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SERI PADUKA BAGINDA
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AKTA KESELAMATAN SOSIAL PEKERJA 1969

PERINTAH KESELAMATAN SOSIAL PEKERJA
(PINDAAN JADUAL KELIMA) 2008

PADA menjalankan kuasa yang diberikan oleh subseksyen 28(3) Akta Keselamatan Sosial Pekerja 1969 [Akta 4], Menteri membuat perintah seperti berikut:

Nama dan permulaan kuat kuasa

1. (1) Perintah ini boleh dinamakan sebagai Perintah Keselamatan Sosial Pekerja (Pindaan Jadual Kelima) 2008.

(2) Perintah ini mula berkuat kuasa pada 4 Februari 2008.

Pindaan Jadual Kelima

2. Akta Keselamatan Sosial Pekerja 1969 [Akta 4] dipinda dengan menggantikan Jadual Kelima dengan Jadual yang berikut:

"JADUAL KELIMA

[Seksyen 28]

PENYAKIT KHIDMAT

BAHAGIAN I

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Bahan kimia- Logam dan sebatianannya</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada logam dan wasap, debu atau wap toksiknya atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan</i>
1. Aluminum	Perengsa pernafasan, bronkitis kronik, fibrosis pulmonari, dermatitis	Pendedahan semasa pengimpalan logam aluminum; digunakan sebagai pengikat fosfor, pengilangan tin, bekas dan bungkusan, pigmen, cat, mangkin, aloi, enjin dan komponen pesawat udara, wayar dan kabel elektrik, rangka tingkap, antipeluh dan dalam loji penurunan aluminum
2. Antimoni	Dermatitis, pneumokoniosis, hemolisis, anuria, penembusan septum hidung, kecederaan miokardium, kanser paru-paru (Antimoni trioksida)	Pendedahan semasa digunakan sebagai perencat. nyalaan bagi plastik, cat, tekstil, kertas, getah dan perekat, aloi dalam penghasilan grid bateri, tuangan jenis, sarung kabel dan pengilangan peranti semikonduktor
3. Arsenik	Ensefalopati, neuritis perifer, polineuropati, anemia hemolitik perolehan, kerosakan glomerulus dan tubul, penembusan septum hidung, hiperkeratosis kulit, fibrosis paru-paru, distrofi permukaan kornea, angiosarkoma hepar, kanser kulit dan paru-paru	Pendedahan semasa perlombongan, penghasilan aloi, peleburan kuprum, penghasilan dan penggunaan pestisid, herbisid, insektisid arsenik; penggunaan dalam industri mikroelektronik; dan digunakan sebagai pigmen dan agen penapis dalam pembuatan kaca, bahan pengawet dalam pemerangan kayu dan sarung kabel
4. Barium	Pneumokoniosis benigna (baritosis), iritasi setempat	Pendedahan semasa pengilangan aloi aluminum, seramik (sebagai fluks), pengimpalan fluks rod, nyalaan isyarat dan bunga api, detergen minyak pelincir, getah, cat, kertas, linoleum dan plastik (sebagai pengisi), penanggal bulu, pestisid; semasa penapisan bijih barit

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Bahan kimia- Logam dan sebatianannya		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada logam dan wasap, debu atau wap toksiknya atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan
5. Berilium	Penyakit berilium kronik, trakeobronkitis, dermatitis (pengulseran atau granuloma) pneumonitis, beriliosis, kanser paru-paru	Pendedahan semasa penghasilan aloi keras dan tahan kakisan dalam industri aeroangkasa, reaktor nuklear; produk seramik dan refraktori, penghubung elektrik, suis, pengimpalan elektrod, tiub sinaran katod, aloi logam dan litografi bagi industri elektronik
6. Boron	Iritasi pernafasan dan kulit, depresi sistem saraf pusat, gangguan tingkah laku mental, kerosakan ginjal	Pendedahan semasa penyahgasan dan penyahoksidaan logam; proses pengerasan keluli; proses metalurgik (sebagai fluks dan sanga pemerisaian); digunakan dalam reaktor atom sebagai penyerap neutron; penghasilan gentian kaca dan dalam produk peluntur
7. Kadmium	Osteomalasia, pneumonitis, emfisema, kerosakan tubul dan glomerulus dengan kegagalan ginjal, anosmia, kanser paru-paru	Pendedahan semasa penyaduran elektrik; pengilangan bateri nikel-kadmium, gelas kelajuan tinggi, pematerian, pengimpalan dan pematerian keras perak (sebagai pengisi); digunakan dalam industri plastik (penstabil); digunakan sebagai pigmen (dalam getah, dakwat, plastik, cat, tekstil) dan pengilangan barang kemas
8. Kromium	Ulserhidung dan kulit, penembusan septum hidung, nekrosis tubul, dermatitis alergi dan iritasi, asma	Pendedahan semasa penyaduran elektrik, pengilangan pewarna atau pigmen dan pengimpalan
9. Kobalt	Dermatitis sentuh alergi, penyakit paru-paru logam keras, kardiomiopati	Pendedahan semasa pengilangan aloi bersuhu tinggi untuk enjin jet
10. Kuprum	Hemolisis, fibrosis pulmonari, demam wasap logam	Pendedahan semasa penyaduran elektrik, pengilangan rayon, pigmen dan racun kulat berasaskan kuprum

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Bahan kimia- Logam dan sebatianannya</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada logam dan wasap, debu atau wap toksiknya atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan</i>
11. Plumbum (a) Tak organik	Anemia, polineuropati, ensefalopati toksik, gangguan neurotingkah laku, hemolisis dan kegagalan ginjal akut	Pendedahan semasa pelombongan atau pengekstrakan plumbum dan zink; digunakan dalam perpaipan, senjata, seramik, kristal, pengilangan bateri simpanan plumbum; pengimpalan atau pemotongan, percetakan sembur dan tembikar
(b) Sebatian plumbum Alkil Organik	Halusinasi, fikiran terganggu, kekeliruan, koma	Pendedahan semasa penghasilan bahan api, pengangkutan agen antiketuk, pengadunan bendalir antiketuk dan gasolin mentah di tempat penapisan agen antiketuk, pembersihan tangki yang mengandungi gasolin berplumbum atau bahan api penerbangan
12. Mangan	Pneumonitis kimia, Parkinsonisme sekunder, ensefalopati, kecederaan ginjal, demam wasap logam	Pendedahan semasa perlombongan dan pemprosesan, pengisaran, peleburan, metalurgi, pengimpalan dan pelicaian tembikar; pengilangan bateri kering dan racun kulat; digunakan sebagai agen pengoksida dalam industri kimia dan dalam penghasilan keluli dan aloi
13. Raksa		
(a) Raksa metil organik	Ketoksikan sistem saraf pusat yang dicirikan melalui gabungan kemerosotan serebelum dan korteks	Pendedahan semasa digunakan dalam pengilangan antiseptik, germisid, diuretik, kontraseptif, racun perosak (racun alga, racun kulat), cat dan lilin serta dalam industri kimia (mangkin dan agen pengalkilan)
(b) Raksa tak organik	Ketoksikan sistem saraf pusat yang dicirikan melalui tremor dan penyakit neuropsikiatri	Pendedahan semasa penghasilan elektrolitik natrium hidroksida dan klorin, penghasilan bateri, pengilangan racun kulat, metalurgi dan pengilangan kelengkapan yang mengandungi raksa
14. Nikel	Dermatitis sentuh alergi, asma, pneumonitis ruang-antara, kanser hidung dan paru-paru (Nikel bisulfida)	Pendedahan semasa pemekatan, peleburan atau penapisan dalam industri penghasilan nikel, penghasilan keluli tahan karat, pengilangan bateri, metalurgi, aloi, penyaduran elektrik; digunakan sebagai mangkin dan pigmen; pelombong bijih nikel sulfida dan pekerja kilang aloi nikel

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Bahan kimia- Logam dan sebatianannya		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada logam dan wasap, debu atau wap toksiknya atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan
15. Nikel karbonil	Pneumonitis ruang-antara, edema pulmonari dan serebrum, pendarahan serebrum	Pendedahan kepada gas karbonil nikel semasa penapisan nikel
16. Fosforus	Nekrosis rahang, luka terbakar dermis, iritasi pernafasan, ketoksikan hepar dan ginjal	Pendedahan semasa digunakan sebagai baja; digunakan dalam penghasilan minuman dan dentifris (garam asid fosforik); racun perosak/racun haiwan perosak, perencat nyalaan, penghasilan gasolin dan minyak pelincir (sebatian fosforus tak organik); penghasilan bahan letupan, senjata dan mancis (fosforus merah)
17. Platinum	Asma, dermatitis sentuh alergi, rinitis alergi	Pendedahan semasa digunakan dalam penyaduran elektrik, operasi penapisan platinum dan pengilangan skrin pendarflour
18. Selenium	Edema pulmonari, dermatitis alergi perengsa kulit dan luka terbakar pada kulit	Pendedahan kepada selenium unsur dalam industri elektronik, kaca, seramik, plastik dan getah
19. Talium	Polineuropati deria motor	Pendedahan semasa digunakan sebagai racun rodensia, pengilangan komponen elektronik dan kanta optik
20. Tin		
(a) Tak organik	Iritasi pernafasan, pneumokoniosis benigna (stannosis), iritasi kulit dan sawan	Pendedahan semasa digunakan dalam penyaduran elektrik, pengetinan, pematerian, proses aloi tin
(b) Organik organotin (trimetil, triethyltin)	Iritasi mata, iritasi ringan hingga teruk pada kulit dan membran mukus, edema serebrum, nekrosis hepar dan sawan	Pendedahan semasa digunakan sebagai penstabil dalam plastik dan minyak, sebagai mangkin dalam pengawetan getah; sebagai bahan pengawet dalam tekstil dan kulit serta sebagai biosid pada tumbuhan marin
21. Uranium	Penyakit buah pinggang, kanser paru-paru, sakit sinaran	Pendedahan semasa perlombongan dan penggunaan uranium

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Bahan kimia- Logam dan sebatianya</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada logam dan wasap, debu atau wap toksiknya atau sebatianya yang melebihi Had Pendedahan yang Dibenarkan</i>
22. Vanadium	Iritasi pernafasan, asma, dermatitis alergi	Pendedahan semasa digunakan dalam penghasilan ferovanadium, aloi vanadium, digunakan sebagai mangkin dan salutan
23. Zink	Iritasi pulmonari dan edema	Pendedahan semasa digunakan dalam penggalvanian keluli dan logam lain, tuangan terap untuk digunakan dalam alat automotif dan kelengkapan elektrik

BAHAGIAN II

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Asid dan Alkali</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada asid dan alkali, dan wap toksiknya atau sebatianya yang melebihi Had Pendedahan yang Dibenarkan</i>
1. Asid asetik	Iritasi pernafasan, bronkitis, faringitis	Pendedahan semasa digunakan dalam penghasilan fotografik; pengilangan glisin, drug, pewarna dan herba
2. Asid akrilik	Iritasi mata, kulit dan sistem pernafasan; luka terbakar pada mata dan kulit, pemekaan kulit	Pendedahan semasa digunakan dalam resin, bahan pemplastik dan penghasilan drug
3. Asid kromik (kromat atau dikromat)	Pengulseran hidung dan kulit, penembusan septum hidung	Pendedahan semasa digunakan dalam penyaduran kromium, ukiran proses, pengilangan simen, penyaduran anod, pembersihan logam, pemerangan, pengilangan lica dan cat seramik
4. Asid formik	Iritasi mata, kulit, tekak; luka terbakar pada kulit, dermatitis	Pendedahan semasa digunakan dalam industri tekstil, industri kulit, penyaduran nikel dan sebagai bahan penggumpal lateks getah

PEKERJAAN/INDUSTRI	PENYAKIT	AGEN
Asid dan Alkali		
<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada asid dan alkali, dan wap toksiknya atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan</i>		
Pendedahan semasa digunakan dalam pengilangan resin sintetik, pewarna, salutan permukaan, dakwat dan bahan pemplastik	Iritasi ringan pada kulit dan membran mukus	5. Asid fumarik
Pendedahan semasa digunakan dalam industri kulit, tekstil, pelekat dan plastik	Luka terbakar pada kulit dan mata	6. Asid glikolik
Pendedahan semasa digunakan dalam pencelupasan keluli, penghasilan bahan kimia dan degradasi terma polivinil klorida	Iritasi mata dan kulit	7. Asid hidroklorik
Pendedahan semasa digunakan sebagai perantaraan dalam penghasilan fluorokarbon; digunakan dalam pembersihan logam, punaran kaca dan aplikasi gilap	Osteosklerosis, luka terbakar pada kulit	8. Asid hidrofluorik
Pendedahan semasa penghasilan ammonium kalium nitrat, bahan letupan, asid adipik, isosianida dan baja	Bronkiolitis fibrosa obliterans	9. Asid nitrik-wasap nitrus
Pendedahan semasa penghasilan baja, detergen dan bahan pembersih	Iritan dermatitis, iritasi pernafasan, edema pulmonari	10. Asid fosforik
Pendedahan semasa pengilangan baja, nitrobenzena, penyaduran elektrik dan penapisan petroleum	Larinks dan kanser paru-paru	11. Asid sulfurik

BAHAGIAN III

PEKERJAAN/INDUSTRI	PENYAKIT	AGEN
Gas		
<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada gas yang melebihi Had Pendedahan yang Dibenarkan</i>		
Pendedahan semasa digunakan dalam kerja penyejukan, pengilangan plastik, penapisan petroleum dan penyaduran elektrik bahan kemas	Sindrom disfungsi saluran udara reaktif, bronkiolitis obliterans, ketakcukupan pernafasan kronik	1. Ammonia

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Gas		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada gas yang melebihi Had Pendedahan yang Dibenarkan</i>
2. Karbon dioksida	Penyesak ringkas, koma, kecederaan otak anoksik, jantung terhenti	Pendedahan semasa peletupan, digunakan dalam pengilangan air mineral, penapaian di kilang bir dan pembentukan kapur di tanur kapur
3. Karbon monoksida	Penyesak kecederaan otak anoksik, iskemia jantung	Pendedahan semasa penggunaan trak angkat susun bukan elektrik yang digunakan dalam bangunan, dinamit, serbuk letupan untuk peletupan di kolong bawah tanah; digunakan dalam gas pencahayaan; memadam kebakaran, kerja garaj, kuasa gas penghasil, relau letupan, ketuhar untuk pembakaran kok batu arang dan bahan api lain, enjin gas
4. Dietilena dioksida (dioksana)	Kegagalan ginjal akut, nekrosis hati	Pendedahan semasa digunakan dalam pencair cat, agen pembersih dan dalam industri semikonduktor
5. Etilena oksida	Iritasi saluran pernafasan, kanser, polineuropati, katarak	Pendedahan semasa digunakan dalam pengilangan glikol etilena, glikol eter dan produk perubatan; digunakan sebagai pewasap racun perosak, pensteril di hospital
6. Formaldehida	Dermatitis sentuh, bronkitis, asma, nasofarinks dan kanser paru-paru	Pendedahan semasa digunakan dalam rumah mayat, pengawetan tisu, kerja makmal
7. Halogen	Penyesak kimia	Pendedahan semasa digunakan untuk pensterilan air
8. Hidrogen sianida	Kecederaan otak anoksik, kakisan kulit, atrofi optik	Pendedahan semasa digunakan dalam pewasapan, operasi penyaduran logam, pengekstrakan garam perak dan emas daripada bijih
9. Hidrogen fluorida	Luka terbakar pada kulit, fluorosis, sindrom disfungsi saluran udara reaktif, bronkiolitis obliterans, ketidakcukupan pernafasan kronik	Pendedahan semasa digunakan dalam industri plastik dan mikroelektronik
10. Hidrogen sulfida	Iritasi pernafasan dan membran mukus, kecederaan otak anoksik	Pendedahan semasa digunakan dalam geoterma dan pengekstrakan tenaga bahan api fosil; digunakan sebagai bahan penyahjangkit tani oleh peladang, pekerja lubang kumbahan dan baja

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Gas		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada gas yang melebihi Had Pendedahan yang Dibenarkan
11. Nitrik oksida, Nitrogen dioksida	Penyesak ringkas, menjadikan asma semakin teruk	Pendedahan semasa pengimpalan; digunakan dalam industri kertas
12. Ozon	Menjadikan asma semakin teruk	Pendedahan semasa pengimpalan dan proses fotokopi
13. Fosgen	Sindrom disfungsi saluran udara reaktif, edema pulmonari, bronkiolitis	Pendedahan semasa digunakan dalam pengilangan isosianat, racun perosak, pewarna dan farmaseutikal; pengimpalan arka

BAHAGIAN IV

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Pelarut		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada pelarut yang melebihi Had Pendedahan yang Dibenarkan
1. Karbon bisulfida	Ensefalopati, psikosis, skotoma pusat, keabnormalan neurotingkah laku, parkinsonisme, neuritis periferi, iritasi pernafasan dan penyakit ginjal	Pendedahan semasa pengilangan rayon, racun serangga, racun herba, laker dan varnis serta kerja makmal
2. n-heksana	Sistem saraf pusat, depresi, disfungsi neurotingkah laku, polineuropati, dermatitis	Pendedahan semasa digunakan sebagai pelarut dalam gam, simen getah, varnis, dakwat dan proses pengekstrakan di dalam makmal
3. Monomer akrilamida	Neuropati akson dengan rasa kebas. Kesan sistem saraf pusat – ataksia, tremor, disartria, kulit melepuh	Pendedahan kepada monomer akrilamida semasa pengilangannya, dalam penghasilan polimer, dalam industri salutan permukaan; digunakan dalam pemprosesan kimia, rawatan air dan pemisahan mineral
4. Sikloheksana, kerosin	Dermatitis nyahlemak, depresi sistem saraf pusat, depresi, ketidakseimbangan, dermatitis, disfungsi neurotingkah laku	Pendedahan semasa digunakan sebagai pelarut industri dan dalam sintesis nilon

AGEN

PENYAKIT

PEKERJAAN/INDUSTRI

Pelarut

Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada pelarut yang melebihi Had Pendedahan yang Dibenarkan

5. Hidrokarbon Aromatik

(a) Benzena dan homolognya

Leukemia bukan-limfatik akut, anemia aplastik, agranulositosis, metemoglobinemia

Pendedahan semasa menanggalkan dan menyahgriscat; digunakan sebagai pelarut dalam industri petroleum; ketuhar kok, dalam penghasilan agen pembersih kering

(b) Terbitan amino-atau kloro-atau nitro yang toksik

Dermatitis, ensefalopati toksik, disfungsi neurotingkah laku, neuropati perifer

Pendedahan semasa digunakan dalam pengilangan bahan letupan dan industri pewarna

(c) Stirena

Dermatitis, ensefalopati toksik, disfungsi neurotingkah laku, neuropati perifer

Digunakan dalam pengilangan getah sintetik, sebagai monomer atau kopolimer untuk resin polistirena akrilonitril-butadiena-stirena (ABS)

(d) Toluena

Dermatitis, ensefalopati toksik, disfungsi neurotingkah laku, neuropati perifer

Digunakan sebagai pelarut dalam industri kimia dan makmal

(e) Xilena

Dermatitis, ensefalopati toksik, disfungsi neurotingkah laku, neuropati perifer

Digunakan sebagai substrat bagi sintesis organik

6. Metil alkohol

Neuropati optik (Metil alkohol) dan depresi sistem saraf pusat

Pendedahan semasa digunakan sebagai perantaraan industri, pelarut, ramuan antisejuk beku dan bahan api

7. Karbon tetraklorida

Toksik hati dan ginjal

Pendedahan semasa penghasilan klorofluorokarbon, getah terklorin, farmaseutikal, racun perosak dan agen antiketuk

8. 2 metoksietanol

Ensefalopati, anemia, dermatitis nyahlemak

Pendedahan semasa digunakan sebagai pelarut; pengilangan antisejuk beku dan poliester

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Pelarut		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada pelarut yang melebihi Had Pendedahan yang Dibenarkan
9. Keton		
(a) Metil n-butil keton (MnBK)	Ensefalopati, polineuropati deria motor, gangguan mental dan tingkah laku, neuropati optik	Pendedahan semasa digunakan sebagai pelarut industri dan penanggal varnis
(b) Metil iso-butil Keton (MiBK)	Neuropati periferai	Pendedahan semasa digunakan sebagai pelarut dalam cat dan pelarut pengekstrakan dalam industri farmaseutikal
(c) Metil etil keton (MEK)	Neuropati periferi dengan n-heksana atau Metil n-butil keton	Pendedahan semasa digunakan sebagai pelarut; dalam pengekstrakan minyak sayur dan pemisahan dalam industri petrokimia
10. Metilena klorida	Toksin hati, meningkatkan karboksihemoglobin	Pendedahan semasa digunakan dalam penghasilan alat mainan dan produk plastik
11. Metil klorida (klorometana)	Toksik kepada otak, hati, buah pinggang dan paru-paru, sawan, ataksia dan diplopia	Pendedahan semasa penghasilan polimer dan resin silikon metil, digunakan sebagai agen pemetilan dalam penghasilan getah butil
12. Tetrakloreтана	Narkotik kuat, sistem saraf pusat dan ketoksikan hati, perengsa kulit	Pendedahan semasa digunakan dalam pengilangan pesawat udara; digunakan sebagai pelarut; penyediaan fabrik kapal terbang; pengilangan mutiara dan kulit tiruan
13. Triklorometana (kloroform)	Toksin hati, anestetik	Pendedahan semasa digunakan dalam kerja makmal dan pelarut industri
14. Trikloroetilena	Kesan narkotik, euforia, sakit kepala, kekeliruan, mengantuk, tidak sedarkan diri, pneumonitis kimia, kerosakan buah pinggang dan hati, dermatitis	Pendedahan semasa digunakan dalam penyahgrisan, pembersihan kanta; sebagai pelarut untuk pengekstrakan dan perantaraan kimia
15. 1,1,2 Trikloroetana	Depresi sistem saraf pusat, ensefalopati toksik	Pendedahan semasa digunakan sebagai perantaraan kimia dan pelarut

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Pelarut		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada pelarut yang melebihi Had Pendedahan yang Dibenarkan</i>
16. Pelarut berasaskan aldehida		
(a) Formaldehid	Iritasi mata, dermatitis sentuh, bronkitis, asma, kanser nasofaringeal dan kanser paru-paru	Pendedahan semasa digunakan dalam penghasilan formaldehid dan resin poliasetal dan fenoliknya, plastik, gam papan lapis; pengilangan urea; sebagai perantara dalam sintesis kimia, sebatian acuan, resin faundri; pengawetan dan penyahjangkitan; perekat untuk penebatan; baja pelepasan perlahan dan kemasan tekstil berasaskan formaldehid
(b) Glutaraldehid	Perengsa kulit, mata dan paru-paru, asma, dermatitis alergi	Pendedahan semasa digunakan sebagai pengikat biologi dalam makmal, pemerangan dan sintesis kimia
17. Bis(Klorometil) eter (BCME)	Iritasi pernafasan, kanser paru-paru (terutamanya jenis sel oat)	Pendedahan semasa digunakan dalam penyediaan resin penukaran ion

BAHAGIAN V

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Racun Perosak		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada racun perosak, wap, debu atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan</i>
1. Dipiridil (Dikuat, Parakuat)	Sindrom distres pernafasan akut, fibrosis pulmonari, kecederaan kornea, gangguan sistem saraf pusat, ketoksikan ginjal dan hepar	Pendedahan semasa digunakan sebagai racun herba oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
2. Karbamat (dimetilditio karbamat)	Dermatitis perengsa, polineuropati tertunda, bronkospasma, pankreatitis	Pendedahan semasa digunakan sebagai racun serangga oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Racun Perosak		
3. Sebatian klorofenoksi (2-4 dikloro fenoksi asid asetik)	Hipotensi, kegagalan pernafasan, lemah otot dan spasma, rabdomiolisis	Pendedahan semasa digunakan sebagai racun herba oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
4. Racun kulat Ditiokarbamat dan tiokarbamat (etilena-bis-ditiokarbamat, dimetilditiokarbamat)	Perengsa dan dermatitis alergi, adenokarsinoma tiroid	Pendedahan semasa digunakan sebagai racun kulat oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
5. Glifosat	Hipotensi, disaritmia, edema pulmonari, pneumonitis sedutan, iritasi membran mukus, dermatitis sentuh, ketoksikan hati	Pendedahan semasa digunakan sebagai racun herba oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
6. Organoklorin (Aldrin, klordana, endosulfan, endrin, lindana)	Pengujaan sistem saraf pusat, sawan, anemia aplastik	Pendedahan semasa digunakan sebagai racun serangga oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
7. Metil bromida (Bromometana)	Ensefalopati, distres pernafasan, sawan, neuropati periferi, ketoksikan hati	Pendedahan semasa digunakan sebagai agen pewasapan
9. Nitrofenol	Kerosakan buah pinggang dan hati, metemoglobinemia, perangsang saraf pusat	Pendedahan semasa digunakan sebagai racun herba, racun serangga, racun kulat oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
10. Fosforus organofosfat atau sebatian tak organiknya	Dermatitis perengsa, ketoksikan berterusan sistem saraf pusat, polineuropati tertunda, bronkospasma, pankreatitis	Pendedahan semasa digunakan sebagai racun serangga oleh peladang, pengilang racun perosak, penyembur racun perosak dan penyelidik pertanian
11. Piretroid sintetik (Permetrin, deltametrin)	Asma, dermatitis sentuh alergi dan perengsa, rinitis alergi, trombositopenia	Pendedahan semasa digunakan sebagai racun serangga oleh peladang, pengilang racun perosak, penyembur dan penyelidik pertanian
12. Pentaklorofenol	Iritasi kulit dan saluran pernafasan, keruntuhan sistemik, klorakne, bronkitis, aplasi sumsum tulang, hilang penglihatan	Pendedahan semasa digunakan sebagai racun serangga dan pengawet kayu

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Racun Perosak		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan), dan pendedahan kepada racun perosak, wap, debu atau sebatianannya yang melebihi Had Pendedahan yang Dibenarkan</i>
13. Racun rodensia		
(a) Warfarin	Pendarahan dari membran mukus dan saluran gastrousus	Pendedahan semasa digunakan sebagai racun rodensia oleh peladang, pengilang dan penyelidik pertanian
(b) Zink fosfida	Iritasi pulmonari yang teruk, sawan, ketoksikan ginjal dan hati	Pendedahan semasa digunakan sebagai gas pewasap, umpan racun rodensia

BAHAGIAN VI

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Fizikal		<i>Pekerjaan yang melibatkan pendedahan kepada agen fizikal ini dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan</i>
1. Bunyi bising	Trauma akustik	Pendedahan kepada bunyi bising pekerjaan pada tahap tekanan bunyi 140 dB yang sangat tinggi dalam tempoh yang pendek
	Hilang pendengaran teraruh hingar	Pendedahan kepada bunyi bising pekerjaan pada tahap tekanan bunyi yang tinggi melebihi 85 desibel sepanjang tempoh 8 jam selama bertahun-tahun
2. Getaran	Hand Arm Vibration Syndrome (HAVS)	Pendedahan secara berpanjangan dan berlebihan kepada getaran setempat di bahagian tangan dalam julat 125-300 Hz
	Getaran seluruh tubuh	Pendedahan kepada gerakan yang berulang, getaran daripada alat pneumatik, gerudi kuasa, mesin rivet atau tukul pembalak, gergaji rantai, penyerpih, penggerudi batu, pemotong batu, operator dan perivet gerudi tukul
3. Tekanan	Disbarisme, kesakitan nyahmampat, barotrauma, osteonekrosis, embolisme gas arteri serebrum, lengkok	Pendedahan kepada udara termampat, udara dalam air atau nipis, gas boleh nafas lain atau campuran gas seperti dalam air atau pekerja terowong

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Fizikal		Pekerjaan yang melibatkan pendedahan kepada agen fizikal ini dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan
4. Sinaran		
(a) Sinaran pengionan		
(i) Pendedahan akut kepada sinar X, sinar gamma, sinar alfa dan sinar beta pada dos yang tinggi	Sindrom sinaran akut, eritema alihan, deskuamasi, lesi radionekrotik	Pendedahan akut kepada sinar X, reaktor nuklear, partikel ion, radium, bahan radioaktif lain atau tenaga sinaran
(ii) Pendedahan kronik kepada sinar X, sinar gamma, sinar alfa dan sinar beta dalam tempoh pendam yang panjang	Katarak, radiodermatitis kronik, polineuropati, epiteloma spinoselular kutaneus, leukemia limfoid mieloid, osteosarkoma, anemia aplastik, kanser paru-paru, tiroid, testis, payu dara wanita dan kulit	Pendedahan kronik kepada sinar X, reaktor nuklear, zarah pengionan, radium, bahan radioaktif lain atau tenaga sinaran
(b) Sinaran bukan pengionan		
(i) Sinaran ultraungu	Kesan akut: keratokonjunktivitis katarak sinaran, fotoretinitis, eritema kulit	Pendedahan secara berulang atau berpanjangan kepada ultraungu, silau atau sinaran daripada kaca lebur, logam lebur atau merah pijar, bahan putih pijar semasa pengimpalan elektrik atau pengimpalan asetilena
(ii) Sinaran inframerah	Kesan akut: blefaritis, keratitis, gangguan retina berkaitan dengan haba-skotoma. Lesi pigmen fundus Kesan kronik: katarak Pekerja Kaca	Pendedahan secara akut atau berpanjangan kepada sinaran inframerah di kalangan tukang besi, peniup kaca, pekerja di relau, pembuat roti, pekerja faundri, laser industri
5. Haba	Kekejangan haba, kelesuan haba, sinkop haba, strok haba dan katarak	Pendedahan kepada haba yang melampau, senaman lasak dan pelepasan haba terganggu, kelembapan tinggi semasa bekerja di luar, proses bersuhu tinggi, pengimpal, pekerja seramik dan pekerja kedai roti
6. Suhu terlalu rendah	Chilblain, rosak fros, kaki rendaman, hipotermia sistemik	Pendedahan kepada kesejukan melampau yang menyebabkan suhu teras badan jatuh di bawah 36° Celsius di dalam bilik sejuk atau industri makanan sejuk beku

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Agen Fizikal</i>		<i>Pekerjaan yang melibatkan pendedahan kepada agen fizikal ini dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan</i>
7. Kekurangan oksigen	Hipoksia, asfiksiasi	Pendedahan kepada persekitaran kerja tanpa oksigen yang mencukupi, ruang tertutup, lurang, silo pemyelenggaran dan penyelidik di altitud tinggi, pemanjat gunung
8. Pencahayaan kurang baik	Nistagmus pelombong dan gerakan mata yang luar biasa	Pendedahan kepada pencahayaan yang kurang baik di dalam lombong

BAHAGIAN VII

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
<i>Agen Biologi</i>		<i>Pekerjaan yang melibatkan pendedahan kepada agen biologi dan adanya jangkitan</i>
A. Virus		
1. Arbovirus	Ensefalomielitis St. Louis/ Equine	Pendedahan di kalangan pekerja makmal
2. <i>Highly Pathogenic Avian Influenza (HPAI) Virus</i>	Selesema Burung	Pendedahan kepada burung yang dijangkiti HPAI
3. Virus Kurang Daya Tahan Penyakit (HIV)	Sindrom Kurang Daya Tahan Penyakit (AIDS)	Pendedahan kepada darah dan produk darah yang dijangkiti HIV di kalangan pekerja jagaan kesihatan, pekerja pelupusan dan perkhidmatan makmal
4. Flavivirus	<i>Japanese Encephalitis</i>	Pendedahan kepada haiwan yang dijangkiti Flavivirus
5. Virus Hepatitis A	Jangkitan Hepatitis A	Pendedahan kepada virus Hepatitis A di kalangan pekerja kumbahan
6. Virus Hepatitis B	Jangkitan Hepatitis B kegagalan hati akut, Hepatitis kronik, sirosis, hepatoma	Pendedahan kepada darah manusia atau produk darah manusia yang dicemari virus Hepatitis B atau suatu sumber virus Hepatitis B di kalangan pekerja jagaan kesihatan dan makmal, pekerja pelupusan sisa hospital, kakitangan ambulan, kakitangan penjara dan polis

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Biologi		Pekerjaan yang melibatkan pendedahan kepada agen biologi dan adanya jangkitan
7. Virus Hepatitis C	Jangkitan Hepatitis C Hepatitis kronik, sirosis, hepatoma	Pendedahan kepada darah atau produk darah manusia yang dicemari virus Hepatitis C atau suatu sumber virus Hepatitis C di kalangan pekerja jagaan kesihatan dan makmal, pekerja pelupusan sisa hospital, kakitangan ambulan, kakitangan penjara dan polis
8. Virus Hepatitis E	Jangkitan Hepatitis E	Pendedahan kepada darah atau produk darah manusia yang dicemari virus Hepatitis E atau suatu sumber virus Hepatitis E di kalangan pekerja jagaan kesihatan dan makmal, pekerja pelupusan sisa hospital, kakitangan ambulan, kakitangan penjara dan polis
9. Virus Nipah (Paramiksovirida)	Jangkitan virus Nipah	Pendedahan kepada haiwan dan dagingnya yang dijangkiti virus Nipah di kalangan penternak babi dan pekerja jagaan kesihatan
10. Virus (Virus Korona) Sindrom Pernafasan Akut Teruk (SARS)	Jangkitan virus SARS	Pendedahan kepada mereka yang dijangkiti virus SARS di kalangan pekerja jagaan kesihatan
11. Virus Anjing Gila	Anjing gila, gejala sistem saraf pusat, racauan, sawan, kegagalan pernafasan	Pendedahan kepada virus Anjing Gila melalui gigitan haiwan rabid atau haiwan domestik yang dijangkiti virus anjing gila di kalangan pekerja ladang dan penternakan, haiwan veterinar, kakitangan makmal haiwan dan kawalan haiwan
12. Virus Rubela	Rubela	Pendedahan kepada pesakit yang dijangkiti rubela di kalangan kakitangan jagaan kesihatan dan penjaga tadika
B. Bakteria		
1. <i>Bacillus anthracis</i> daripada produk haiwan	Jangkitan antraks lesi vesikular kutaneus, pendarahan pulmonari, pneumonia	Pendedahan kepada haiwan yang dijangkiti <i>Bacillus anthracis</i> dan spora, bulu kejur, belulang, kuku, kapas, tanduk atau kulitnya atau produk haiwan yang lain atau pengendalian karkas dan sisa oleh pekerja ladang, haiwan, rumah sembelih, veterinar, makmal, doktor, jururawat, kakitangan ambulan dan juruteknik patologi

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Biologi		Pekerjaan yang melibatkan pendedahan kepada agen biologi dan adanya jangkitan
2. <i>Borrelia burgdorferi</i> daripada gigitan sengkenit yang dijangkiti	Penyakit Lyme	Pendedahan kepada gigitan sengkenit yang dijangkiti <i>Borrelia burgdorferi</i> dalam kerja yang melibatkan kerja luar meliputi perladangan dan perhutanan
3. <i>Brucella abortus</i> , <i>B. suis</i> , <i>B. mellitensis</i> daripada ternakan	Bruselosis	Pendedahan kepada haiwan yang dijangkiti <i>Brucella</i> atau produknya dalam kerja perladangan, perhutanan dan penternakan haiwan, pengendalian karkas atau sebahagian daripadanya atau produknya yang tidak dirawat, rumah sembelih, veterinar, kerja makmal; pengendalian spesimen makmal atau vaksin yang mengandungi <i>Brucella</i>
4. <i>Clostridium tetani</i> dari tanah, kumbahan atau haiwan melalui luka dalam yang tidak dibersihkan	Tetanus Sawan	Pendedahan kepada tanah yang tercemar semasa perladangan, tugas ketenteraan dan kerja kumbahan
5. <i>Erysipelothrix rhusiopathiae</i> dari haiwan yang dijangkiti	Erisipeloid Erisipeloid Kutaneus Sepsis dengan endokarditis	Pendedahan kepada agen melalui kerja perladangan dan penternakan haiwan, kerja veterinar, kerja penyembelihan, kerja pemprosesan daging, kerja lain yang boleh terkena babi, lembu, atau ikan termasuk pengendalian karkasnya
6. <i>Francisella tularensis</i> daripada pelbagai haiwan, terutamanya kuda betina, arnab, tupai, tikus, mencit dan haiwan perosak lain	Tularemia	Pendedahan kepada <i>Francisella tularensis</i> dalam perladangan, kerja penternakan haiwan, perhutanan, kerja makmal yang melibatkan pengendalian arnab, kuda betina, tupai darat, mencit atau rodensia kecil berbulu yang lain yang dijangkiti
7. <i>Leptospira icthohaemorrhagical interrogans</i> daripada haiwan (tikus terutamanya), air kencing haiwan atau tanah yang tercemar	Leptospirosis/penyakit Weil (demam paya, penyakit babi) Kegagalan hati dan ginjal, pneumonia	Pendedahan kepada agen melalui perladangan dan kerja penternakan haiwan, kerja veterinar, kerja penyembelihan, kerja tenusu, kerja pemprosesan daging, kerja yang boleh terkena tanah yang tercemar, nelayan air tawar dan pengendali ikan, kerja kumbahan dan pemungut sampah yang terdedah kepada tikus yang dijangkiti

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Biologi		
Pekerjaan yang melibatkan pendedahan kepada agen biologi dan adanya jangkitan		
8. <i>Mycobacterium bovis</i> daripada haiwan yang dijangkiti	Tuberkulosis bovin	Pendedahan kepada <i>Mycobacterium bovis</i> yang dipindahkan melalui haiwan yang dijangkiti atau produknya, kerja penyembelihan dan penternakan haiwan
9. <i>Mycobacterium tuberculosis</i> , <i>Mycobacterium leprae</i> daripada manusia yang dijangkiti	Tuberkulosis/Kusta	Pendedahan jika terkena terus dengan sumber atau sumber-sumber agen disebabkan oleh pekerjaan: (a) dalam rawatan perubatan atau penjagaan seseorang atau mereka yang menghidap penyakit tuberkulosis/kusta atau dalam suatu khidmat tambahan yang lain kepada rawatan atau penjagaan itu; (b) merawat seseorang atau mereka yang menghidap penyakit tuberkulosis atau kusta yang timbul keperluan terhadapnya disebabkan penyakit fizikal atau mental; (c) sebagai penyelidik yang terbabit dalam penyelidikan berkaitan dengan tuberkulosis/kusta; atau (d) sebagai pekerja makmal, ahli patologi atau pekerja bedah siasat, yang kerjanya itu melibatkan bahan yang merupakan sumber jangkitan tuberkulosis atau dalam sebarang kerja tambahan kepada pekerjaan tersebut
10. <i>Mycobacterium marinum</i>	Granuloma tangki ikan	Pendedahan kepada agen di kalangan pembersih tangki ikan
11. <i>Pseudomonas mallei</i>	Glanders pneumonia, septicemia, abses setempat	Pendedahan apabila terkena anjing gila, atau haiwan ekuin atau karkas di kalangan pekerja ladang dan pekerja di tempat penyembelihan

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Biologi		
<i>Pekerjaan yang melibatkan pendedahan kepada agen biologi dan adanya jangkitan</i>		
12. <i>Pseudomonas pseudomallei</i>	Melioidosis	Pendedahan kepada rodensia yang dijangkiti <i>Pseudomonas pseudomallei</i>
C. Rickettsiae dan Chlamydiae		
1. <i>Chlamydia psittaci</i> daripada burung	Klamidiosis burung psitakosis (ornitosis) ensefalitis, miokarditis, tromboflebitis	Pendedahan kepada burung, ayam itik dan najisnya yang dijangkiti <i>Chlamydia psittaci</i> atau sisanya atau produk burung seumpamanya yang tidak dirawat misalnya pekerja ladang itik, pekerja memproses bulu, pekerja rumah sembelih, pemeriksa daging ayam itik dan pekerja kedai haiwan peliharaan
	Ovin klamidiosis	Pendedahan apabila terkena kambing biri-biri yang dijangkiti <i>Chlamydia psittaci</i> atau sisanya atau produk kambing seumpamanya yang tidak dirawat di kalangan pekerja ladang biri-biri, pakar bedah veterinar
2. <i>Chlamydia pneumoniae</i> daripada manusia	Pneumonia klamidia	Pendedahan kepada manusia yang dijangkiti <i>Chlamydia pneumoniae</i> di kalangan pekerja jagaan kesihatan
3. <i>Coxiella burnetii</i> daripada haiwan domestik (lembu, kambing biri-biri, kambing) atau melalui gigitan sengkenit yang jarang-jarang berlaku	Demam Q pneumonitis, miokarditis,	Pendedahan apabila terkena haiwan yang dijangkiti, kambing biri-biri, sisa atau produknya yang tidak dirawat di kalangan pekerja ladang lembu yang terlibat dalam penternakan kambing biri-biri, kerja penyembelihan, kerja veterinar, kerja makmal
4. <i>Rickettsia rickettsii</i> dan spesies <i>Rickettsia</i> lain	Demam berbintik (demam tifus bawaan sengkenit/ <i>rickettsia</i> bawaan sengkenit)	Pendedahan kepada <i>Rickettsia rickettsii</i> dan spesies <i>Rickettsia</i> lain dalam kerja makmal dan kerja luar
5. <i>Rickettsia prowazekii</i>	Tifus Eskar	Pendedahan kepada sebarang <i>Rickettsia prowazekii</i> di kalangan kakitangan tentera dan peladang
6. <i>Yersinia pestis</i>	Wabak septisemia, kejutan endotoksik, koagulasi intravaskular tersebar-(DIVC)	Pendedahan kepada agen melalui tikus yang dijangkiti di kawasan penternakan haiwan dan perladangan

AGEN	PENYAKIT	PEKERJAAN/INDUSTRI
Agen Biologi		
D. Protozoa		
1. <i>Toxoplasma gondii</i> daripada kucing (atau burung, kambing biri-biri, kambing, babi, lembu, dll)	Toksoplasmosis abses serebrum, pneumonia, miokarditis	Pendedahan kepada agen semasa kerja pertanian, kerja veterinar, kerja penyembelihan dan kerja di kedai haiwan peliharaan
2. Cacing kerawit <i>Ancyostoma braziliense</i>	Larva migrans kutaneus plak gerak, berkeluk terutamanya di kaki	Pendedahan kepada agen di kalangan pekerja di pantai tropika
E. Kulat		
1. Sporotrikosis nokardia	Mikosis dalam nodul kulit	Pekerja dengan pendedahan kepada agen
2. <i>Candida albicans</i>	Kandidiasis	Pekerja dengan pendedahan kepada agen

BAHAGIAN VIII

PENYAKIT MENGIKUT ORGAN SASARAN

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
A. Penyakit Paru-paru		
1. Asma		
(a) Isosianat-toluena diisosianat		Pendedahan kepada asmagen dalam kerja kimia, cat sembur, pengilangan busa poliuretana, digunakan dalam perekat berasaskan poliuretana, pembuatan roti dan perladangan, kerja makmal, perladangan, kerja kayu, tukang kayu, pengering tekstil, pendandan rambut, penjagaan kesihatan dan pengeluaran sarung tangan
(b) Garam platinum		
(c) Wasap atau debu yang berpunca daripada pengilangan, pengangkutan atau penggunaan agen pengeras (agen pengawet resin epoksi berasaskan ftalik anhidrida, tetrakloroftalik anhidrida, trimelitik anhidrida atau trietilenatetramina		

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
	(d) Wasap yang berpunca daripada penggunaan rosin sebagai fluks pematerian (e) Enzim proteolitik (f) Debu mineral seperti simen, kuprum (g) Debu tepung dan bijirin (h) Haiwan termasuk serangga dan epitelia atropod lain serta bahan kumuh-debu haiwan seperti tulang atau bulu (i) Debu papan (j) Debu tumbuhan daripada tumbuhan seperti kapas, kayu, flaks, sekam padi, gabus, rempah, hem, guni, tembakau, teh, gandum barli, rai (k) Pewarna reaktif (l) Garam persulfat (m) Produk yang diperbuat daripada lateks asli (getah asli) (n) Glutaraldehid	
2. Rinitis alergi	(a) Isosianat (b) Garam Platinum (c) Wasap atau debu yang berpunca daripada pengilangan, pengangkutan atau penggunaan agen pengeras (agen pengawet resin epoksi berasaskan ftalik anhidrida, tetrakloroftalik anhidrida, trimelitik anhidrida atau trietilenatetramina	Pendedahan kepada agen dalam industri penyaduran logam, pemprosesan makanan, pekerja makmal, pemprosesan bijirin, pengilangan drug, pengilangan serbuk pencuci, dandanan rambut, industri elektronik, pengimpal, pemprosesan pewarna teh dan kopi

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
	(d) Wasap yang berpunca daripada penggunaan rosin sebagai fluks pematieran (e) Enzim proteolitik (f) Debu mineral seperti simen, kuprum (g) Debu tepung dan bijirin (h) Haiwan termasuk serangga dan epitelia atropod lain dan bahan kumuh-debu haiwan seperti tulang atau bulu (i) Pewarna reaktif Persulfat (j) Produk yang diperbuat daripada lateks asli (getah asli) (k) Glutaraldehid	
3. Penyakit berkaitan dengan asbestos Asbestosis (fibrosis pulmonari interstitial resapan), penyakit pleural asbestos benigna, penyakit berkaitan dengan asbestos malignan -mesotelioma, plak pleural, efusi pleural	Asbestos atau sebarang campuran asbestos	Pendedahan kepada asbestos atau sebarang campuran asbestos (lombong dan kuari asbestos, industri pengilangan produk asbestos), kerja penebatan, kerja limbungan kapal, kerja yang melibatkan penyingkiran bahan yang mengandungi asbestos atau jubin atau yang lain atau yang banyak Pendedahan kepada debu yang berpunca daripada sebarang operasi sebelumnya, pengilangan atau pembaikan tekstil asbestos atau barangan lain yang mengandungi atau terdiri daripada asbestos; pelombongan, pemprosesan, pengilangan atau pengendalian, perobohan, pengangkutan, pelupusan
4. Kecederaan pulmonari akut (edema larinks, laluan udara terhalang), sindrom distres pernafasan akut (<i>Acute Respiratory Distress Syndrome</i> (ARDS))	Klorin, ammonia, sulfur dioksida, dan aerosol asid	Pendedahan kepada agen

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
5. Bronkitis kronik	Batu arang, kabut minyak, gentian berkekaca sintetik, simen Portland, wasap pengimpalan, kapas, bijirin, kayu, asap tembakau, asap kebakaran, ekzos enjin	Pendedahan kepada agen yang menyebabkan bronkitis kronik, Pendedahan kepada debu batu arang yang disebabkan oleh kerja di bawah tanah di dalam lombong batu arang untuk satu tempoh selama sekurang-kurangnya 20 tahun dan tempoh itu hendaklah termasuk satu tempoh ketidakupayaan untuk bekerja semasa melakukan pekerjaan itu
6. Emfisema	<i>B. subtilis proteases</i> , wasap kadmium	Sedutan wasap kadmium bagi satu tempoh, selama 20 tahun atau lebih di kalangan pelombong batu arang, pekerja pengilangan tekstil
7. Penyakit saluran udara akibat debu organik tertentu		
(a) Bisinosis (<i>weaver's cough</i> atau <i>mill fever</i>)	Debu kapas, hem atau sisal	Pendedahan kepada debu kapas, debu kapas sintetik atau hem atau debu sisal di kalangan pekerja industri kapas
(b) Penyakit <i>Flax-dressers</i>	Flaks	Pendedahan kepada debu flaks
8. Pneumokoniosis		Sebarang pekerjaan yang melibatkan—
(a) Silikosis		
(i) Silikosis Akut	Batu silika dan debu mineral lain	(a) pelombongan, pengkuarian atau pemprosesan batu silika, penggunaan pasir kuartzos kering (kuartza, kristobalit, tridimit) atau sebarang endapan kering atau sisa kering silika (silikon dioksida SiO_2) atau sebarang campuran yang mengandungi bahan seumpamanya, termasuk magnesium silikat terhidrat
(ii) Silikosis Dipercepat	Pasir kuartzos kering (kuartza, kristobalit, tridimit) atau sebarang deposit kering atau sisa kering silika (silikon dioksida SiO_2) atau sebarang campuran yang mengandungi bahan seumpamanya, termasuk magnesium silikat terhidrat	
(iii) Silikosis kronik		

PENYAKIT

AGEN

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Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan

- (b) pengendalian sebarang bahan yang dinyatakan dalam subperenggan (a) dalam atau berkaitan dengan sebarang operasi yang disebut di dalamnya atau banyak Pendedahan kepada debunya akibat operasi tersebut, pengisaran, pengerudian, pemecahan batu yang mengandungi silika, pengilangan seramik dan kaca;
- (c) pemecahan, penghancuran atau pengisaran flin atau kerja atau pengendalian flin yang pecah, hancur atau yang dikisar atau bahan yang mengandungi flin tersebut atau yang banyak Pendedahan kepada debu akibat operasi tersebut;
- (d) peletupan pasir melalui udara termampat dengan penggunaan pasir kuartzos atau batu silika atau flin hancur atau yang banyak Pendedahan kepada debu akibat peletupan pasir itu;
- (e) penskalaan dandang atau banyak Pendedahan kepada debu akibat daripadanya;
- (f) pekerjaan di dalam faundri atau pengerjaannya, atau pendedahan yang banyak kepada debu akibat mana-mana operasi berikut;
- (g) pelepasan tuangan keluli daripada bahan silika yang terlekat;
- (h) pelepasan tuangan logam daripada bahan silika yang terlekat;

PENYAKIT

AGEN**PEKERJAAN/INDUSTRI**

Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan

- (i) pengilangan tembikar atau barang tanah liat, (termasuk barang tanah liat sanitari, jubin tanah liat elektrik), dan sebarang pekerjaan yang banyak Pendedahan kepada debu akibat daripadanya;
- (j) pemasangan granit atau sebarang batu igneus oleh tukang batu atau penghancuran bahan seperti itu atau banyak Pendedahan kepada debu akibat operasi tersebut; atau
- (k) penggunaan atau persediaan untuk menggunakan mesin pengasah atau banyak Pendedahan kepada debu akibat daripadanya

Sebarang pekerjaan yang melibatkan –

- (a) pelombongan, pengkuarian atau pemprosesan batu silika, penggunaan pasir kuartzos kering (kuartza, kristobalit, tridimit) atau sebarang endapan kering atau sisa kering silika (silikon dioksida SiO_2) atau sebarang campuran kering yang mengandungi bahan tersebut, termasuk magnesium silikat terhidrat;
- (b) pengendalian sebarang bahan yang dinyatakan dalam subperenggan (a) di dalam atau berkaitan dengan sebarang operasi yang disebut di dalamnya atau banyak Pendedahan yang kepada debu akibat operasi tersebut, pengisaran, penggerudian, pemecahan batu yang mengandungi silika, pengilangan seramik dan kaca;

(b) Silikosis yang dikaitkan dengan tuberkulosis

Mana-mana agen di atas serentak dengan jangkitan *Mycobacterium tuberculosis*

PENYAKIT**AGEN****PEKERJAAN/INDUSTRI**

Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan

- (c) pemecahan, penghancuran atau pengisaran flin atau kerja atau pengendalian flin yang pecah, hancur atau yang dikisar atau bahan yang mengandungi flin tersebut atau yang banyak Pendedahan kepada debu akibat operasi tersebut;
- (d) peletupan pasir melalui udara termampat dengan penggunaan pasir kuartzos atau batu silika atau flin hancur atau yang banyak Pendedahan kepada debu akibat peletupan pasir itu;
- (e) penskalaan dandang atau yang banyak Pendedahan kepada debu akibat daripadanya;
- (f) pekerjaan di dalam faundri atau melakukan, atau yang banyak Pendedahan kepada debu akibat, mana-mana operasi berikut;
- (g) pelepasan tuangan keluli daripada bahan silika yang terlekat;
- (h) pelepasan tuangan logam daripada bahan silika yang terlekat;
- (i) pengilangan tembikar atau barang tanah liat, (termasuk barang tanah liat sanitari, jubin tanah liat elektrik), dan sebarang pekerjaan yang banyak Pendedahan kepada debu akibat daripadanya;
- (j) pemasangan granit atau sebarang batu igneus oleh tukang batu atau penghancuran bahan seperti itu atau banyak pendedahan kepada debu akibat operasi tersebut; atau

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
		(k) penggunaan atau persediaan untuk menggunakan mesin pengasah atau banyak Pendedahan kepada debu akibat daripadanya.
9. Pneumokoniosis pelombong batu arang dan penyakit paru-paru lain yang berkaitan dengan batu arang	Batu arang	Batu arang atau sebarang lombong (di bawah atau di atas tanah) yang salah satu matlamat operasi melombong adalah untuk mendapatkan sebarang mineral, atau menggunakan atau mengendalikan sebarang mineral yang dikeluarkan dari tempat itu
10. Grafit fibrosis (paru-paru) (grafit pneumokoniosis)	Grafit (asli dan tiruan)	Pendedahan semasa pengeluaran grafit asli atau tiruan dan debu akibat pengisaran
11. Stanosis	Timah	Pendedahan kepada debu atau wasap timah semasa melombong timah dan metalurgi
12. Siderosis	Debu besi	Pendedahan dengan tersedut debu yang mengandungi besi dan hematit
13. Baritosis	Debu barium	Pendedahan semasa penggerudian telaga, aloi dengan aluminum, dan penggunaan barium karbonat dalam rawatan air dan sebagai fluks dalam seramik
14. Talkosis	Talkum	Pendedahan semasa pengeluaran talkum
15. Pneumokoniosis akibat sekam padi	Sekam padi atau debu atau bahan yang mengandungi padi	Pendedahan kepada sekam padi, debu atau bahan yang mengandungi padi
16. Pneumonitis Hiperpeka (Alveolitis alergi luaran) akibat debu organik		Pendedahan kepada spora kulapuk atau kulat atau protein heterolog disebabkan melakukan kerja dalam bidang— (a) pertanian, hortikultur, perhutanan, penanaman kulat yang boleh dimakan atau kerja malt; atau (b) memuatkan atau memunggah atau mengendalikan penyimpanan bahan sayuran cendawan atau kulat yang boleh dimakan

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan		
(a) Bakteria termofilik dan produk bakteria		
(i) Paru-paru peladang	<i>Micropolyspora faeni</i> <i>Faenia rectivirgula</i>	Pendedahan peladang kepada agen
(ii) Paru-paru pekerja cendawan	<i>Thermoactinomyces vulgaris</i> <i>Micropolyspora faeni</i>	Pendedahan pekerja semasa penghasilan cendawan
(iii) Bagasosis	<i>Thermoactinomyces sachari</i> <i>Thermoactinomyces vulgaris</i>	Pendedahan kepada agen dalam ladang tebu
(iv) Penyakit pekerja sisal	Debu tali	Pendedahan kepada agen di kalangan pembuat beg dan tali
(v) Paru-paru pekerja kopi	Debu biji kopi	Pendedahan kepada agen di kalangan pekerja kopi
(b) Bakteria bukan termofilik		
(i) Paru-paru pekerja baja	<i>Thermoactinomyces vulgaris</i> <i>Thermoactinomyces candidus</i>	Peladang Pendedahan kepada agen apabila mengendalikan baja
(ii) Paru-paru pekilang	<i>Sitophilus granarius</i> (kumbang belalai gandum)	Pendedahan kepada agen melalui bijirin yang dicemari debu
(iii) Paru-paru pekerja detergen	Debu detergen	Pendedahan kepada manik dan debu detergen
B. Kulat		
1. Paru-paru pekerja kayu	Debu kulit kayu yang bercendawan	Pendedahan kepada agen di kalangan pengulit kayu gergaji dan pembalak
2. Penyakit kumbang belalai gandum	Tepung gandum yang dicemari	Pendedahan kepada agen di kalangan pekerja tepung
3. Paru-paru pekerja kilang kertas	Serpihan kayu bercendawan	Pendedahan kepada agen di kalangan pekerja kilang kertas

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>		
C. Protein Haiwan		
1. Penyakit penggemar Burung bayan burung		Pendedahan kepada agen di kalangan pengendali burung
2. Paru-paru penternak Burung merpati merpati		Pendedahan kepada agen di kalangan pengendali burung merpati
3. Paru-paru pengendali Ayam ayam itik		Pendedahan kepada agen di kalangan penternak ayam itik
4. Paru-paru furier Ayam belanda		Pendedahan kepada agen di kalangan furier
5. Penyakit pengendali Tikus rodensia		Pendedahan kepada agen di kalangan pekerja makmal haiwan
D. Bahan kimia		
1. Pneumonitis hiperpeka	Toluena diisiosianat (TDI), heksametilena diisiosianat, difenilmetana diisiosianat (MDI)	Pendedahan kepada agen semasa digunakan sebagai pelarut industri, di kalangan pekerja faundri dan pekerja busa poliuretana
	Trimelitik anhidrid	Pendedahan kepada agen di kalangan pekilang resin epoksi dan cat
2. Penyakit paru-paru logam keras	Kobalt dalam pelarut	Pekerja tungsten karbida apabila Pendedahan kepada kobalt
3. Penyakit berilium kronik	Zarahhan berilium	Pendedahan kepada berilium semasa pengekstrakan; digunakan dalam metalurgi, industri aeroangkasa dan industri nuklear
4. Sindrom toksik debu organik	Rumput kering dan bijirin bercendawan, kompos, tebu bercendawan, debu biji kopi, debu kulit kayu bercendawan, tepung gandum yang tercemar, kulapuk keju, liken bercendawan, burung bayan, burung merpati, ayam itik, musang, tikus dan debu organik lain	Pendedahan kepada agen semasa kegiatan pertanian

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
5. Legionelosis	<i>Legionella pneumophila</i>	Pendedahan kepada <i>Legionella pneumophila</i> akibat sistem pengalihan udara yang tercemar dalam persekitaran kerja
6. Kanser paru-paru akibat pekerjaan	Arsenik, asbestos, nikel oksida, nikel subsulfida, Bis (klorometil) eter, sebatian kromium (heksavalen), kalsium kromat, zink kromate, strontium kromat dalam bentuk tulennya, gas mustard, minyak mineral, hidrokarbon aromatik polisiklik, radon, debu kayu	Pendedahan kepada agen

BAHAGIAN IX

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
<i>Penyakit kulit</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan) dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
1. Dermatitis sentuh alergi	(a) Pelekat, antiseptik, antibiotik-bahan makanan haiwan dengan antibiotik (b) Biosid-(formaldehid, timerosal) (c) Simen (kromate, kobalt) (d) Kosmetik-haruman (e) Bendalir dan minyak pemotong (f) Pewarna-pewarna rambut-(para-fenilena diamina, pencuci gambar warna, pewarna tekstil serakan), bahan penyahjangkit	Pendedahan kepada agen semasa pengendaliannya

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
<i>Penyakit kulit</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
	(g) Makanan (sayur-sayuran, makanan laut, sos salad, daging, buah-buahan, agen perisa, bahan antioksidan) (h) Gam dan agen pengikat (i) Logam-nikel (peralatan nikel), kromat, kobalt, raksa (j) Tumbuh-tumbuhan dan pokok (pengawet)-kayu dan pengawetnya (k) Urushiol (<i>Toxicodendron</i>), Lakton seskuiterpena (<i>Compositae</i>), Primin (<i>Primula obconica</i>), Tulpalin A (<i>Tulipa</i>, <i>Alstroemeria</i>) (l) Plastik-(monomer epoksi, mono-mer akrilik, resin fenolik, mangkin amina) (m) Resin-(epoksi, akrilat, isosiata, resin formaldehid), fluks pematerian (amina dan kolofoni) (n) Produk getah (bahan tambah-merkaptobenzotiazol, tiuram, karbamat, tiourea)-sarung tangan, but dan topeng (bahan kimia getah)	
2. Dermatitis Sentuh Perengsa	(a) Alkohol, glikol, air (b) Bahan makanan haiwan, baja, tumbuh-tumbuhan, racun perosak (c) Mangkin amina stirena, benzoil peroksida (d) Alifatik-sulingan petroleum (kerosen, gasolin), nafta, minyak, pembersih tangan	Pendedahan kepada agen semasa pengendaliannya

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
<i>Penyakit kulit</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
	(e) Aromatik—benzena, toluena, xilena	
	(f) Bendalir pemotong, pelelas, minyak, pembersih tangan	
	(g) Bahan kimia, asid dan alkali (simen)	
	(h) Eploksi, fenolik, monomer akrilik	
	(i) Terhalogen-trikloroetilena, kloroform, dan metilena klorida	
	(j) Logam—arsenik, krom	
	(k) Agen lain—turpentin, keton, ester, debu kayu, laker, penggilap	
	(l) Plastik—sabun dan detergen, syampu, larutan ombak kekal, resin, bahan penyahjangkit, antiseptik, ubat-ubatan, zat aktif permukaan	
	(m) Pelarut—fototoksin: tar batu arang, furokumarin, pewarna, drug	
	(n) Fotoalergen—tumbuh-tumbuhan, stilbena, terbitan asid amino-benzoik dan salisilanilida terhalogen	
	(o) Pengawet kayu, gentian kaca, pelarut, minyak, pic, tar, cat, jus sayur-sayuran dan buah-buahan (enzim), agen penggilap	
3. Akne dan klorakne	(a) Minyak dan gris serta keadaan panas dan lembap di tempat kerja	Pendedahan kepada minyak, gris dan keadaan panas dan lembap di tempat kerja
	(b) Klorakne—terpolihalogen, naftalena, bifenol, dibenzofuran dan sesetengah bahan cemar racun herba	Pendedahan kepada agen

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
<i>Penyakit kulit</i>		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan</i>
4. Pengulseran krom, pengulseran membran mukus atau epidermis	Asid kromik, kromat atau dikromat ammonium, kalium, zink atau natrium, atau sebarang sediaan atau larutan yang mengandungi sebarang bahan ini	Pendedahan kepada agen
5. Urtikaria sentuh	(a) Alergen-lateks, tepung jagung, bulu binatang dan dander, antibiotik, akrilat, resin epoksi, formaldehid, bahan makanan misalnya telur, lobak merah, ikan, daging dan susu (b) Agen bukan imunologi—etil/butil/isopropil/asetil, alkohol, asid sorbik, asid sorbik, asid benzoik, sulfur dioksida (c) Ammonia, (sama ada asid sinamik yang alergi atau tak alergi) kentang, epal, salad, ammonium persulfat, xilena	Pendedahan kepada agen
6. Dermatitis	Kayu rengas dan sapnya	Pendedahan kepada agen semasa manipulasi kayu rengas atau sebarang proses dalam atau berkaitan dengan pengilangan barangannya
7. Kerato kilat-konjunktivitis atau retinitis	Pengimpalan elektrik atau pengimpalan asetilena cahaya ultraungu	Pendedahan kepada agen semasa pengimpalan elektrik atau pengimpalan asetilena
8. Ketumbuhan kulit setempat yang baru, papiloma atau lesi keratotik	Berilium, minyak syal, tar, pic, bitumen, minyak mineral dan jelaga	Pendedahan kepada agen
9. Dermatitis tungau	Burung hantu dan burung merpati dan burung lain yang mempunyai tungau	Pendedahan kepada agen semasa mengendalikan burung hantu dan burung merpati yang dipenuhi tungau
10. Pengulseran kulit pekerjaan	Bahan kimia perengsa yang mengakis	Pendedahan kepada agen semasa mengendalikan bahan kimia perengsa yang mengakis
11. Vitiligo pekerjaan/toksik (leukoderma)	(a) Fenol-paratertier-butilfenol (4-tert-butilfenol), paratertier-butilkatekol (4-tert-butilkatekol), paraamilfenol	Pendedahan kepada agen

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
Penyakit kulit		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, penyimpanan, pelupusan), dan pendedahan kepada agen yang melebihi Had Pendedahan yang Dibenarkan
	(b) Katekol-katekol (pirokatekol), p-metil katekol, 4-isopropil katekol, 4-tert-butil katekol	
	(c) Hidrokuinon, monobenzil eter bagi hidrokuinon (4-benziloksifenol) atau mono-butil eter bagi hidrokuinon (4-butoksifenol)	
12. Kanser kulit pekerjaan	Arsenik atau sebatian arsenik, tar, pic, poliaromatik hidrokarbon, bitumen, minyak mineral (termasuk parafin), jelaga, sinaran ultraungu debu organik	Pendedahan kepada agen

BAHAGIAN X

PENYAKIT	AGEN/FAKTOR RISIKO ERGONOMI	PEKERJAAN/INDUSTRI
Penyakit Otot-Skeletal Pekerjaan		Pekerjaan yang melibatkan pendedahan kepada berbilang faktor risiko ergonomik – tenaga, sangat berulang, kerja tidak neutral, tempoh yang berpanjangan, beban berat dan melebihi Had Pendedahan yang Dibenarkan
1. Anggota atas		
(a) Sindrom Salur Keluar Torasik	Kerja yang melibatkan penarikan bahu ke belakang dan ke bawah, bekerja pada aras yang lebih tinggi daripada kepala dengan abduksi dan aduksi berulang pada bahu dan lengan yang mengakibatkan mampatan struktur neurovaskular yang merentas keluar dada, leher dan melalui bahagian bawah klavikel hingga ke aksila	Pekerja dengan kegiatan yang dicirikan oleh berbilang faktor risiko ergonomik
(b) Sindrom Kuf Pemutar	Tugas yang berkaitan dengan pergerakan yang sangat pantas, berulang dan kuat, memberikan tekanan yang berlebihan pada otot dan tendon dengan daya yang berlebihan di sekeliling bahu	Pekerja dengan kegiatan yang dicirikan oleh berbilang faktor risiko ergonomik

PENYAKIT	AGEN/FAKTOR RISIKO ERGONOMI	PEKERJAAN/INDUSTRI
<i>Penyakit otot-Skeletal Pekerjaan</i>		<i>Pekerjaan yang melibatkan pendedahan kepada berbilang faktor risiko ergonomik-tenaga, sangat berulang, kerja tidak neutral, tempoh yang berpanjangan, beban berat dan melebihi Had Pendedahan yang Dibenarkan</i>
(c) Tangan lesu	Tugas dengan tugas manual yang pantas, berulang dan berlebihan yang menyebabkan geseran atau tekanan yang teruk dan berpanjangan pada bursa tangan yang mengakibatkan geseran atau tekanan yang teruk atau berpanjangan pada tangan	Pekerja dengan kegiatan yang dicirikan oleh berbilang faktor risiko ergonomik
(d) Siku lesu	Tugas dengan tugas manual yang pantas, berulang dan berlebihan yang menyebabkan geseran atau tekanan luaran yang teruk dan berpanjangan pada bursa siku	Pekerja dengan kegiatan yang dicirikan oleh berbilang faktor risiko ergonomik
(e) Epikondilitis tengah (<i>Golfer's elbow</i>)	Pergerakan kuat yang sentiasa berulang, melibatkan fleksor/pronator jari dan pergelangan tangan	Pekerja dengan fleksi pergelangan tangan/jari dan siku terlentur yang kuat dan sentiasa berulang
(f) Epikondilitis lateral (<i>Tennis elbow</i>)	Dorsifleksi pergelangan tangan yang kuat dan sentiasa berulang	Pekerja dengan regangan pergelangan tangan dan genggam tangan yang kuat dan berulang
(g) Tenosinovitis stiloid radial (<i>De Quervains tenosynovitis</i>)	Pergerakan berterusan atau sentiasa berulang, penggunaan tenaga yang kuat dan postur pergelangan tangan yang ekstrem, terutamanya jika digabungkan dengan kecederaan pada anggota badan dan appendaj.	Pekerja yang mencubit dengan kuat secara berterusan atau berulang menggunakan ibu jari semasa menjalankan tugasnya, penggunaan tenaga yang kuat dan postur pergelangan tangan yang ekstrem, terutamanya jika digabungkan dengan kecederaan pada anggota badan dan appendaj
(h) Sindrom Terowong Karpal (saraf median)	Pergerakan yang sentiasa berulang, penggunaan tenaga yang kuat, postur pergelangan tangan yang ekstrem dan pergerakan hiperfleksi dan hiperekstensi yang ekstrem menyebabkan tekanan berpanjangan pada alur anatomi mengakibatkan kecederaan saraf. Pergerakan yang kuat dan kerap berulang dengan alat bergetar, kerja yang melibatkan tekanan dan postur pergelangan tangan yang ekstrem, terutamanya gabungan semua faktor risiko ini	Pekerja dengan pergerakan yang kuat, kerap dan berulang menggunakan alat bergetar pegang tangan yang bahagian dalam alat itu bergetar untuk memindahkan getaran ke tangan; kerja yang melibatkan postur pergelangan tangan atau tangan yang ekstrem

PENYAKIT	AGEN/FAKTOR RISIKO ERGONOMI	PEKERJAAN/INDUSTRI
Penyakit otot-Skeletal Pekerjaan		Pekerjaan yang melibatkan pendedahan kepada berbilang faktor risiko ergonomik-tenaga, sangat berulang, kerja tidak neutral, tempoh yang berpanjangan, beban berat dan melebihi Had Pendedahan yang Dibenarkan
2. Anggota bawah		
(a) Lutut lesu (Housemaid's knee)	Bursitis atau selulitis subkutaneus yang terjadi pada atau di bahagian atas lutut	Pekerja dengan tugas manual yang pantas, berulang dan berlebihan yang menyebabkan geseran atau tekanan yang teruk atau berpanjangan terhadap bursa pada atau di sekitar lutut. Tugas yang memerlukan pekerja kerap duduk melutut.
(b) Sindrom Terowong Tarsus (saraf tibial posterior)	Pergerakan kaki yang kuat, kerap, berpanjangan dan berulang	Pekerja dengan pergerakan kaki yang pantas, berulang dan berlebihan

BAHAGIAN XI

PENYAKIT	AGEN	PEKERJAAN/INDUSTRI
Penyakit Psikososial		
1. Gangguan tekanan pascatrauma	Gangguan trauma ekstrem atau ketakutan yang melampau, tidak berdaya atau seram	Pendedahan kepada tekanan yang terlalu ekstrem yang disebabkan oleh kemalangan atau kejadian yang berlaku semasa bekerja atau tidak bekerja

BAHAGIAN XII

KANSER PEKERJAAN

AGEN	KANSER PEKERJAAN	PEKERJAAN/INDUSTRI
		Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan
1. 4-Aminobifenil (1 IARC)	Kanser lapisan epitelium saluran dan pundi kencing (papiloma), gangguan neurologi hati	Pendedahan kepada agen semasa menggunakan atau mengendalikan atau Pendedahan kepada wasap, debu atau wap 4-aminobifenil atau bahan yang mengandungi 4-aminobifenil; digunakan dalam industri sintesis bahan kimia dan pengilangan getah

AGEN

KANSER PEKERJAAN

PEKERJAAN/INDUSTRI

Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan

2. Akrilonitril (2A IARC) Kanser paru-paru dan prostat, limfoma, polineuropati

Pendedahan kepada akrilonitril; digunakan dalam pengilangan serat tekstil, pempolimeran akrilonitril dan getah, plastik, industri tekstil

3. Arsenik (1 IARC) Neoplasma kulit malignan (karsinoma sel skuamus), larinks, bronkus dan paru-paru, hemangiosarkoma

Pendedahan semasa perlombongan, peleburan kuprum, pengilangan kaca, pengeluaran; penggunaan racun perosak arsenik, racun herba, racun serangga, pemerangan dan pembuatan kaca

4. Asbestos (1 IARC) Paru-paru-mesotelioma malignan terbaaur (pleura, perikardium, peritoneum), pleura, kanser saluran gastrousus-esofagus, peritoneum, usus besar Neoplasma bronkus malignan, larinks, paru-paru, ginjal

Pendedahan kepada asbestos, debu atau sebarang campuran asbestos pada satu paras yang melebihi paras yang lazimnya didapati di persekitaran terutamanya di lombong atau kuari; semasa pengilangan produk berasaskan asbestos, kerja perobohan atau pembuangan asbestos

5. Benzena atau homolog toksiknya (terbitan nitro dan amino) (1 IARC) Leukemia, limfoma hodgkin, malignansi darah yang lain

Pendedahan kepada benzena atau homolog toksiknya semasa menggunakan ketuhar kok, pengilangan kasut menggunakan benzena, pelarut dengan benzena, bahan api dan industri petroleum

6. Benzidina dan garam (1 IARC) Kemaglinanan pundi

Pendedahan kepada benzidin semasa pengilangan pewarna atau pigmen, agen makmal; digunakan dalam industri kertas, kulit, tekstil dan pewarna

7. Benz-o-pirena (2A IARC) Kemaglinanan paru-paru, kulit dan pundi

Pendedahan kepada benz-o-pirena semasa mengguna atau mengendalikannya; digunakan dalam penyelidikan

8. Berilium (IARC 1) Neoplasma bronkus dan paru-paru malignan

Pendedahan semasa pengeluaran aloi keras tahan kakisan dalam industri aeroangkasa, reaktor nuklear; produk seramik dan refraktori, penghubung elektrik, suis, elektrod kimpalan, tiub sinaran katod, aloi logam dan litografi dalam industri elektronik

9. β -naftilamina (1 IARC) Kanser pundi kencing, metemoglobinemia, ataksia

Pendedahan semasa digunakan untuk pengilangan pewarna atau pigmen

AGEN	KANSER PEKERJAAN	PEKERJAAN/INDUSTRI
<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan</i>		
10. Bis-klorometil eter (BCME), Klorometilmetil eter (1 IARC)	Kemaglinanan bronkus dan paru-paru	Pendedahan kepada Bis-klorometil eter yang terhasil semasa pengilangan klorometil metil eter; digunakan dalam industri kimia sebagai perantaraan kimia
11. Kadmium dan sebatiananya (1 IARC)	Neoplasma bronkus dan paru-paru malignan	Pendedahan semasa penyaduran elektrik; pengilangan bateri nikel-kadmium; gelas kelajuan tinggi, pematerian, pengimpalan dan pematerian keras perak (sebagai pengisi); digunakan dalam industri plastik (penstabil); digunakan sebagai pigmen (dalam getah, dakwat, plastik, cat, tekstil) dan pengilangan barang kemas
12. Sebatian kromium-heksavalen (1 IARC)	Neoplasma bronkus dan paru-paru malignan, kanser hidung	Pendedahan semasa penyaduran elektrik, pengilangan pewarna atau pigmen dan pengimpalan
13. Tar batu arang dan pic tar batu arang gelaga; asfalt jelaga, kreosot atau bitumen, antrasena, minyak mineral, bahan meruap dan sisa bahan ini. Hidrokarbon aromatik polisiklik zarahhan (1 IARC)	Kanser kulit, bronkus dan paru-paru, pundi, larinks, kaviti mulut	Pendedahan kepada agen semasa penggunaan bahan binaan, elektrod, pengegasan batu arang dan pengeluaran kok-pengeluaran petroleum, pengilangan pigmen, pembinaan jalan dan penempatan
14. Etilena oksida (1 IARC)	Leukemia, katarak	Pendedahan semasa digunakan dalam pengilangan etilena glikol, glikol eter dan produk perubatan; digunakan sebagai pewasap racun perosak, pensteril di hospital
15. Etilena dibromida (1,2 dibromoetana) (2A IARC)	Kanser perut	Pendedahan kepada agen semasa penggunaan, pengendalian atau pendedahan kepada wasap, debu atau wap etilena dibromida atau bahan yang mengandungi dibromida
16. Formaldehid (2A IARC)	Kanser nasofarinks, sino-hidung, otak dan leukemia	Pendedahan kepada agen semasa digunakan sebagai pengawet tisu di rumah mayat dan makmal
17. Hematit	Kanser paru-paru	Pendedahan kepada agen semasa penggunaan, pengendalian dan Pendedahan kepada wasap, debu atau wap hematit semasa melombong (dengan pendedahan kepada radon)

AGEN	KANSER PEKERJAAN	PEKERJAAN/INDUSTRI
		<i>Pekerjaan yang melibatkan penggunaan atau pengendalian (pengilangan, pengangkutan, penyimpanan, pelupusan) dan pendedahan kepada agen melebihi Had Pendedahan yang Dibenarkan</i>
18. Sinaran pengionan (1 IARC)	Neoplasm malignan – tulang dan kulit, leukemia	Pendedahan kepada sinar X, reaktor nuklear, zarah pengionan, radium, bahan radioaktif lain atau tenaga sinaran
19. Minyak mineral, tidak dirawat dan dirawat secara biasa (1 IARC)	Kanser kulit dan skrotum	Pendedahan kepada agen semasa digunakan sebagai pelincir
20. Gas mustard (1 IARC)	Kanser paru-paru, larinks, farinks	Pendedahan kepada gas mustard–gas perang
21. Nikel–sebatianannya subsulfid dan karbonil (1 IARC)	Kemalignanan bronkus dan paru-paru, membran mukus hidung atau sinus udara yang berkaitan	Pendedahan semasa memekat, melebur atau menapis dalam industri pengeluaran nikel, pengeluaran keluli tahan karat, pengilangan bateri, metalurgi, aloi, penyaduran elektrik; digunakan sebagai pemangkin dan pigmen; pelombong bijih nikel sulfida dan pekerja kilang aloi nikel
22. Radium (1 IARC)	Tulang (sarkoma)	Penggunaan, pengendalian atau pendedahan kepada wasap, debu atau wap radium
23. Progeni radon (1 IARC)	Neoplasm bronkus dan paru-paru malignan	Pendedahan kepada agen dalam perlombongan bawah tanah, pemprosesan bijih dan produk radioaktif
24. Minyak syal (1 IARC)	Kanser kulit dan skrotum	Penggunaan, pengendalian atau pendedahan kepada minyak syal
25. Jelaga, tar dan minyak mineral	Kanser kulit, paru-paru dan pundi, distrofi permukaan kornea	Pendedahan kepada agen semasa membuat jalan
26. Monomer vinil klorida (1 IARC)	Angiosarkoma hati, neoplasm hati malignan dan duktus hempedu intrahepar, otak dan paru-paru	Pendedahan kepada agen semasa pengilangan vinil klorida, pempolimeran vinil klorida dan industri plastik
27. Debu kayu keras	Kanser nasofarinks, hidung dan paru-paru	Pendedahan kepada agen semasa kerja kayu, pembuat perabot dan kabinet

BAHAGIAN XIII

1. Bagi maksud Jadual ini—

- (a) “had pendedahan yang dibenarkan” ertinya had siling atau kepekatan bawaan udara purata nilai masa lapan jam atau had pendedahan maksimum sebagaimana yang ditakrifkan di bawah Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan Dan Standard Pendedahan Bahan Kimia Berbahaya Kepada Kesihatan) 2000 [P.U. (A) 131 2000];
- (b) “IARC” ertinya Agensi Penyelidikan Kanser Antarabangsa;
- (c) “Kumpulan 1 IARC” ertinya agen ini karsinogen kepada manusia; dan
- (d) “Kumpulan 2A IARC” ertinya agen ini mungkin karsinogen kepada manusia.

2. Bagi maksud menentukan suatu penyakit khidmat, Jadual ini hendaklah dibaca bersama-sama dengan—

- (a) Akta Kilang dan Jentera 1967 dan Akta Keselamatan dan Kesihatan Pekerjaan 1994, peraturan-peraturan yang dibuat di bawah Akta ini, garis panduan dan kod amalan yang berkaitan dengan pendedahan kepada agen di tempat kerja;
- (b) Garis panduan Diagnosa Penyakit Khidmat yang dikeluarkan oleh Pertubuhan; dan
- (c) Garis panduan Pengawasan Perubatan yang dibuat di bawah Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan Dan Standard Pendedahan Bahan Kimia Berbahaya Kepada Kesihatan) 2000.

Dibuat 24 Disember 2007

[KSM/PUU/01/05/03 Jld. 2; PN(PU²)58.XV]

DATUK SERI DR. FONG CHAN ONN
Menteri Sumber Manusia

EMPLOYEES' SOCIAL SECURITY ACT 1969

EMPLOYEES' SOCIAL SECURITY (AMENDMENT OF FIFTH SCHEDULE) ORDER 2008

In exercise of the powers conferred by subsection 28(3) of the Employees' Social Security Act 1969 [Act 4], the Minister makes the following order:

Citation and commencement

1. (1) This order may be cited as the **Employees' Social Security (Amendment of Fifth Schedule) Order 2008**.

(2) This Order comes into operation on 4 February 2008.

Amendment of Fifth Schedule

2. The Employees' Social Security Act 1969 [Act 4] is amended by substituting for the Fifth Schedule the following Schedule:

"FIFTH SCHEDULE

[Section 28]

OCCUPATIONAL DISEASES

PART I

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Chemicals-Metals and its compounds</i>		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the metal and its toxic fumes, dust or vapour or its compound exceeding Permissible Exposure Limits</i>
1. Aluminium	Respiratory irritant, chronic bronchitis, pulmonary fibrosis, dermatitis	Exposure during welding of aluminium metal; use as phosphor binders, manufacture of cans, containers and wrappings, pigments, paints, catalysts, alloys, engine and aircraft components, electric wires and cables, window frames, antiperspirants and in aluminium reduction plants
2. Antimony	Dermatitis, pneumoconiosis, haemolysis, anuria, nasal septum perforation, myocardial injury, lung cancer (Antimony trioxide)	Exposure during use as a flame retardant for plastics, paint, textiles, paper, rubber and adhesives, alloys in production of battery grids, type casting, cable sheath and manufacture of semiconductor devices

AGENT	DISEASE	OCCUPATION/INDUSTRY
Chemicals-Metals and its compounds		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the metal and its toxic fumes, dust or vapour or its compound exceeding Permissible Exposure Limits</i>
3. Arsenic	Encephalopathy, peripheral neuritis, polyneuropathy, acquired haemolytic anaemia, glomerular and tubular damage, nasal septum perforation, skin hyperkeratosis, lung fibrosis, dystrophy of corneal surface, hepatic angiosarcoma cancer of skin and lung	Exposure during mining, alloy production, copper smelting, production and use of arsenic pesticide, herbicides, insecticides; use in the microelectronic industry; and used as pigment and refining agents in glass manufacture, preservative in tanning wood and cable sheaths
4. Barium	Benign pneumoconiosis (baritosis), local irritation	Exposure during the manufacture of aluminium alloys, ceramics (as flux), welding rod fluxes, flares and fireworks, lubricating oil detergents, rubber, paint, paper, linoleum and plastics (as filler) hair removers, pesticide; during barite ore refining
5. Beryllium	Chronic beryllium disease, tracheobronchitis, pneumonitis dermatitis (ulceration or granuloma), berylliosis, lung cancer	Exposure during production of hard, corrosion-resistant alloys in aerospace industry, nuclear reactors; ceramic and refractory products, electrical contacts, switches, welding electrodes, cathode ray tubes, metallic alloys and lithography for the electronics industry
6. Boron	Respiratory and skin irritation, Central nervous system depression, mental behavior disorders, renal damage	Exposure during degassing and deoxidising of metals; steel hardening process; metallurgical processes (as fluxes and shielding slag); use in atomic reactors as neutron absorber; glass fibers production and in bleaching products
7. Cadmium	Osteomalacia, pneumonitis, emphysema, tubular and glomerular damage with renal failure, anosmia, lung cancer	Exposure during electroplating; manufacture of nickel-cadmium batteries, high speed bearings, soldering, welding and silver brazing (as fillers); use in plastics industry (stabiliser); use as pigments (in rubber, ink, plastics, paint, textiles) and jewellery manufacture
8. Chromium	Nasal and skin ulcer, nasal septum perforation, tubular necrosis, allergic and irritant dermatitis, asthma	Exposure during electroplating, dye or pigment manufacture and welding

AGENT	DISEASE	OCCUPATION/INDUSTRY
Chemicals-Metals and its compounds		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the metal and its toxic fumes, dust or vapour or its compound exceeding Permissible Exposure Limits</i>
9. Cobalt	Allergic contact dermatitis, hard metal lung disease, cardiomyopathy	Exposure during manufacture of high temperature alloys for jet engines
10. Copper	Haemolysis, pulmonary fibrosis, metal fume fever	Exposure during electroplating, manufacture of rayon, pigments and copper based fungicide
11. Lead		
(a) Inorganic	Anaemia, polyneuropathy, toxic encephalopathy, neurobehavioural disturbances, haemolysis and acute renal failure	Exposure during lead and zinc mining or extraction; use in plumbing, ammunition, ceramics, crystal, lead storage batteries manufacture; welding or cutting, spray printing and pottery
(b) Organic Alkyl lead compounds	Hallucinations, agitation, mental confusion, coma	Exposure during fuel production, transportations of antiknock agents, blending antiknock fluid and raw gasoline at refineries of antiknock agents; cleaning of tanks containing leaded gasoline or aviation fuel
12. Manganese	Chemical pneumonitis, secondary parkinsonism, encephalopathy, renal injury, metal fume fever	Exposure during mining and processing, grinding, smelting, metallurgy, welding and pottery glazing; manufacture of dry batteries and fungicides; use as oxidizing agent in the chemical industry and in production of steel and alloys
13. Mercury		
(a) Organic methyl mercury	Central nervous system toxicity characterised by combined cerebellar and cortical degeneration	Exposure during use in the manufacture of antiseptics, germicides, diuretics, contraceptives, pesticides (algicides, fungicides), paints and waxes and in the chemical industry (catalyst and alkylating agents)
(b) Inorganic mercury	Central nervous system toxicity characterised by tremor and neuropsychiatric disease	Exposure during electrolytic production of sodium hydroxide and chlorine, battery production, fungicide manufacture, metallurgy and manufacture of mercury containing equipment

AGENT	DISEASE	OCCUPATION/INDUSTRY
Chemicals-Metals and its compounds		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the metal and its toxic fumes, dust or vapour or its compound exceeding Permissible Exposure Limits</i>
14. Nickel	Allergic contact dermatitis, asthma, interstitial pneumonitis, nasal and lung cancer (Nickel bisulphide)	Exposure during concentrating, smelting or refining in the nickel producing industry, stainless steel production, manufacture of batteries, metallurgy, alloys, electroplating; use as catalysts and pigments; sulphide nickel ore miners and high nickel alloy manufacture workers
15. Nickel carbonyl	Interstitial pneumonitis, pulmonary and cerebral oedema, cerebral haemorrhage	Exposure to nickel carbonyl gas during refining of nickel
16. Phosphorus	Necrosis of jaw, dermal burns, respiratory irritation, hepatic and renal toxicity	Exposure during use as fertilizer; use in beverage and dentifrices production (phosphoric acid salts); pesticides/ rodenticide, flame retardants, gasoline and lube oils production (inorganic phosphorus compounds); explosives, ammunitions and match production (red phosphorus)
17. Platinum	Asthma, allergic contact dermatitis, allergic rhinitis	Exposure during use in electroplating, platinum refinery operations and manufacture of fluorescent screen
18. Selenium	Pulmonary oedema, skin irritant allergic dermatitis and skin burns	Exposure to elemental selenium in electronics, glass, ceramic, plastic and rubber industries
19. Thallium	Sensori-motor polyneuropathy	Exposure during use as rodenticide, manufacture of electronic components and optical lens
20. Tin		
(a) Inorganic	Respiratory irritation, benign pneu-moconiosis (stannosis) seizures, skin irritation and fits	Exposure during use in electroplating, canning, soldering, tin alloy processes
(b) Organic organotin (trimethyl, triethyltin)	Irritation of eyes, mild to severe skin and mucous membrane irritation, cerebral oedema, hepatic necrosis and fits	Exposure during use as stabiliser in plastics and oil, as catalysts in curing rubber; as preservatives in textile and leather and as biocides in marine plants
21. Uranium	Kidney disease, lung cancer, radiation sickness	Exposure during mining and use of uranium

AGENT	DISEASE	OCCUPATION/INDUSTRY
Chemicals-Metals and its compounds		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the metal and its toxic fumes, dust or vapour or its compound exceeding Permissible Exposure Limits</i>
22. Vanadium	Respiratory irritation, asthma, allergic dermatitis	Exposure during use in production of ferrovanadium, vanadium alloys, use as catalyst and coating
23. Zinc	Pulmonary irritation and oedema	Exposure during use in galvanising steel and other metals, die cast for use in automotive parts and electrical equipment

PART II

AGENT	DISEASES	OCCUPATION/INDUSTRY
Acid and Alkali		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to, the acid and alkali and its toxic vapour, or its compound exceeding Permissible Exposure Limits</i>
1. Acetic acid	Respiratory irritation, bronchitis, pharyngitis	Exposure during use in photographic development; manufacture of glycine, drugs, dyes and herbicides
2. Acrylic acid	Irritation of the eyes, skin and respiratory system; eye and skin burns; skin sensitisation	Exposure during use in resin, plasticiser and drug production
3. Chromic acid (chromates or dichromates)	Nasal and skin ulceration, perforation of the nasal septum	Exposure during use in chromium plating, process engraving, cement manufacture, anodizing, metal cleaning, tanning, manufacture of ceramic glazes and paints
4. Formic acid	Irritation of the eyes, skin, throat; skin burns, dermatitis	Exposure during use in textile industry, leather industry, nickel plating and as a coagulant for rubber latex
5. Fumaric acid	Mild skin and mucous membrane irritation	Exposure during use in manufacture of synthetic resins, dyes, surface coatings, inks and plasticisers
6. Glycolic acid	Skin and eye burns	Exposure during use in leather, textile, adhesive and plastic industries
7. Hydrochloric acid	Irritation eyes and skin	Exposure during use in steel pickling, chemical manufacturing and thermal degradation of polyvinyl chloride

AGENT	DISEASES	OCCUPATION/INDUSTRY
Acid and Alkali		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to, the acid and alkali and its toxic vapour, or its compound exceeding Permissible Exposure Limits</i>
8. Hydrofluoric acid	Osteosclerosis, skin burns	Exposure during use as an intermediate in the production of fluorocarbons; use in metal cleaning, glass etching and polishing applications
9. Nitric acid-Nitrous fumes	Bronchiolitis fibrosa obliterans	Exposure during production of ammonium potassium nitrate, explosives, adipic acid, isocyanides and fertilizers
10. Phosphoric acid	Irritant dermatitis, respiratory irritation, pulmonary oedema	Exposure during production of fertilizers, detergents and cleansers
11. Sulphuric acid	Laryngeal and lung cancer	Exposure during manufacture of fertilizers, nitrobenzene; electroplating and petroleum refining

PART III

AGENT	DISEASE	OCCUPATION/INDUSTRY
Gases		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to gases exceeding Permissible Exposure Limits</i>
1. Ammonia	Reactive airway dysfunction syndrome, bronchiolitis obliterans, chronic respiratory insufficiency	Exposure during use in refrigeration work, plastic manufacture, petroleum refining and jewellery electroplating
2. Carbon dioxide	Simple asphyxiant, coma, anoxic brain injury, cardiac arrest	Exposure during blasting, use in manufacture of mineral water, fermentation in breweries and the formation of lime in lime kilns
3. Carbon monoxide	Asphyxiant, anoxic brain injury, cardiac ischemia	Exposure during use of non-electric fork lift used indoors, dynamite, gunpowder for blasting in subterranean galleries; use in illuminating gas, fire fighting, garage works, power of producer gas, blast furnaces, stoves for the burning of charcoal coke and other fuel, gas engines
4. Diethylene dioxide (dioxane)	Acute renal failure, liver necrosis	Exposure during use in paint diluents, cleaning agents and in the semiconductor industry

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Gases</i>		
<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to gases exceeding Permissible Exposure Limits</i>		
5. Ethylene oxide	Respiratory tract irritation, cancer, polyneuropathy, cataract	Exposure during use in manufacture of ethylene glycol, glycol ethers and medical products; use as a pesticide fumigant, sterilant in hospitals
6. Formaldehyde	Contact dermatitis, bronchitis, asthma, nasopharynx and lung cancer	Exposure during use in mortuary, tissue preservative, laboratory workers
7. Halogens	Chemical asphyxiants	Exposure during use for water sterilisation
8. Hydrogen cyanide	Anoxic brain injury, skin corrosion, optic atrophy	Exposure during use in fogging, metal plating operations, extraction of silver and gold salts from ores
9. Hydrogen fluoride	Skin burns, fluorosis, reactive air ways dysfunction syndrome, bronchiolitis obliterans, chronic respiratory insufficiency	Exposure during use in plastic industry and microelectronics
10. Hydrogen sulphide	Respiratory and mucous membrane irritation, anoxic brain injury	Exposure during use in geothermal and fossil fuel energy extraction; use as agricultural disinfectant by farmers, sewage and manure pit workers
11. Nitric oxides, Nitrogen dioxide	Simple asphyxiant, aggravates asthma	Exposure during welding; used in paper industry
12. Ozone	Aggravates asthma	Exposure during welding and photocopying process
13. Phosgene	Reactive airway dysfunction syndrome, pulmonary oedema, bronchiolitis	Exposure during use in manufacture of isocyanate, pesticide, dyes, and pharmaceuticals; exposure during arc welding

PART IV

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Solvents</i>		
<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to solvents exceeding Permissible Exposure Limits</i>		
1. Carbon bisulphide	Encephalopathy, psychosis, central scotoma, neurobehavioral abnormalities, parkinsonism, peripheral neuritis, respiratory irritation and renal disease	Exposure during manufacture of rayon, insecticides, herbicides, lacquer and varnish and in laboratory work

AGENT	DISEASE	OCCUPATION/INDUSTRY
Solvents		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to solvents exceeding Permissible Exposure Limits</i>
2. n-hexane	Central nervous system, depression, neurobehavioural dysfunction, polyneuropathy, dermatitis	Exposure during use as solvent in glues, rubber cements, varnishes, inks, and extraction process in laboratories
3. Acrylamide monomer	Axonal neuropathy with numbness. Central nervous system effects-ataxia, tremor, dysarthria, blistering of skin	Exposure to acrylamide monomer during its manufacture, in the polymer production, in surface coating industries; use in chemical processing, water treatment and mineral separation
4. Cyclohexane, kerosene	Defatting dermatitis, central nervous system depression) depression, disequilibrium, dermatitis, neurobehavioural dysfunction	Exposure during use as industrial solvent and in the synthesis of nylon
5. Aromatic hydrocarbons		
(a) Benzene and its homologues	Acute non-lymphatic leukaemia, aplastic anaemia, agranulocytosis, methaemoglobinaemia	Exposure during paint removal and degreasing; use as a solvent in petroleum industry; coke ovens; in the production of dry cleaning agents
(b) Its toxic amino-or chloro-or nitro derivatives	Dermatitis, toxic encephalopathy, neurobehavioral dysfunction, peripheral neuropathy	Exposure during use in manufacture of explosives and dye industries
(c) Styrene	Dermatitis, toxic encephalopathy, neurobehavioral dysfunction, peripheral neuropathy	Use in the manufacture of synthetic rubber, as monomer or copolymer for polystyrene acrylonitrile-butadiene-styrene (ABS) resins
(d) Toluene	Dermatitis, toxic encephalopathy, neurobehavioral dysfunction, peripheral neuropathy	Use as solvent in chemical industry and laboratories
(e) Xylene	Dermatitis, toxic encephalopathy, neurobehavioral dysfunction, peripheral neuropathy	Use as substrate for organic synthesis
6. Methyl alcohol	Optic neuropathy (Methyl alcohol) and central nervous system depression	Exposure during use as industrial intermediate, solvent, ingredient of antifreeze and fuel
7. Carbon tetrachloride	Liver and kidney toxic	Exposure during production of chlorofluorocarbon, chlorinated rubber, pharmaceuticals, pesticides and antiknock agents

AGENT	DISEASE	OCCUPATION/INDUSTRY
Solvents		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to solvents exceeding Permissible Exposure Limits</i>
8. 2 methoxyethanol	Encephalopathy, anaemia, defatting dermatitis	Exposure during use as solvent; manufacture of anti-freezing and polyesters
9. Ketones		
(a) Methyl n-butyl ketone (MnBK)	Encephalopathy, sensori-motor polyneuropathy, mental and behaviour disorders, optic neuropathy	Exposure during use as industrial solvent and varnish remover
(b) Methyl iso-butyl Ketone (MiBK)	Peripheral neuropathy	Exposure during use as a solvent in paint and as extraction solvent in pharmaceutical industry
(c) Methyl ethyl ketone (MEK)	Peripheral neuropathy in conjunction with n-hexane or Methyl n-butyl ketone	Exposure during use as solvent; in vegetable-oil extraction and separation in petrochemical industry
10. Methylene Chloride	Liver toxin, increases carboxyhaemoglobin	Exposure during use in manufacture of toys and plastic products
11. Methyl chloride (chloromethane)	Toxic to brain, liver, kidneys and lungs, fits, ataxia and diplopia	Exposure during production of methyl silicon polymers and resins, use as a methylating agent in the productions of butyl rubber
12. Tetrachlorethane	Powerful narcotic, central nervous system and liver toxicity, skin irritant	Exposure during use in aircraft manufacturing; use as a solvent; preparation of aero plane fabric; manufacture of artificial pearl and leather
13. Trichloromethane (chloroform)	Liver toxin, anesthetic	Exposure during use in laboratory work and industrial solvent
14. Trichloroethylene	Narcotic effect, euphoria, dizziness, confusion, drowsiness, loss of consciousness, chemical pneumonitis, kidney and liver damage, dermatitis	Exposure during use in degreasing, lens cleaning; as solvent for extraction and chemical intermediate
15. 1, 1, 2 Trichloroethane	Depression of central nervous system, toxic encephalopathy	Exposure during use as chemical intermediate and solvent

AGENT	DISEASE	OCCUPATION/INDUSTRY
Solvents		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to solvents exceeding Permissible Exposure Limits</i>
16. Aldehyde based solvents		
(a) Formaldehyde	Eye irritation, contact dermatitis, bronchitis, asthma, nasopharyngeal cancer and lung cancer	Exposure during use in production of formaldehyde and its polyacetal and phenolic resin, plastics, plywood glue; manufacture of urea; as intermediate in chemical synthesis, moulding compounds, foundry resins; preservation and disinfection; adhesives for insulation; slow release fertilizers and formaldehyde based textile finishes
(b) Glutaraldehyde	Skin eye and lung irritant, occupational asthma, allergic dermatitis	Exposure during use as biological fixative in laboratories, tanning and chemical synthesis
17. Bis (Chloromethyl) ether (BCME)	Respiratory irritation, lung cancer (mainly oat cell type)	Exposure during use in preparation of ion exchange resins

PART V

AGENT	DISEASE	OCCUPATION/INDUSTRY
Pesticides		<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to pesticides, vapour, dust or its compound exceeding the Permissible Exposure Limits</i>
1. Dipyridyls (Diquat, Paraquat)	Acute respiratory distress syndrome, pulmonary fibrosis, corneal injury, central nervous system disturbance, renal and hepatotoxicity	Exposure during use as herbicides by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
2. Carbamates (dimethyldithio carbamate)	Irritant dermatitis, delayed polyneuropathy, bronchospasm, pancreatitis	Exposure during use as insecticides by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
3. Chlorophenoxy compounds (2-4 Dichloro phenoxy acetic acid)	Hypotension, respiratory failure, muscle weakness and spasm, rhabdomyolysis	Exposure during use as herbicide by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Pesticides</i>		
<i>Occupations involving the use or handling of (manufacturing, transport, storage, disposal), and exposure to pesticides, vapour, dust or its compound exceeding the Permissible Exposure Limits</i>		
4. Fungicides Dithiocarbamates and thiocarbamates (ethylene-bis-dithiocarbamate, Dimethyldithiocarbamate)	Irritant and allergic dermatitis, thyroid adenocarcinoma	Exposure during use as fungicide by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
5. Glyphosate	Hypotension, dysarrhythmia, pulmonary oedema, aspiration pneumonitis, mucous membrane irritation, contact dermatitis, liver toxicity	Exposure during use as herbicide by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
6. Organochlorine (Aldrin, chlordane, endosulfan, endrin, lindane)	Central nervous system excitation, fits, aplastic anaemia	Exposure during use as insecticide by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
7. Methyl bromide (Bromomethane)	Encephalopathy, respiratory distress, fits, peripheral neuropathy, liver toxic	Exposure during use as fumigation agent
9. Nitrophenol	Kidney and liver damage, methemoglobinemia, Central nervous stimulant	Exposure during use as herbicide, insecticide, fungicide by farmers, pesticide manufactures, pesticide sprayers and agricultural researchers
10. Organophosphate phosphorus or it's inorganic compound	Irritant dermatitis, persistent central nervous system toxicity, delayed polyneuropathy, bronchospasm, pancreatitis	Exposure during use as insecticide by farmers, pesticide manufactures, sprayers and agricultural researchers
11. Synthetic pyrethroids (Permethrin, deltamethrin)	Asthma, allergic and irritant contact dermatitis, allergic rhinitis, thrombocytopaenia	Exposure during use as insecticide by farmers, pesticide manufactures, sprayers and agricultural researchers
12. Pentachlorophenol	Skin and respiratory tract irritation, systemic collapse, chloracne, bronchitis, bone marrow aplasia, visual loss	Exposure during use as insecticide and wood preservative
<i>13. Rodenticides</i>		
(a) Warfarin	Bleeding from mucous membrane and gastrointestinal tract	Exposure during use as rodenticides by farmers, manufacturers and agricultural researchers
(b) Zinc phosphide	Severe pulmonary irritation, fits, renal and liver toxicity	Exposure during use as fumigant gas, rodenticide baits

PART VI

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Physical agents</i>		<i>Occupations involving the exposure to these physical agents and exceeding Permissible Exposure Limits</i>
1. Noise	Acoustic trauma	Exposure to occupational noise of very high sound 140 dB pressure level for a short time
	Noise Induced hearing loss	Exposure to occupational noise of high sound pressure level in excess of 85 decibels over 8-hour period for many years
2. Vibration	Hand Arm Vibration Syndrome (HAVS)	Exposure to prolonged excessive local vibration to hand of range 125-300 Hz.
	Whole body vibration	Exposure to repeated motions, vibrations from pneumatic tools, power drills, riveting machines or hammers-lumberjacks, chain sawyers, chippers, rock drillers, stone cutters, jackhammer operators and riveters
3. Pressure	Dysbarism, decompression sickness, barotraumas, osteonecrosis, cerebral arterial gas embolism, bends	Exposure to compressed air, underwater or rarefied air, other respirable gases or gaseous mixtures such as in under water or tunnel workers
4. Radiation		
(a) Ionising radiation		
(i) Acute exposure to large doses of X-rays, gamma rays, alpha rays and beta rays	Acute radiation syndrome, transient erythema, desquamation, radionecrotic lesions, Cataract, chronic radiodermatitis, polyneuropathy, cutaneous spinocellular epithelioma, lymphoid myeloid leukaemia, osteosarcoma, aplastic anaemia, cancer of lung, thyroid, testis, female breast and skin	Acute exposure to X-rays, nuclear reactors, ionising particle, radium, other radio-active substance or radiant energy Chronic exposure to X-rays, nuclear reactors, ionising particle, radium, other radio-active substance or radiant energy
(ii) Chronic exposure to X-rays, gamma rays, alpha rays and beta rays with a long latent period		

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Physical agents</i>		
<i>(b) Non-ionising radiation</i>		
(i) Ultraviolet radiation	Acute effect: radiation cataract keratoconjunctivitis, photoretininitis, skin erythema Chronic effect: Actinic cataract, skin cancer	Frequent or prolonged exposure to ultraviolet, the glare or rays from molten glass, molten or red-hot metal, white-hot material during electro-welding or acetylene welding
(ii) Infrared radiation	Acute effect: Blepharitis, keratitis, heat-related retinal disorder-scotoma pigmentary lesions of fundus Chronic effect: Glass Workers' Cataract	Acute or prolonged exposure to infra red radiation among blacksmiths, glass blowers, furnace men, baker, foundry workers, industrial lasers
5. Heat	Heat cramps, heat exhaustion, heat syncope, heat stroke and cataract	Exposure to extreme heat, strenuous exercise and impaired heat dissipation, high humidity during outdoor work, high temperature processes, welders, ceramic workers and bakery workers
6. Extreme low temperatures	Chilblain, frostbite, immersion foot, systemic hypothermia	Exposure to extreme cold where the core body temperature falls below 36° Celsius in cold room or frozen food industry
7. Lack of oxygen	Hypoxia, asphyxiation	Exposure to working environment with insufficient oxygen, confined spaces, manholes, maintenance silos and in high altitudes researchers, mountain climbers
8. Poor lighting	Miner's nystagmus and other irregular eye movements	Exposure to poor lighting in mines

PART VII

AGENT	DISEASE	OCCUPATION/INDUSTRY
<i>Biological agent</i>		
<i>A. Viral</i>		
1. Arbovirus	St. Louis/Equine encephalomyelitis	Occupations involving exposure to biological agent and where there is an infection Exposure among laboratory workers

AGENT	DISEASE	OCCUPATION/INDUSTRY
Biological agent		
<i>Occupations involving exposure to biological agent and where there is an infection</i>		
2. Highly Pathogenic Avian Influenza Virus (HPAI)	Avian Influenza	Exposure to birds infected with HPAI
3. Human Immunodeficiency Virus	Acquired Immunodeficiency Syndrome (AIDS)	Exposure to blood and blood products infected with HIV among health care workers, laboratory disposal and service workers
4. Flavivirus	Japanese Encephalitis	Exposure to animals infected with Flavivirus
5. Hepatitis A virus	Hepatitis A infection	Exposure to Hepatitis A virus among sewage workers
6. Hepatitis B virus	Hepatitis B infection acute liver failure, chronic hepatitis, cirrhosis, hepatoma	Exposure to human blood or human blood products contaminated with Hepatitis B virus or a source of Hepatitis B virus among health care and laboratory workers, hospital waste disposal workers, ambulance personnel, prison and police staff
7. Hepatitis C virus	Hepatitis C infection chronic hepatitis, cirrhosis, hepatoma	Exposure to human blood or human blood products contaminated with Hepatitis C virus, or a source of Hepatitis C virus among health care and laboratory workers, hospital waste disposal workers, ambulance personnel, prison and police staff
8. Hepatitis E virus	Hepatitis E infection	Exposure to human blood or human blood products contaminated with Hepatitis E virus, or a source of Hepatitis E virus among health care and laboratory workers, hospital waste disposal workers, ambulance personnel, prison and police staff
9. Nipah virus (Paramyxoviridae)	Nipah virus infection	Exposure to animals infected with Nipah virus and its meat among pig farmers and health care workers
10. Severe Acute Respiratory Syndrome (SARS) virus (Corona virus)	SARS virus infection	Exposure to people infected with SARS virus among health care workers

AGENT	DISEASE	OCCUPATION/INDUSTRY
Biological agent		
<i>Occupations involving exposure to biological agent and where there is an infection</i>		
11. Rabies Virus	Rabies, central nervous system manifestations, delirium, fits, respiratory failure	Exposure to Rabies virus through bites of rabid animals or domestic animals infected with rabies virus among farming and animal husbandry work, veterinary, animals laboratory and animal control personnel
12. Rubella virus	Rubella	Exposure to patients with rubella infection among health care staff and kindergarten caretakers
B. Bacteria		
1. <i>Bacillus anthracis</i> from animals products	Anthrax infection cutaneous vesicular lesion, pulmonary hemorrhage, pneumonia	Exposure to animals infected with <i>Bacillus anthracis</i> and its spores, bristle, hides, hoofs, wool, horn or skins or other animal products or handling of carcasses and residues among farming, animal, abattoir, veterinary, laboratory work, doctors, nurses, ambulance crews and pathology technicians
2. <i>Borrelia burgdorferi</i> from bite of infected tick	Lyme disease	Exposure to bite from a tick infected with <i>Borrelia burgdorferi</i> among work involving out door work involving farming and forestry
3. <i>Brucella abortus</i> , <i>B. suis</i> , <i>B. mellitensis</i> from livestock	Brucellosis	Exposure to animals infected with <i>Brucella</i> or their products among farming, forestry and animal husbandry work, carcasses or parts thereof or their untreated products, abattoir, veterinary, laboratory work; handling laboratory specimens or vaccines containing <i>Brucella</i>
4. <i>Clostridium tetani</i> from soil, sewage or animals through an unclean deep wound	Tetanus Fits	Exposure to contaminated soil during farming, military work and sewage work
5. <i>Erysipelothrix rhusiopathiae</i> from infected animals	Erysipeloid Cutaneous Erysipeloid Sepsis with endocarditis	Exposure to the agent through farming and animal husbandry work, veterinary work, abattoir work, meat processing work other work, involving contact with pig, cattle, poultry or fish including the handling of its carcasses

AGENT	DISEASE	OCCUPATION/INDUSTRY
Biological agent		Occupations involving exposure to biological agent and where there is an infection
6. <i>Francisella tularensis</i> from a variety of animals, particularly hares, rabbits, squirrels, rats, mice and other rodents	Tularemia	Exposure to <i>Francisella tularensis</i> during farming, animal husbandry work, forestry, laboratory work involving handling of infected rabbits, hares, ground squirrels, mice or other small furry rodents
7. <i>Leptospira icthohaemorrhagical interrogans</i> from animals (especially rat) animal urine or contaminated soil	Leptospirosis/Weil disease (swamp fever, swine disease)	Exposure to the agent through farming and animal husbandry work, veterinary work, abattoir work, dairy work, meat processing work, work with contact with contaminated soil, fresh water fisherman and fish handler, sewage work and garbage collector involving exposure to infected rats
8. <i>Mycobacterium bovis</i> from infected animals	Bovine tuberculosis	Exposure to <i>Mycobacterium bovis</i> transmitted through contact with infected animals or their products, abattoir work and animal husbandry
9. <i>Mycobacterium tuberculosis</i> , <i>Mycobacterium leprae</i> from infected human	Tuberculosis/Leprosy	Exposure through close contact with a source or sources of the agent by reason of employment: (a) in the medical treatment or nursing of a person or persons suffering from tuberculosis/leprosy or in a service ancillary to such treatment or nursing; (b) in attendance upon a person or persons suffering from tuberculosis or leprosy where the need for such attendance arises by reason of physical or mental infirmity; (c) as a research worker engaged in research in connection with tuberculosis/leprosy; or (d) as a laboratory worker, pathologists or post-mortem worker, where occupation involves working with material which is a source of tuberculosis infection or in any occupation ancillary to such employment

AGENT	DISEASE	OCCUPATION/INDUSTRY
Biological agent		Occupations involving exposure to biological agent and where there is an infection
10. <i>Mycobacterium marinum</i>	Fish tank granuloma	Exposure to the agent among fish tank cleanser
11. <i>Pseudomonas mallei</i>	Glanders pneumonia, septicaemia, local abscesses	Exposure through contact rabid dogs, or equine animals or carcasses among farm and slaughterhouse workers
12. <i>Pseudomonas pseudomallei</i>	Melioidosis	Exposure to rodents infected with <i>Pseudomonas pseudomallei</i>
C. Rickettsiae and Chlamydiae		
1. <i>Chlamydia psittaci</i> from birds	Avian chlamydiosis psittacosis (ornithosis) encephalitis, myocarditis, thrombophlebitis	Exposure to birds, poultry or their excreta infected with <i>Chlamydia psittaci</i> or the remains or untreated products of such birds such as duck farm workers, feather processing workers, abattoir workers, poultry meat inspectors and pet shop workers
	Ovine chlamydiosis	Exposure through contact with sheep infected with <i>Chlamydia psittaci</i> or the remains or untreated products of such sheep among sheep farm workers, veterinary surgeons
2. <i>Chlamydia pneumoniae</i> from humans	Chlamydial pneumonia	Exposure to humans infected with <i>Chlamydia pneumoniae</i> among healthcare workers
3. <i>Coxiella burnetii</i> from domestic animals (cattle, sheep, goats) or more rarely through tick bites	Q fever pneumonitis, myocarditis,	Exposure through contact with infected animals, sheep, their remains or their untreated products among cattle farm workers involved the rearing of sheep, abattoir work, veterinary work, laboratory work
4. <i>Rickettsia rickettsii</i> and other <i>Rickettsia</i> species	Spotted fever (tickborne typhus fever/tickborne rickettsioses)	Exposure to <i>Rickettsia rickettsii</i> and other <i>Rickettsia</i> species among laboratory work and outdoor work
5. <i>Rickettsia prowazekii</i>	Typhus Eschar	Exposure to any <i>Rickettsia prowazekii</i> among army personnel and farmers
6. <i>Yersinia pestis</i>	Plague Septicaemia, endotoxic shock, disseminated intravascular coagulopathy-(DICC)	Exposure to the agent through infected rats in animal husbandry, farming

AGENT	DISEASE	OCCUPATION/INDUSTRY
Biological agent		
<i>Occupations involving exposure to biological agent and where there is an infection</i>		
D. Protozoa		
1. <i>Toxoplasma gondii</i> from cat (or birds, sheep, goats, swine, cattle, etc)	Toxoplasmosis cerebral abscess, pneumonia, myocarditis	Exposure to agents during agricultural work, veterinary work, abattoir work and pet shop work
2. Hookworm <i>Ancylostoma braziliense</i>	Cutaneous larva migrans mobile, serpiginous plaque especially of feet	Exposure to the agent among workers in tropical beaches
E. Fungi		
1. Sporothricosis nocardia	Deep mycoses skin nodules	Worker involving exposure to the agent

PART VIII

DISEASES BY TARGET ORGANS

DISEASE	AGENT	OCCUPATION/INDUSTRY
<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>		
A. Lung disease		
1. Asthma	(a) Isocyanates-toluene diisocyanate (b) Platinum salts (c) Fumes or dusts arising from the manufacture, transport or use of hardening agents (epoxy resin curing agent based on phthalic anhydride, tetrachlorophthalic anhydride, trimellitic anhydride, or triethylenetetramine) (d) Fumes arising from the use of rosin as a soldering flux	Work with exposure to asthmagens in chemical work, spray painting, polyurethane foam manufacture, use of polyurethane based adhesives, baking and farming, laboratory work, farming, woodwork, carpenters, textile dyers, hair dressers, health care work and glove producers

DISEASE	AGENT	OCCUPATION/INDUSTRY
<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>		
	(e) Proteolytic enzymes	Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits
	(f) Mineral dusts such as cement, copper	
	(g) Flour and grain dusts	
	(h) Animal including insects and other arthropods epithelia and excretions-animal dusts such as bone or hair	
	(i) Wood dust	
	(j) Plant dusts of plant origin such as cotton, wood, flax, jute, padi husks, cork, spices, hemp, sisal, tobacco, tea, barley oats, rye	
	(k) Reactive dyes	
	(l) Persulphate salt	
	(m) Products made with natural latex (natural rubber)	
	(n) Glutaraldehyde	
2. Allergic rhinitis	(a) Isocyanates	Work with exposure to any of the agents in metal plating industry, food processing, laboratory workers, grain processing, drug manufacture, washing powder manufacture, hair dressing, electronics industry, welders, dye tea and coffee processing
	(b) Platinum salts	
	(c) Fumes or dusts arising from the manufacture, transport or use of hardening agents (epoxy resin curing agent based on phthalic anhydride, tetrachlorophthalic anhydride, trimelitic anhydride, or triethylenetetramine)	
	(d) Fumes arising from the use of rosin as a soldering flux	
	(e) Proteolytic enzymes	
	(f) Mineral dusts such as cement, copper	
	(g) Flour and grain dusts	

DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
	(h) Animal including insects and other athropods epithelia and excretions-animal dusts such as bone or hair (i) Reactive dyes Persulphates (j) Products made with natural latex (natural rubber) (k) Glutaraldehyde	
3. Asbestos related diseases Asbestosis (diffuse interstitial pulmonary fibrosis), benign asbestos pleural disease, malignant asbestos related disease-mesothelioma, Pleural plaques, pleural effusion	Asbestos or any admixture of asbestos	Handling of asbestos or any admixture of asbestos, (asbestos mines and quarries, asbestos products manufacture industry), insulation work, shipyard work, work involving removal of asbestos containing materials or tiles or other or substantial exposure to the dust arising from any of the foregoing operations the manufacture or repair of asbestos textiles or other articles containing or composed of asbestos; mining, processing, manufacturing, or handling, demolition work, transportation, disposal, exposure to materials containing asbestos
4. Acute pulmonary injury (laryngeal oedema, airflow obstruction), acute respiratory distress syndrome (ARDS)	Chlorine, ammonia, sulphur dioxide, and acid aerosols	Handling and physical exposure to materials which can cause ARDS
5. Chronic bronchitis	Coal, oil mist, synthetic vitreous fibers, Portland cement, welding fumes, cotton, grain, wood, tobacco smoke, fire smoke, engine exhaust	Exposure to the agents causing chronic bronchitis, exposure to coal dust by reason of working underground in a coal mine for a period or periods amounting in the aggregate to at least 20 years and any such period or periods shall include a period or periods of incapacity while engaged in such an occupation
6. Emphysema	<i>B. subtilis</i> proteases, cadmium fumes	Inhalation of cadmium fumes for a period of, or periods which amount in aggregate to 20 years or more among coal miners, textile manufacturing workers

DISEASE	AGENT	OCCUPATION/INDUSTRY
7. Airway disease due to specific organic dust		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
(a) Byssinosis (weaver's cough or mill fever)	Cotton dust, hemp, or sisal	Exposure to cotton dust, cotton synthetic dusts or hemp or sisal dust among cotton industry workers
(b) Flax-dressers disease	Flax	Work with exposure to flax dust
8. Pneumoconiosis		Any occupation involving—
(a) Silicosis		
(i) Acute silicosis	Silica rock and other mineral dusts	(a) the mining, quarrying or processing of silica rock, the use of dried quartzose sand (quartz, cristobalite, tridimite) or any dry deposit or dry residue of silica (silicon dioxide SiO_2) or any dry admixture containing such materials, including hydrated magnesium silicate;
(ii) Accelerated silicosis	Dried quartzose sand (quartz, cristobalite, tridimite) or any dry deposit or dry residue of silica (silicon dioxide SiO_2) or any dry admixture containing such materials, including hydrated magnesium silicate	(b) the handling of any of the materials specified in subparagraph (a) in or incidental to any of the operations mentioned therein or substantial exposure to the dust arising from such operations, grinding, drilling, braking of silica-containing rocks, ceramics and glass manufacture;
(iii) Chronic silicosis		(c) the breaking, crushing or grinding of flint or the working or handling of broken, crushed or ground flint or materials containing such flint or substantial exposure to the dust arising from such operations; (d) sand blasting by means of compressed air with the use of quartzose sand or crushed silica rock or flint or substantial exposure to the dust arising from such sand blasting; (e) boiler scaling or substantial exposure to the dust arising there from;

DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i> (f) occupation in a foundry or the performance of, or substantial exposure to the dust arising from, any of the following operations; (g) the freeing of steel castings from adherent siliceous substance; (h) the freeing of metal castings from adherent siliceous substance; (i) the manufacture of china or earthenware (including sanitary earthenware, electrical earthenware tiles), and any occupation involving substantial exposure to the dust arising there from; (j) the dressing of granite or any igneous rock by masons or the crushing of such materials or substantial exposure to the dust arising from such operations; or (k) the use, or preparation for use, of a grind-stone or substantial exposure to the dust arising there from
(b) Silicosis associated with tuberculosis	Any of the above agents in concurrent with infection by <i>Mycobacterium tuberculosis</i>	Any occupation involving— (a) the mining, quarrying or processing of silica rock, the use of dried quartzose sand (quartz, cristobalite, tridimite) or any dry deposit or dry residue of silica (silicon dioxide SiO_2) or any dry admixture containing such materials, including hydrated magnesium silicate; (b) the handling of any of the materials specified in subparagraph (a) in or incidental to any of the operations mentioned therein or substantial exposure to the dust arising from such operations, grinding, drilling, braking of silica-containing rocks, ceramics and glass manufacture;

DISEASE	AGENT	OCCUPATION/INDUSTRY
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(c) the breaking, crushing or grinding of flint or the working or handling of broken, crushed or ground flint or materials containing such flint or substantial exposure to the dust arising from such operations;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(d) sand blasting by means of compressed air with the use of quartzose sand or crushed silica rock or flint or substantial exposure to the dust arising from such sand blasting;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(e) boiler scaling or substantial exposure to the dust arising there from;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(f) occupation in a foundry or the performance of, or substantial exposure to the dust arising from, any of the following operations;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(g) the freeing of steel castings from adherent siliceous substance;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(h) the freeing of metal castings from adherent siliceous substance;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(i) the manufacture of china or earthen-ware (including sanitary earthenware, electrical earthenware tiles), and any occupation involving substantial exposure to the dust arising there from;
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(j) the dressing of granite or any igneous rock by masons or the crushing of such materials or substantial exposure to the dust arising from such operations; or
<i>(Faint text describing disease symptoms and prevalence)</i>	<i>(Faint text describing the agent)</i>	(k) the use, or preparation for use, of a grindstone or substantial exposure to the dust arising there from.

DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
9. Coal miners' pneumoconiosis and other coal related lung disease	Coal	Coal or any mine (underground or above ground) in which one of the objects of the mining operations is the getting of any mineral, or the working or handling of any minerals extracted there from
10. Graphite fibrosis (of lung) (graphite pneumoconiosis)	Graphite (natural and artificial)	Exposure during production of natural or artificial graphite articles and dust arising from grinding
11. Stannosis	Tin	Exposure to tin dust or fumes during tin mining and metallurgy
12. Siderosis	Iron dusts	Exposure to inhalation of dusts containing iron and hematite
13. Baritosis	Barium dust	Exposure during well drilling, alloys with aluminum, and use of barium carbonate in water treatment and as flux in ceramics
14. Talcosis	Talc	Exposure during talc manufacture
15. Pneumoconiosis due to padi husk	Padi husk or dust or a substance containing padi	Exposure to padi husk, dust or a substance containing padi
16. Hypersensitivity pneumonitis (Extrinsic allergic alveolitis) due to organic dusts		Exposure to moulds or fungal spores or heterologous proteins by reason of employment in:
(a) Thermophilic bacteria and bacterial product		(a) agriculture, horticulture, forestry, cultivation of edible fungi or malt-working; or
(i) Farmers lung	<i>Micropolyspora faeni</i> <i>Faenia rectivirgula</i>	Farmers exposed the agents
(ii) Mushroom worker's lung	<i>Thermoactinomyces vulgaris</i> <i>Micropolyspora faeni</i>	Workers exposed during mushroom production
(iii) Bagassosis	<i>Thermoactinomyces sachari</i> <i>Thermoactinomyces vulgaris</i>	Exposure to the agent in sugarcane plantations

DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
(iv) Sisal worker's disease	Rope dust	Exposure to the agent among bag and rope makers
(v) Coffee worker's lung	Coffee bean dust	Exposure to the agent among coffee workers
(b) Non thermophilic bacteria		
(i) Fertiliser workers lung	<i>Thermoactinomyces vulgaris</i> <i>Thermoactinomyces candidus</i>	Farmers exposed the agents when handling fertiliser
(ii) Millers' lung	<i>Sitophilus granarius</i> (wheat weevil)	Exposure to agent through dust contaminated grain
(iii) Detergent workers lung	Detergent dust	Exposure to the detergent beads and dust
B. Fungi		
1. Wood worker's lung, wood pulp worker's lung	Moldy bark dust	Exposure to the agent among lumber barkers and loggers
2. Wheat weevils disease	Infected wheat flour	Exposure to the agent among flour workers
3. Papermill worker's lung	Moldy wood chips	Exposure to the agent among paper mill workers
C. Animal Proteins		
1. Bird fancier's disease	Parakeets	Exposure to the agent among bird handlers
2. Pigeon breeder's lung	Pigeons	Exposure to the agent among pigeon handlers
3. Poultry handler's lung	Chickens	Exposure to the agent among poultry farmers
4. Furrier's lung	Turkey	Exposure to the agent among furriers
5. Rodent handler's disease	Rats	Exposure to the agent among animal laboratory workers

DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
D. Chemicals		
1. Hypersensitivity pneumonitis	Toluene diisocyanate (TDI), hexamethylene diisocyanate, diphenylmethane diisocyanate (MDI)	Exposure to agent during use as industrial solvent, among foundry workers and polyurethane foam workers
	Trimellitic anhydride	Exposure to the agent among epoxy resins and paint manufacturer
2. Hard metal lung disease	Cobalt in solvents	Tungsten carbide workers with exposure to cobalt
3. Chronic beryllium disease	Beryllium particulate	Exposure to beryllium during extraction; use in metallurgy, aerospace industry and nuclear industry
4. Organic dust toxic syndrome	Moldy hay and grain, compost, Moldy sugar cane, coffee bean dust, moldy bark dust, infected wheat flour, cheese mold, moldy lichen, parakeets, pigeons, chicken ducks, fox, rats and other organic dust	Exposure to the agents during agricultural activities
5. Legionellosis	<i>Legionella pneumophila</i>	Exposure to <i>Legionella pneumophila</i> due to contaminated ventilation system in the working environment
6. Occupationally caused lung cancer	Arsenic, antimony, asbestos, nickel oxides, nickel subsulphide, Bis (chloromethyl) ether, chromium compound (hexavalent), calcium chromate, zinc chromate, strontium chromate in their pure forms, mustard gas, mineral oil, polycyclic aromatic hydrocarbon, radon, wood dust	Workers with direct exposure to specific agents

PART IX

SKIN DISEASE

AGENT

OCCUPATION/INDUSTRY

Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits

1. Allergic contact dermatitis

- (a) Adhesives, antiseptics, antibiotics-Animal feeds with antibiotics
- (b) Biocide-(formaldehyde, Thimerosal)
- (c) Cements (chromate, cobalt)
- (d) Cosmetics – fragrances
- (e) Cutting fluids and oils
- (f) Dyes-hair dyes-(paraphenylene diamine, photographic colour developers, disperse textile dyes), disinfectants
- (g) Food (vegetables, seafood, salad dressings, meat, fruits, flavouring agent, antioxidants)
- (h) Glues and bonding agents
- (i) Metals – nickel (nickel utensils), chromate, cobalt, mercury
- (j) Plants and tree (preservatives) -wood and its preservatives
- (k) Urushiol (Toxicodendron), Sesquiterpene lactones (Compositae), Primin (Primula obconica), Tulpalin A (Tulipa, Alstroemeria)
- (l) Plastic-(epoxy monomer, acrylic monomer, phenolic resins, amine catalysts)
- (m) Resins - (epoxy, acrylates, isocyanates, formaldehyde resins), soldering fluxes (amines and colophony)

Workers with direct exposure to these agents

SKIN DISEASE	AGENT	OCCUPATION/INDUSTRY
	(n) Rubber products (additives-mercaptoben-zothiazole, thiurams, carbamates, thioureas)-gloves, boots and mask (rubber chemicals)	<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
2. Irritant contact dermatitis	(a) Alcohols, glycols, water (b) Animals feeds, fertilizers, plants, pesticides (c) Amine catalyst, styrene, benzoyl peroxide (d) Aliphatic – petroleum distillates (kerosene, gasoline), naptha, oils, hand cleaners (e) Aromatic – benzene, toluene, xylene (f) Cutting fluids, abrasives, oils, hand cleansers (g) Chemicals, acids and alkalis (cements) (h) Eploxy, phenolic, acrylic monomers (i) Halogenated - trichloroethylene, chloroform, and methylene chloride (j) Metal –arsenic, chrome (k) Other agents-turpentine, ketones, esters, wood dust, lacquer, polishes (l) Plastics – soap and detergents, shampoos, permanent wave solutions, resins, disinfectants, antiseptics, m e d i c a m e n t s , surfactants (m) Solvents-photo-toxins: coal tar, furocoumarins, dyes, drugs	Workers with direct exposure to the agents

SKIN DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
	(n) Photo-allergens - plants, stillbenes, aminobenzoic acid derivatives and halogenated salicylanilides	
	(o) Wood preservatives, fiberglass, solvents, oil, pitch, tar, paints vegetables and fruits juices (enzymes), polishing agents	
3. Acne and chloracne	(a) Oils and grease and hot humid conditions in the workplace	Workers with direct exposure to oils, grease and hot humid conditions in the workplace
	(b) Chloracne - polyhalogenated, naphthalenes, biphenols, dibenzofurans and some herbicides contaminants	Workers with direct exposure to the agents
4. Chrome ulceration, ulceration of the mucous membrane or the epidermis	Chromic acid, chromate or dichromate of ammonium, potassium, zinc or sodium, or any preparation or solution containing any of these substances	Workers with direct exposure to the agents
5. Contact urticaria	(a) Allergens-latex, corn starch, animal fur and dander, antibiotic, acrylates, epoxy resins, formaldehyde, foodstuffs e.g. eggs, carrots, fish, meat and milk	Workers with direct exposure to the agents
	(b) Non-immunological agents-ethyl/butyl/isopropyl/acetyl, alcohol, sorbic acid, benzoic acid, sulphur dioxide	
	(c) Ammonia, (may be either allergic or non-allergic cinnamic acid) potato, apple, lettuce, ammonium persulphate, xylene	

SKIN DISEASE	AGENT	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacturing, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
6. Dermatitis	Rengas wood and its sap	Exposure to the agent during manipulation of rengas wood or any process in or incidental to the manufacture of articles therefrom
7. Flash kerato-conjunctivitis or retinitis	Electro-welding or acetylene welding UV light	Exposure during electro-welding or acetylene welding
8. Localised new growth of skin, papilloma, or keratotic lesions	Beryllium, shale oils, tar, pitch, bitumen, mineral oil, and soot	Workers with direct exposure to the agents
9. Mite dermatitis	Owls and pigeons and other birds with mites	Exposure to the agent during handling of owls and pigeons infested with mites
10. Occupational skin ulceration	Corrosives irritant chemicals	Exposure to the agent during handling of corrosives irritant chemicals
11. Occupational/ toxic vitiligo (leucoderma)	(a) Phenols-paratertiary-butylphenol (4-tert-butylphenol), paratertiary-butylcatechol (4-tert-butylcatechol), para-amyphenol (p-pentyl phenol) (b) Cathechols-catechols (pyrocatechol), p-methyl catechol, 4-isopropyl catechol, 4-tert-butyl catechol (c) Hydroquinone, monobenzyl ether of hydroquinone (4-benzyloxyphenol) or mono-butyl ether of hydroquinone (4-butoxyphenol)	Workers with direct exposure to the agents
12. Occupational skin cancer	Arsenic or arsenic compounds, tar, pitch, polyaromatic hydrocarbon, bitumen, mineral oil (including paraffin), soot, organic dust ultraviolet radiation	Workers with direct exposure to the agents

PART X

DISEASE**Occupational Musculo-Skeletal Disease****1. Upper limb****(a) Thoracic Outlet Syndrome****AGENT/ERGONOMIC RISK FACTOR**

Work involving pulling the shoulders back and down, working overhead with repeated abduction and adduction of the shoulder and arm resulting in compression of the neurovascular structures passing out of the chest, neck and beneath the clavicle to the axilla

(b) Rotator Cuff Syndrome

Tasks associated with highly rapid repetitive and vigorous movement, overstraining of the muscle and tendons, with excessive forces around the shoulder

(c) Beat hand

Tasks with rapid, repetitive, excessive manual task causing severe or prolonged external friction or stress/pressure on the bursa of hand causing severe or prolonged friction or pressure on the hand

(d) Beat elbow

Tasks with rapid, repetitive, excessive manual task causing severe or prolonged external friction or stress/pressure at bursa of the elbow

(e) Medial epicondylitis (Golfer's elbow)

Highly repetitive forceful movements, involving finger and wrist flexors/pronators

(f) Lateral epicondylitis (Tennis elbow)

Highly repetitive forceful wrist dorsiflexion

OCCUPATION/INDUSTRY

Occupations involving exposure to multiple ergonomic risk factors – forceful, very highly repetitive, non-neutral work, prolonged duration, vibration, heavy load and exceeding Permissible Exposure Limits

Workers with activities characterised by multiple ergonomic risk factors

Workers with activities characterised by multiple ergonomic risk factors

Workers with activities characterised by multiple ergonomic risk factors

Workers with forceful, highly repetitive wrist/finger flexion and flexed elbow

Workers with repeated forceful wrist extension and power grasp

Workers with constant or repetitive forceful pinching with thumb while executing, forceful exertions and extreme postures of the wrist, especially a combination of these with injury to body limbs and appendages

DISEASE	AGENT/ERGONOMIC RISK FACTOR	OCCUPATION/INDUSTRY
Occupational Musculo-Skeletal Disease		Occupations involving exposure to multiple ergonomic risk factors – forceful, very highly repetitive, non-neutral work, prolonged duration, vibration, heavy load and exceeding Permissible Exposure Limits
(g) Radial styloid tenosynovitis (De Quervains tenosynovitis)	Constant or highly repetitive movements, forceful exertions and extreme postures of the wrist, especially a combination of these with injury to body limbs and appendages	Workers with forceful, frequent, repetitive movement with hand-held vibrating tools whose internal parts vibrate so as to transmit that vibration to the hand; work involving extreme postures of the wrist or hand
(h) Carpal Tunnel Syndrome (Median nerve)	Highly repetitive movements, forceful exertions, extreme postures of the wrist and extreme movements of hyperflexion and hyperextension causing prolonged pressure on the anatomical grooves resulting in nerve injuries. Forceful, frequent repetitive movement, with vibrating tools, work involving extreme pressure and postures of the wrist, especially a combination of these risk factors	
2. Lower limbs		
(a) Beat knee (Housemaid's knee)	Bursitis or subcutaneous cellulitis arising at or above the knee	Workers with rapid, repetitive, excessive manual task causing severe or prolonged friction or stress on the bursa of at or about the knee. Worker who kneel a lot
(b) Tarsal Tunnel Syndrome (Posterior tibial nerve)	Forceful, frequent, prolonged and repetitive movement of the foot	Workers with rapid, repetitive, excessive movement of the foot

PART XI

PSYCHOSOCIAL DISEASE

1. Post-traumatic stress disorder

AGENT

Extreme traumatic stress or intense fear, helplessness or horror

OCCUPATION/INDUSTRY

Worker exposed to extreme stress caused by an accident or incident arising out of and in the course of employment

PART XII

OCCUPATIONAL CANCERS

AGENT	OCCUPATIONAL CANCER	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
1. 4-Aminobiphenyl (IARC 1)	Cancer of the epithelial lining of the urinary tract and bladder (papilloma), liver neurological disorder	Exposure to agent during the use or handling of or exposure to the fumes, dust or vapour of 4-aminobiphenyl or substances containing 4-aminobiphenyl; use in chemical synthesis industry and rubber manufacturing
2. Acrylonitrile (IARC 2A)	Lung and prostate cancer, lymphoma, ployneuropathy	Exposure to acrylonitrile; use in textile fiber manufacture, acrylonitrile polymerization and rubber, plastics, textile industry
3. Arsenic (IARC 1)	Malignant neoplasm of skin (squamous cell carcinoma), larynx, bronchus and lungs, haemangiosarcoma	Exposure during mining, copper smelting, glass manufacture, production; use of arsenic pesticides, herbicides, insecticides, tanning and glass making
4. Asbestos (IARC 1)	Lung-Diffuse malignant mesothelioma (pleura, pericardium, peritoneum), pleura, gastrointestinal tract cancer - oesophagus, peritoneum, large intestine Malignant neoplasm of bronchus, larynx, lungs, kidney	Exposure to asbestos, dust or any admixture of asbestos at a level above that commonly found in the environment especially at mines or quarries; during asbestos based product manufacture, demolition or asbestos removal work
5. Benzene or its toxic homologues (nitro-and amino-derivatives) (IARC 1)	Leukaemia, hodgkin lymphoma, other blood malignancies	Exposure to benzene or its toxic homologues during work with coke ovens, shoe manufacture using benzene, solvents with benzene, fuel and petroleum industry
6. Benzidine and salts (IARC 1)	Malignancy of the bladder	Exposure to benzidine during dye or pigment manufacture, laboratory agent; use in paper, leather, textile and dye industry
7. Benz-o-pyrene (IARC 2A)	Malignancy of lungs, skin and bladder	Exposure to the benz-o-pyrene when using or handling it; use in research

AGENT	OCCUPATIONAL CANCER	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
8. Beryllium (IARC 1)	Malignant neoplasm of bronchus and lungs	Exposure during production of hard, corrosion-resistant alloys in aerospace industry, nuclear reactors; ceramic and refractory products, electrical contacts, switches, welding electrodes, cathode ray tubes, metallic alloys and lithography for the electronics industry
9. β -naphthylamine (IARC 1)	Cancer bladder, methaemoglobinemia, ataxia	Exposure during use for dye or pigment manufacture
10. Bis-chloromethyl ether (BCME), Chloromethylmethyl ethers (IARC 1)	Malignancy of the bronchus and lung	Exposures to Bis-chloromethyl ether produced during the manufacture of chloromethyl methyl ether; use in the chemical industry as chemical intermediate
11. Cadmium and its compounds (IARC 1)	Malignant neoplasm of bronchus and lungs	Exposure during electroplating; manufacture of nickel-cadmium batteries, high speed bearings, soldering, welding and silver brazing (as fillers); use in plastics industry (stabiliser); use as pigments (in rubber, ink, plastics, paint, textiles) and jewellery manufacture
12. Chromium - its compounds-hexavalent (IARC 1)	Malignant neoplasm of bronchus and lungs, nasal cancer	Exposure during electroplating, dye or pigment manufacture and welding
13. Coal tars and coal tar pitches; soot asphalt, creosote or bitumen, anthracene, mineral oil, volatiles, and residues of these substances. Particulate polycyclic aromatic hydrocarbon (IARC 1)	Cancer of the skin, bronchus and lung, bladder, larynx, mouth cavity	Exposures to the agent during building material use, electrodes, coal gasification and coke production-petroleum production, pigment manufacture, road paving and insulation
14. Ethylene oxide (IARC 1)	Leukaemia, cataract	Exposure during use in manufacture of ethylene glycol, glycol ethers and medical products; use as a pesticide fumigant, sterilant in hospitals

AGENT	OCCUPATIONAL CANCER	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
15. Ethylene dibromide (1,2-dibromoethane) (IARC 2A)	Cancer of the stomach	Exposure to the agent during the use, handling of, or exposure to the fumes, dust or vapour of ethylene dibromide or a substance containing dibromide
16. Formaldehyde (IARC 2A)	Cancer nasopharyngeal, sino-nasal, brain and leukaemia	Exposure to the agent during use as tissue preservative in mortuary and laboratories
17. Haematite	Lung cancer	Exposure to the agent during the use, handling and exposure to the fumes, dust or vapour of haematite, during mining (with exposure to radon)
18. Ionizing radiations (IARC 1)	Malignant neoplasm – bone and skin, leukaemia	Exposure to X-rays, nuclear reactors, ionising particle, radium, other radio active substance or radiant energy
19. Mineral oil, untreated and mildly treated (IARC 1)	Skin and scrotum cancer	Exposure to the agent during use as lubricants
20. Mustard gas (IARC 1)	Lung, larynx, pharyngeal cancer	Exposure to mustard gas-war gas
21. Nickel – its compounds subsulphite and carbonyl (IARC 1)	Malignancy of the bronchus and lung, mucous membrane of the nose or associated air sinuses	Exposure during concentrating, smelting or refining in the nickel producing industry, stainless steel production, manufacture of batteries, metallurgy, alloys, electroplating; use as catalysts and pigments; sulphide nickel ore miners and high nickel alloy manufacture workers
22. Radium (IARC 1)	Bone (sarcomas)	The use, handling of, or exposure to the fumes, dust or vapour of radium
23. Radon progeny (IARC 1)	Malignant neoplasm of bronchus and lungs	Exposure to agent in underground mining, processing of ores and radioactive products
24. Shale oils (IARC 1)	Skin and scrotum cancer	The use, handling of, or exposure to shale oils
25. Soot, tars and mineral oils	Skin, lung and bladder cancer, dystrophy of corneal surface	Exposure to the agent during road making

AGENT	OCCUPATIONAL CANCER	OCCUPATION/INDUSTRY
		<i>Occupations involving the use or handling of (manufacture, transport, storage, disposal) and exposure to the agents exceeding Permissible Exposure Limits</i>
26. Vinyl chloride monomer (IARC 1)	Angiosarcoma of the liver, malignant neoplasm of liver and intrahepatic bile ducts, brain and lung	Exposure to the agent during manufacturing of vinyl chloride, vinyl chloride polymerization and plastic industry
27. Hardwood dust	Cancer nasopharynx, nose and lung	Exposure to the agent during woodwork, cabinet and furniture makers

PART XIII

1. For the purpose of this Schedule—

- (a) “permissible exposure limits” means a ceiling limit or an eight-hour time-weighted average airborne concentration or the maximum exposure limit as defined under the Occupational Safety and Health (Use And Standard Of Exposure Of Chemicals Hazardous To Health) Regulations 2000 [P.U. (A) 131/2000];
- (b) “IARC” means International Agency for Research on Cancer—
- (c) “Group 1 IARC” means the agent is a definite human carcinogen; and
- (d) “Group 2A IARC” means the agent is probably human carcinogen.

2. For the purpose of determining an occupational disease, this Schedule shall be read together with—

- (a) the Factories and Machinery Act 1967, the Occupational Safety and Health Act 1994, Regulations made under these Acts, Regulations, Guidelines, Code of Practice with regards to occupational exposures of the agent;
- (b) the guidelines on the Diagnosis of Occupational Diseases issued by the Organization; and
- (c) the guidelines on the Medical Surveillance made under the Occupational Safety and Health (Use And Standard Of Exposure Of Chemicals Hazardous To Health) Regulations 2000.

Made 24 December 2007

[KSM/PUU/T/01/05/03 Jld. 2; PN(PU²)58/XV]

DATUK SERI DR. FONG CHAN ONN
Minister of Human Resources

P.U. (A) 33.

AKTA PERIKANAN 1985

PERINTAH PENUBUHAN TAMAN LAUT MALAYSIA (PINDAAN) 2008

PADA menjalankan kuasa yang diberikan oleh subseksyen 41(1) Akta Perikanan 1985 [Akta 317], Menteri membuat perintah yang berikut:

Nama

1. Perintah ini boleh dinamakan **Perintah Penubuhan Taman Laut Malaysia (Pindaan) 2008**.

Pindaan Jadual Pertama

2. Jadual Pertama kepada Perintah Penubuhan Taman Laut Malaysia 1994 [P.U. (A) 401/1994] dipinda dengan memasukkan selepas butiran 39 butiran yang berikut:

“40. Pulau Yu Besar

Terengganu

41. Pulau Yu Kecil

Terengganu”.

Dibuat 11 Januari 2008

[Prk. ML 11/01/02-1 Jld. 4(5)]

TAN SRI DATO' SERI HAJI MUHYIDDIN BIN HAJI MOHD. YASSIN
Menteri Pertanian dan Industri Asas Tani

FISHERIES ACT 1985

ESTABLISHMENT OF MARINE PARKS MALAYSIA (AMENDMENT) ORDER 2008

IN exercise of the powers conferred by subsection 41(1) of the Fisheries Act 1985 [Act 317], the Minister makes the following order:

Citation

1. This order may be cited as the **Establishment of Marine Parks Malaysia (Amendment) Order 2008**.

Amendment of First Schedule

2. The First Schedule to the Establishment of Marine Parks Malaysia Order 1994 [P.U. (A) 401/1994] is amended by inserting after item 39 the following items:

“40. Pulau Yu Besar

Terengganu

41. Pulau Yu Kecil

Terengganu”.

Made 11 January 2008

[Prk. ML 11/01/02-1 Jld. 4(5)]

TAN SRI DATO' SERI HAJI MUHYIDDIN BIN HAJI MOHD. YASSIN
Minister of Agriculture and Agro-based Industry

P.U. (A) 34.

AKTA KASTAM 1967

PERINTAH KASTAM (NILAI-NILAI) (MINYAK KELAPA SAWIT) (No. 5) 2008

PADA menjalankan kuasa yang diberikan oleh seksyen 12 Akta Kastam 1967 [Akta 235], Menteri membuat perintah yang berikut:

Nama dan permulaan kuat kuasa

1. Perintah ini bolehlah dinamakan **Perintah Kastam (Nilai-Nilai) (Minyak Kelapa Sawit) (No. 5) 2008** dan hendaklah mula berkuat kuasa bagi tempoh 4 Februari 2008 hingga 10 Februari 2008.

Pemungutan dan pembayaran duti kastam

2. Bagi maksud pemungutan dan pembayaran duti-duti kastam, menurut peruntukan-peruntukan Perintah Duti Kastam 1996 [P.U. (A) 15/1996], nilai bagi tiap-tiap satu barang berduti yang dinyatakan dalam ruang (1) dan (2) Jadual mengikut unitnya yang tersebut dalam ruang (3) hendaklah nilai yang dinyatakan dalam ruang (4) Jadual tersebut.

CUSTOMS ACT 1967

CUSTOMS (VALUES) (PALM OIL) (No. 5) ORDER 2008

IN exercise of the powers conferred by section 12 of the Customs Act 1967 [Act 235], the Minister makes the following order:

Citation and commencement

1. This order may be cited as the **Customs (Values) (Palm Oil) (No. 5) Order 2008** and shall have effect for the period from 4 February 2008 to 10 February 2008.

Levy and payment of customs duties

2. For the purpose of the levy and payment of customs duties, in accordance with the provisions of the Customs Duties Order 1996 [P.U. (A) 15/1996], the value of each of dutiable goods specified in columns (1) and (2) of the Schedule in respect of the unit thereof mentioned in column (3) of the Schedule shall be the value specified in column (4) of the said Schedule.

JADUAL/SCHEDULE

Barang (Goods)	Subkepala (Subheading)	Unit (Unit)	Nilai (Value)
(1)	(2)	(3)	(4)
Crude Palm Oil	1511.10 000	tonne	RM3,182.79

Dibuat 31 Januari 2008

Made 31 January 2008

[KE. HT(34.11) 819/03-6/klt. 7(08); Perb. (8.20) 116/1-4;
PN(PU²)338/VIII/klt. 7]

Dengan arahan Menteri Kewangan.

By direction of the Minister of Finance.

Bagi pihak dan atas nama Menteri Kewangan/

On behalf and in the name of the Minister of Finance

SITI HALIMAH BINTI ISMAIL

Timbalan Kanan Setiausaha

Bahagian Analisa Cukai (Dasar)

Hakcipta Pencetak (H)

PERCETAKAN NASIONAL MALAYSIA BERHAD

Semua Hak Terpelihara. Tiada mana-mana bahagian jua daripada penerbitan ini boleh diterbitkan semula atau disimpan di dalam bentuk yang boleh diperolehi semula atau disiarkan dalam sebarang bentuk dengan apa jua cara elektronik, mekanikal, fotokopi, rakaman dan/atau sebaliknya tanpa mendapat izin daripada Percetakan Nasional Malaysia Berhad (Pencetak kepada Kerajaan Malaysia yang dilantik).



DICETAK OLEH
PERCETAKAN NASIONAL MALAYSIA BERHAD,
KUALA LUMPUR
BAGI PIHAK DAN DENGAN PERINTAH KERAJAAN MALAYSIA