
- Similarly if the enclosed space (e.g.: cofferdam) is adjacent to a fuel oil tank then the checks should be made for Benzene, H₂S gases.

A sufficient stock of toxic tubes should be requested once the voyage orders are received for a toxic cargo for which the vessel has not any/sufficient toxic gas detector tubes.

C. Breathing Apparatus:

Breathing Apparatus to be tested by the Master or nominated responsible officer, the following should be noted:

- The operation of the audible low pressure alarm should be tested prior use.
- Face mask should be checked for tightness.
- All breathing apparatus cylinders should be kept fully charged at all times. If the pressure of the cylinder is 10% below its full rated pressure, it should be charged prior use.

D. Validity of the Permit

Maximum period of validity never to exceed a normal working day of 8 hours.

The permit shall be approved by the Master.

E. Displaying the Permit

A copy of the permit should be permanently displayed at the entrance to the space.

F. Regular tests of Atmosphere

Shall be carried out initially before commencement of work and at regular intervals as long as the work is in progress. Readings must be recorded in form S-12.

LAMPIRAN 13

SURAT PENURUNAN BARANG DAN PERMINTAAN BARANG

PT. PERTAMINA (PERSERO)
DIREKTORAT PEMASARAN DAN NIAGA - PERKAPALAN
GEDE / PNZP



SURAT PENURUNAN BARANG

No : 2.11..... / F303C2 / 2015

Pada hari ini tgl 25 Juni 2015 saat kapal sandar di SPM Balongan terminal telah diturunkan barang dari kapal melalui bapak Supriyono (PT. TRI TUNGGAL JAYA MANDIRI).
untuk direpair, kalibrasi sekaligus pembaruan sertifikat kalibrasi,
Barang - barang tersebut sebagai berikut yaitu :

1. UTI Merk : Enraf tank system sebanyak 1 unit
2. Multi gas detector sebanyak 2 unit
3. Personal gas detector sebanyak 3 unit dan 1 buah charger

Balongan, 25 Juni 2015
Nakhoda GEDE

Ch. Officer

Capt. Rustanto
Np. 747188

NAUPAL
Np. 747967



PT PERTAMINA (Persero)
DIREKTORAT PEMASARAN DAN NIAGA - PERKAPALAN

ACTION PLAN

ACTION PLAN	1	TANJUN 2015
NAMA KAPAL	1	GEDE
COST CENTER	1	A1404047
COST ELEMENT	1	S001013170
PERMINTAAN KAPAL	1	REPAIR & CALIBRATION PERSONAL GAS DETECTOR and REQUEST of SENSOR SPARE PART

No.	ITEM DESCRIPTION URAJAN PERMINTAAN	SPECIFICATION	QUANTITY	UNIT	QUOTATION	REMARKS
1	Personal Gas Detector Sensor spare part for H2S, CO, LEL, & O2	Maker : Riken Keiki Serial no. : 327030050RN	1 2	unit Set		Repair & Calibration
2	Personal Gas Detector Sensor spare part for H2S, CO, LEL, & O2	Maker : Riken Keiki Serial no. : 468100049RN	1 2	unit Set		Repair & Calibration
3	Personal Gas Detector Sensor spare part for H2S, CO, LEL, & O2	Maker : Riken Keiki Serial no. : 468100050RN	1 2	unit Set		Renewed Calibration Certificate only
4	Personal Gas Detector Sensor spare part for H2S, CO, LEL, & O2	Maker : Riken Keiki Serial no. : 327030049RN	1 2	unit Set		Renewed Calibration Certificate only
5	Personal Gas Detector Sensor spare part for H2S, CO, LEL, & O2	Maker : Riken Keiki Serial no. : 327030043RN	1 2	unit Set		Renewed Calibration Certificate only

PELABIHAN TANGGAL	Balangan 25-Jun-2015
MAN TECH COMM FLEET	
OWNER SUPERINTENDENT	Bambang Kurniawan
Gandung Rachman N.A	
MASTER SUPERVISOR	Cappt. Rustanto Nagral
CK OFFICER	

LAMPIRAN 15



PORTABLE GAS DETECTOR AND EQUIPMENTS LIST

VESSEL : GEDE
CALL SIGN : PNZP

DATE OF LAST CHECK : 1 SEPTEMBER 2016

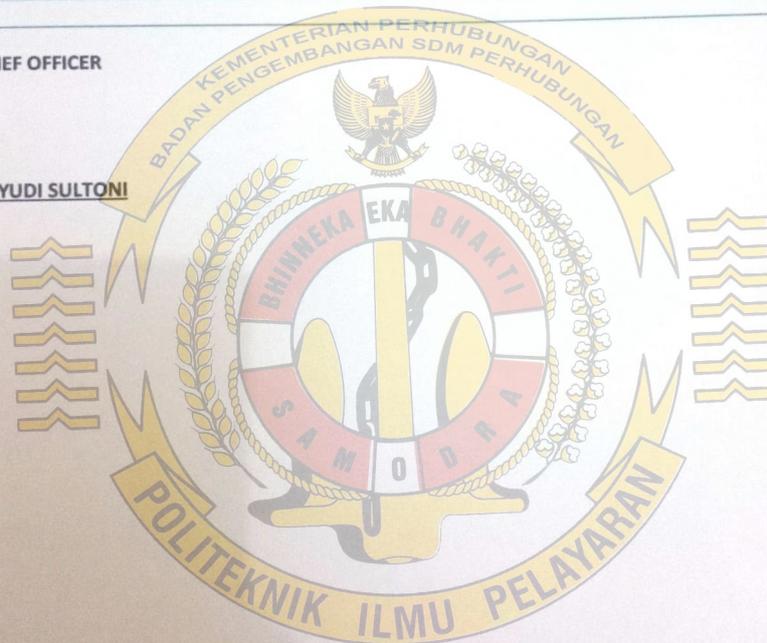
NO	EQUIPMENTS	MERK	EXPIRED	QUANTITY
1	MULTI GAS DETECTOR	RIKEN KEIKI RX - 517	CALIBRATION BY SHOREBASE	4 SETS
2	PERSONAL GAS DETECTOR	RIKEN KEIKI GX - 2009	CALIBRATION BY SHOREBASE	4 SETS
3	DRAGER ACCURO PUMP	DRAGER		2 SETS
4	BENZENE 5 TO 50 PPM	DRAGER	JAN 18	4 SETS
5	CALIBRATION STATION FOR GX 2009	RIKEN KEIKI (RKI)		2 SETS
6	ASPIRATING PUMP AP-20	KITIGAWA		2 SETS
7	BENZENE 5 TO 50 PPM	DRAGER	JAN 18	4 SETS
8	ISOBUTANE (I-C ₄ H ₁₀) 10%, NITROGEN BALANCE	RIKEN KEIKI (RKI)	JUNI 17	1 CAN
9	METHANE (CH ₄) 2.5% (50% LEL) AIR BALANCE	SPECTRO GAS	MAR 19	3 CAN
10	ISOBUTANE LEL 50 %, AIR BALANCE	RIKEN KEIKI (RKI)	DES 17	2 CAN
11	NITROGEN 99.9995 %	AMS	NOV 17	1 CAN
12	MIXED GAS H ₂ S 25 PPM, CO 50 PPM, CH ₄ LEL 50 %, O ₂ 12%, N ₂ BALANCE	RIKEN KEIKI (RKI)	JAN 18	1 CAN
13	NITROGEN UHP > 99.999 %	RIKEN KEIKI (RKI)	DEC 17	1 CAN
14	PROPANE (C ₃ H ₈) 1.1% (50 % LEL) AIR BALANCE	RIKEN KEIKI (RKI)	MAR 18	3 CANS
15	ISOBUTANE GAS 50% LEL, BAL AIR, 103L	RIKEN KEIKI (RKI)	JUL 17	1 CAN
16	EXTENSION HOSE FOR DRAGER TUBE PUMP	RIKEN KEIKI (RKI)	SEP 18	1 CAN
17	STANDALONE CALIBRATION STATION 81 – SDM- 2009-06	RIKEN KEIKI (RKI)	SEP 18	2 CAN
18	REGULATOR FOR SILVER CYLINDER		JUNI 17	1 CAN
				2 SETS
				1 PC
				2 PCS



19	GAS SAMPLING HOSE FOR GAS DETECTOR MONITORING		1 SET
20	GAS SAMPLING BAG (FOR CALIBRATION KIT)		8 PCS
21	EXTENSION HOSE INCLUDE ADAPTOR & TUBE HOLDER	RIKEN KEIKI (RKI)	1 PC
22	IG FLOATING DEVICE FOR GAS SAMPLING (TIXIC GAS)		1PC
23	FOUR GAS PERSONAL MONITOR		1PC
23	GAS SAMPLING HOSE FOR GAS DETECTOR MONITOR		1 PC

CHIEF OFFICER

WAHYUDI SULTONI



LAMPIRAN 15

ENCLOSED SPACE ENTRY PERMIT

APPENDIX

EXAMPLE OF AN ENCLOSED SPACE ENTRY PERMIT

This permit relates to entry into any enclosed space and should be completed by the master or responsible person and by any persons entering the space, e.g. competent person and attendant.

GENERAL	
Location/name of enclosed space	
Reason for entry	
This permit is valid from: hrs Date	
to: hrs Date	
(See Note 1)	
SECTION 1 - PRE-ENTRY PREPARATION	
(To be checked by the master or nominated responsible person)	
	Yes No
• Has the space been thoroughly ventilated by mechanical means?
• Has the space been segregated by blanking off or isolating all connecting pipelines or valves and electrical power/equipment?
• Has the space been cleaned where necessary?
• Has the space been tested and found safe for entry? (See note 2)
• Pre-entry atmosphere test readings:	
- oxygen % vol (21%)	By:
- hydrocarbon % LFL (less than 1%)	
- toxic gases ppm (less than 50% OEL of the specific gas)	Time:
	(See note 3)
• Have arrangements been made for frequent atmosphere checks to be made while the space is occupied and after work breaks?
• Have arrangements been made for the space to be continuously ventilated throughout the period of occupation and during work breaks?.....
• Are access and illumination adequate?

Note that national requirements may determine the safe atmosphere range.

	Yes	No
• Is rescue and resuscitation equipment available for immediate use by the entrance to the space?	"	"
• Has an attendant been designated to be in constant attendance at the entrance to the space?	"	"
• Has the officer of the watch (bridge, engine-room, cargo control room) been advised of the planned entry?	"	"
• Has a system of communication between all parties been tested and emergency signals agreed?	"	"
• Are emergency and evacuation procedures established and understood by all personnel involved with the enclosed space entry?	"	"
• Is all equipment used in good working condition and inspected prior to entry?	"	"
• Are personnel properly clothed and equipped?	"	"

SECTION 2 – PRE-ENTRY CHECKS
(To be checked by each person entering the space)

	Yes	No
• I have received instructions or permission from the master or nominated responsible person to enter the enclosed space	"	"
• Section 1 of this permit has been satisfactorily completed by the master or nominated responsible person	"	"
• I have agreed and understand the communication procedures	"	"
• I have agreed upon a reporting interval of minutes	"	"
• Emergency and evacuation procedures have been agreed and are understood	"	"
• I am aware that the space must be vacated immediately in the event of ventilation failure or if atmosphere tests show a change from agreed safe criteria	"	"

SECTION 3 – BREATHING APPARATUS AND OTHER EQUIPMENT (To be checked jointly by the master or nominated responsible person and the person who is to enter the space)		
	Yes	No
• Those entering the space are familiar with any breathing apparatus to be used
• The breathing apparatus has been tested as follows:		
- gauge and capacity of air supply
- low pressure audible alarm if fitted
- face mask – under positive pressure and not leaking
• The means of communication has been tested and emergency signals agreed
• All personnel entering the space have been provided with rescue harnesses and, where practicable, lifelines

Signed upon completion of sections 1, 2 and 3 by:

Master or nominated responsible person Date Time
 Attendant Date Time
 Person entering the space Date Time

SECTION 4 – PERSONNEL ENTRY (To be completed by the responsible person supervising entry)		
Names		
Time in	Time out	
SECTION 5 – COMPLETION OF JOB (To be completed by the responsible person supervising entry)		
• Job completed	Date	Time
• Space secured against entry	Date	Time
• The officer of the watch has been duly informed	Date	Time

Signed upon completion of sections 4 and 5 by:

Responsible person supervising entry Date Time

THIS PERMIT IS RENDERED INVALID SHOULD VENTILATION OF THE SPACE STOP OR IF ANY OF THE CONDITIONS NOTED IN THE CHECKLIST CHANGE

Notes:

- 1 The permit should contain a clear indication as to its maximum period of validity.
- 2 In order to obtain a representative cross-section of the space's atmosphere, samples should be taken from several levels and through as many openings as possible. Ventilation should be stopped for about 10 minutes before the pre-entry atmosphere tests are taken.
- 3 Tests for specific toxic contaminants, such as benzene or hydrogen sulphide, should be undertaken depending on the nature of the previous contents of the space.



LAMPIRAN 16
RECORD PUMP ROOM

PERTAMINA

Location : P. R029

Date	NAME	RANK	TIME		GAS Contain	Supervisors
			IN	OUT		
13.08.16	Master				0, - 20,9%	
	Wahis	A/B	13.10	14.10	0, - 20,9%	
	Karna	OT	13.10	14.10	0, - 20,9%	
	Wahis	A/B	16.10	17.10	0, - 20,9%	
	Pradeta	P. Man	12.00	13.10	0, - 20,9%	
	Risman	OT	18.00	19.10	0, - 20,9%	
	Her	OT	19.00	20.10	0, - 20,9%	
	Risman	OT	20.00	21.10	0, - 20,9%	
	Pradeta	P. Man	21.00	22.10	0, - 20,9%	
	Ruji	A/B	22.00	23.10	0, - 20,9%	
	Wahis	OT	23.00	24.10	0, - 20,9%	
	Ruji	P. Man	24.00	25.10	0, - 20,9%	

LAMPIRAN 17

RISK ASSESSMENT



DETAILED RISK ASSESSMENT

SAF03

Ship's Name: MT.GEDE

Record Number: _____

Current Assessment Date: _____

Last Assessment Date: _____

Work Activity Being Assessed: _____

Section 1

Hazard Analysis of the Intended Work Activity

Hazard No:	Description of Identified Hazards:	Existing Control Measures to Protect Personnel From Harm
1.	Entry without permission	(a) Enclosed entry checklist completed (b) (c)
2.	Lack of oxygen	(a) Enclosed entry checklist completed (b) (c)
3.	Improper tools being used	(a) Cold work permit prepared (b) (c)
4.	Pipe / Valve Line Leaking	(a) PMS of pipe lines (b) (c)
5.	Darkness	(a) Increase illumination (b) Check light (c) Carry approved flash light
6.	Changed in weather and tidal condition	(a) Weather fore cast (b) (c)
7.	Explosive atmosphere	(a) Enclosed entry checklist completed (b) (c)
8.	Instruments Failure	(a) Periodic check, test (b) Use allowed tools (c)
9.	Insufficient Crew	(a) Job planning (b) Pre job meeting (c)
10.	Miscommunication	(a) Enclosed entry checklist completed (b) (c)

*** The primary means of reporting is via Shippers Risk Assessment database. This form is only to be used when Shippers is inoperative.**

SECTION 2

Assessment of Risk Factor

Likelihood	Severity					
	Minor	Moderate	Severe	Major	Critical	Disastrous
Highly Likely	Medium	Medium	Significant	High	Very High	Very High
Likely	Medium	Medium	Significant	High	High	Very High
Occasional	Low	Medium	Significant	Significant	High	High
Remote	Low	Medium	Medium	Significant	Significant	Significant
Unlikely	Very Low	Low	Medium	Medium	Medium	Medium
Very Unlikely	Very Low	Very Low	Low	Low	Low	Medium

To assess the risk factor arising from the hazard:

1. Select the expression for likelihood which most applies to the hazard;
2. Select the expression for severity of harm which most applies to the hazard;
3. Cross-reference using the Risk Estimate table (above) to determine the level of risk;
4. If the Risk Factor is MEDIUM or above (yellow, orange or red) additional control measures should be implemented and recorded in Section 3

Hazard No:	Likelihood of Harm	Severity of Harm	Risk Factor
1.	Very Unlikely	Slight Harm	Very Low
2.	Unlikely	Slight Harm	Low
3.	Very Unlikely	Slight Harm	Very Low
4.	Very Unlikely	Slight Harm	Very Low
5.	Very Unlikely	Slight Harm	Very Low
6.	Very Unlikely	Slight Harm	Very Low
7.	Unlikely	Slight Harm	Low
8.	Unlikely	Slight Harm	Low
9.	Very Unlikely	Slight Harm	Very Low
10.	Unlikely	Slight Harm	Low

*** The primary means of reporting is via Shispsure Risk Assessment database. This form is only to be used when Shispsure is inoperative.**

SECTION 3

Additional Control Measures to Reduce the Risk of Harm

LAMPIRAN 18

PELATIHAN DI KAMAR POMPA



DRILLS – REPORT

S - 02

SHIP'S NAME : MT. GEDE	DATE : 26 May 2015	
TYPE OF DRILL: CASUALTY		
DESCRIPTION OF DRILL: SEARCH / RESCUE (in pump room)		
Rescue drill with setting scenario: <ul style="list-style-type: none"> - During loading cargo operation, A/B(C) get order for open the valve ballast tank in the pump room, after 30 minute that's A/B(C) not report back and no response when duty officer call him. - Duty officer took immediate action send Pump Man for check in the pump room. - Pump Man found A/B(C) was fall down and suffered. - Immediately duty officer raise alarm and announce kind of emergency - Initiate rescue team to evacuate victim from pump room and give the medical treatment for the injured person. - Evacuate victim from pump room by stretcher with safely shifted to hospital. - Broadcast or call to port medical Advice for getting advice medical treatment if victim in serious condition and proceed to closest port for sent victim to hospital. 		
EQUIPMENT USED		
<ul style="list-style-type: none"> - Stretcher - Safety harness - First aid kit and resuscitator - Tackle block - GMDSS and radio communication equipment 		
DURATION OF DRILLS	FROM: 1000 TO: 1030	TOTAL HRS: 30mnts
REMARKS / EVALUATION		
Satisfactory		
RECOMMENDATIONS		
SAFETY OFFICER		MASTER



PROGRAM STUDI NAUTIKA DIPLOMA IV

POLITEKNIK ILMU PELAYARAN

SEMARANG

2017

DAFTAR RIWAYAT HIDUP

1. Nama Lengkap : Laylicha Nori Febrina
2. Tempat / Tanggal Lahir : Batang, 4 Februari 1994
3. NIT : 49124419. N
4. Alamat Asal : Jl. Kaliboyo, RT 06 RW 02
Kec. Tulis Kab. Batang,
Jawa Tengah
5. Agama : Islam
6. Jenis kelamin : Perempuan
7. Golongan darah : A
8. Nama Orang Tua
 - a. Ayah : Nasocha Irfan
 - b. Ibu : Siti Nurjanah
9. c. Alamat Orang Tua : Jl. Kaliboyo, RT 06 RW 02 Kec. Tulis Kab.
Batang, Jawa Tengah
10. Riwayat Pendidikan
 - a. SD : SD N 1 Kaliboyo, tahun 2000 – 2006
 - b. SMP : SMP N 1 Tulis, tahun 2006 - 2009
 - c. SMA : SMA N 1 Batang, tahun 2009 - 2012
 - d. Perguruan Tinggi : PIP Semarang, tahun 2012 - 2017
11. Pengalaman Pratek Laut
 - a. Perusahaan Pelayaran : PT. Pertamina
 - b. Nama Kapal : MT. Gede
 - c. Masa Layar : 4 Oktober 2014 – 11 Oktober 2015

