

# JKKP

Jabatan Keselamatan dan Kesihatan Pekerjaan  
Kementerian Sumber Manusia



# DOSH

Department of Occupational Safety and Health  
Ministry of Human Resources

# 2012



LAPORAN TAHUNAN | ANNUAL REPORT



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## Perutusan Ketua Pengarah *Director-General Statement*

**YBHG DATO' IR DR JOHARI BIN BASRI**

Ketua Pengarah  
*Director-General*

Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia  
*Department of Occupational Safety and Health Malaysia*



**Bismillahirrahmanirrahim  
Assalamualaikum wbt**

**Salam 1Malaysia**

Bersyukur kita ke hadrat Illahi dengan limpah dan kurnianya, sekali lagi laporan tahunan Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia (JKKP) dapat diterbitkan bagi tahun 2012. Pencapaian dan penambahbaikan yang ditunjukkan serta pengalaman yang dimiliki oleh setiap pegawai JKKP dalam melalui hari-hari sepanjang 2012 direncanakan dalam laporan ini. Syabas diucapkan kepada seluruh warga JKKP atas kesungguhan dan usaha yang ditunjukkan dalam merealisasikan amanah dan tanggungjawab yang diberikan bagi memastikan keselamatan dan kesihatan bukan sahaja pekerja malah untuk seluruh rakyat Malaysia terjamin.

Dalam menggerakkan teras strategik Kementerian Sumber Manusia (KSM) melalui perlaksanaan amalan dan kesihatan pekerjaan yang dinamik, Jabatan telah menyusun serta melaksana pelan keselamatan dan kesihatan pekerjaan (KKP) seperti Pelaksanaan Pelan Induk Keselamatan dan Kesihatan Pekerjaan 2010 – 2015 (OSH-MP15) yang melibatkan empat strategi dengan penglibatan Kerajaan, majikan dan pekerja, serta Konvensyen 187 dalam *Promotional Framework for Occupational Safety and Health Convention*. Konvensyen ini merupakan agenda negara yang menunjukkan komitmen Kerajaan dalam menitikberatkan keselamatan dan kesihatan pekerja di tempat kerja. Tujuan ratifikasi konvensyen ini adalah sebagai penanda aras tahap KKP di Malaysia. Dengan ini, Malaysia dapat meyakinkan negara luar untuk menggunakan perkhidmatan KKP dari Malaysia serta membuktikan persekitaran pekerjaan dan perburuhan di Malaysia sentiasa mendapat perhatian yang sewajarnya dari pihak Kerajaan, majikan dan pekerja. Hal ini secara tidak

***In the Name of Allah, Most Gracious, Most Merciful  
May the peace, mercy and blessings of Allah be upon you***

***Salam 1Malaysia***

*All praises and thanks to Allah s.w.t. for with His blessing and permission, once again, the publication of the Annual Report of the Department of Occupational Safety and Health (DOSH) for the year 2012 will be duly published. The achievements and improvements as well as the experience gained by every DOSH officer throughout 2012 are summarised in this report. Congratulations go out to the entire DOSH community for their hard work and dedication in realising the trust and responsibility of ensuring the safety and health of not only the workers but also the safety and health of all Malaysians.*

*The Department, in advancing the strategic thrusts of the Ministry of Human Resources (MOHR) through the implementation of dynamic occupational health practices, has drafted and implemented the occupational safety and health (OSH) plans, such as the Implementation of the Occupational Safety and Health Master Plan 2010-2015 (OSHMP 15), which involves four strategies with the participation of the Government, employers, and employees, and Convention 187 of the Promotional Framework for Occupational Safety and Health Convention. The Convention is the nation's agenda that reflects the Government's commitment in ensuring that a higher priority is given to occupational safety and health. The purpose of its ratification is so that it can be used as a benchmark of occupational safety and health in Malaysia. Hence, Malaysia will be able to convince other countries to use OSH services from Malaysia and to prove that the employment and labour environment in Malaysia always get the attention it deserves from the Government, employers, and employees. This,*

langsung mencapai objektif Jabatan untuk mengurangkan kadar kemalangan di tempat kerja. Usaha ini dapat meningkatkan imej Malaysia di peringkat antarabangsa serta meningkatkan perdagangan antarabangsa dengan membantu pelabur dan pengeksport meyakini keprihatinan Kerajaan terhadap perburuhan negara yang mengamalkan keselamatan dan kesihatan pekerjaan. Dalam pada itu, sambutan Hari Sedunia bagi Keselamatan dan Kesihatan di Tempat Kerja pada setiap 28 April dan juga Minggu Keselamatan dan Kesihatan Pekerjaan pada minggu kedua Julai juga direncanakan dalam konvensyen ini. Pada tahun 2012, kedua-dua acara ini telah disambut dengan jayanya. Syabas dan tahniah diucapkan kepada yang terlibat.

Selain itu, Jabatan turut memainkan peranan dalam membantu perusahaan kecil dan sederhana melalui program *OSH Compliance Support*. Program ini dijalankan bersama dengan Kementerian Sumber Manusia, PERKESO, NIOSH dan juga Perbadanan Perusahaan Kecil dan Sederhana Malaysia. *OSH Compliance Support* merupakan satu inisiatif yang menumpu kepada perusahaan kecil dan sederhana dengan tujuan membimbing para majikan dan pekerja untuk mewujudkan serta melaksanakan sistem pengurusan keselamatan dan kesihatan pekerjaan di tempat kerja. Perusahaan kecil dan sederhana merupakan penyumbang terbesar kepada pembangunan ekonomi negara, iaitu sebanyak 90 peratus menurut statistik Perbadanan Perusahaan Kecil dan Sederhana Malaysia. Sepanjang tahun 2012, sebanyak 15 perusahaan kecil dan sederhana yang terlibat dalam program ini. Ini menunjukkan peningkatan dalam sistem pengurusan KKP di tempat kerja. Di samping itu, aktiviti seperti projek perintis (pintu ke pintu), promosi bergerak CAT Van, projek mentor-mentee kepada perusahaan kecil dan sederhana dijalankan secara berterusan oleh JKKP negeri. Hal ini sekaligus dapat mencapai objektif Jabatan untuk mengurangkan kadar kemalangan di tempat kerja.

Jabatan secara langsung turut memainkan peranan yang besar dalam menjayakan Agenda Transformasi Negara yang dimulakan berdasarkan Program Transformasi Kerajaan (GTP) dengan Bidang Keberhasilan Utama Negara (NKRA), Program Transformasi Ekonomi (ETP) dengan Bidang Ekonomi Utama Negara (NKEA) serta Inisiatif Pembaharuan Strategik (SRI). Penglibatan JKKP dalam projek mega yang tersenarai dalam Agenda Transformasi Negara adalah melalui jalinan kerjasama dengan projek mega seperti pembinaan laluan transit aliran ringan (LRT), pembinaan talian paip di Melaka (Projek LEKAS), pembangunan wilayah Iskandar di Johor, pembangunan infrastruktur dalam bidang minyak dan gas serta pelbagai projek mega yang lain dalam memastikan tahap keselamatan dan kesihatan pekerja di tempat kerja terjamin dengan penguatkuasaan perundangan serta memberikan khidmat nasihat. Kita dapat lihat, melalui agenda yang dirancang, negara meletakkan pembangunan infrastruktur bagi mensejahterakan rakyat sebagai salah satu teras bagi membolehkan percambahan ekonomi negara. Dalam erti kata lain, kesejahteraan rakyat terletak pada pembangunan yang selamat, tempat kerja yang tidak berisiko, dan pekerja yang sihat. Oleh itu, saya berdoa agar penguatkuasaan aspek keselamatan dan kesihatan pekerjaan akan kekal relevan pada masa akan datang agar Jabatan dapat memenuhi misi untuk memastikan keselamatan dan kesihatan pekerjaan di seluruh negara terjamin.

*indirectly, will achieve the objective of the Department to reduce the rate of accidents at work. This effort will enhance Malaysia's image internationally and improves international trade by assuring investors and exporters that the Government is serious about its national labour safety and health practices. In this regard, the World Occupational Safety and Health Day celebration on every 28<sup>th</sup> of April and the Occupational Safety and Health Week celebration on the second week of July are also included in this Convention. In 2012, the two events were celebrated with great success. Congratulations go out to those involved.*

*In addition, the Department also plays a role in helping small and medium enterprises through the OSH Compliance Support. The programme is conducted in collaboration with the Ministry of Human Resources, SOCSO, NIOSH, and the Small and Medium Enterprise Corporation Malaysia (SME Corp). OSH Compliance Support is an initiative that focuses on small and medium enterprises with the aim of guiding employers and employees in creating and implementing the occupational health and safety management system at the workplace. The small and medium enterprise is the largest contributor to the national economic development, accounting for 90 per cent according to statistics provided by SME Corp. During the year of 2012, a total of 15 small and medium enterprises participated in this programme and have since showed an increase in the use of OSH management system at the workplace. In addition, activities such as pilot projects (door-to-door), CAT Van road shows, and mentor-mentee projects for the small and medium enterprises are continuously being held by state DOSH. This, in turn, will achieve the objective of the Department to reduce the rate of accidents at work.*

*The Department also plays a critical role in the successful implementation of the National Transformation Agenda through the National Key Result Areas (NKRA) under the Government Transformation Programme (GTP) and the National Key Economic Areas (NKEA) and Strategic Reform Initiatives (SRI) under the Economic Transformation Programme (ETP). The involvement of the DOSH in mega projects listed in the National Transformation Agenda is through collaboration, such as the construction of the light rail transit (LRT), the construction of pipelines in Melaka (LEKAS Project), the development of the Iskandar region in Johor, infrastructure development in the oil and gas industry as well as various other mega projects, is to ensure occupational safety and health at the work place through the enforcement of the law as well as providing advisory services. With the planned agenda, we can see that the country places infrastructure development to prosper the people as one of the thrusts for promoting economic development. In other words, the welfare of the people lies in a safe development, no-risk workplaces, and healthy workers. Therefore, I pray that enforcement on occupational safety and health will remain relevant in the future so that the Department can fulfil its mission in ensuring occupational safety and health throughout the country.*



Jabatan juga terlibat dalam usaha merealisasikan hasrat kerajaan pada masa akan datang untuk menjadikan perkhidmatan rakyat Malaysia sebagai salah satu sumber ekonomi negara. Hal ini dapat direalisasikan dengan mengeksport kepakaran pegawai JKKP dalam bidang keselamatan dan kesihatan pekerjaan (KKP) ke peringkat antarabangsa. Sekaligus, mencapai matlamat ASEAN OSHNET dalam menonjolkan keselamatan dan kesihatan pekerjaan di peringkat antarabangsa. *Malaysian Technical Cooperation Programme* (MTCP) dengan objektifnya berkongsi pengalaman Malaysia dalam bidang pembangunan yang menjurus kepada keselamatan dan kesihatan pekerjaan bersama dengan negara membangun merupakan program latihan antarabangsa yang meletakkan amanah kepada Jabatan untuk menjalankan kursus dalam bidang keselamatan dan kesihatan pekerjaan dengan pendekatan yang bersifat teknikal. Program latihan ini disampaikan oleh pegawai JKKP yang pakar, khusus kepada negara-negara yang hadir mengikuti program MTCP, dalam memastikan tahap KKP penggunaan teknologi yang sedia ada dan terkini tidak menjejaskan pekerja di tempat kerja. Sebagai persediaan bagi perkongsian maklumat kepakaran tersebut, Jabatan juga turut memperkasakan pengetahuan, dan penguatkuasaan yang sedia ada melalui kajian lapangan yang dijalankan oleh pegawai JKKP dari Kumpulan Pengurusan dan Profesional dengan tujuan meningkatkan keupayaan Jabatan untuk menangani isu KKP dengan lebih efektif dan berkesan. Kajian lapangan yang dijalankan ini turut mendapat kerjasama daripada pelbagai institusi penyelidikan.

Dalam arus kemodenan pada masa kini kita juga tidak boleh lari daripada perkembangan pesat dunia komunikasi. Perhubungan dunia tanpa sempadan ini membolehkan Jabatan berinteraksi dengan rakyat Malaysia yang bekerja ataupun tidak untuk sama-sama memastikan tahap KKP di Malaysia dapat ditingkatkan. Jabatan menyediakan laman sesawang yang penuh informasi berkaitan KKP, muat turun borang permohonan, menghantar permohonan, garis panduan serta banyak lagi yang boleh dilayari di [www.dosh.gov.my](http://www.dosh.gov.my). Dengan adanya kemudahan laman sesawang Jabatan ini, urusan bersama Jabatan hanya di hujung jari. Di samping itu, Jabatan juga mempunyai Sistem Kawal Urus Dokumen Versi 3 (SKUD V3) yang membolehkan permohonan kelulusan reka bentuk daripada JKKP secara atas talian serta Sistem Pengurusan Maklumat Kimia (CIMS) yang merupakan platform pembekal bahan kimia menghantar inventori bahan kimia seperti peruntukan peraturan. Komunikasi secara atas talian ini akan ditingkatkan lagi bagi memudahkan rakyat berurusan dengan Jabatan. Bagi memenuhi kehendak dan keperluan yang diinginkan oleh pelanggan secara lebih berkesan, Jabatan juga mempunyai sistem penyampaian perkhidmatan yang memenuhi standard kualiti yang berkesan melalui Sistem Pengurusan Kualiti ISO 9001:2008 dan Piagam Pelanggan. Jabatan juga menitikberatkan pengurusan keselamatan dan kesihatan di peringkat Jabatan sendiri melalui Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan MS 1722:2005 dan OHSAS 18001:2007 yang berjaya diperoleh dan dipraktikkan.

Secara keseluruhannya, saya berpuas hati dan berbangga dengan pencapaian yang ditunjukkan oleh warga JKKP sepanjang 2012. Majikan dan pekerja serta seluruh rakyat Malaysia termasuk warga JKKP perlu mengetahui dan berusaha untuk menangani masalah

*The Department is also involved in efforts to realise the Government's aspiration to make the services offered by the people of Malaysia as one of the country's economic resources in the future. This can be achieved by exporting the DOSH expertise in occupational safety and health overseas and in doing so, achieve the goal of ASEAN OSHNET in highlighting occupational safety and health at the international level. The Malaysian Technical Co-operation Programme (MTCP) aims to share Malaysia's experience with other developing countries in the area of development by also giving focus to occupational safety and health. Under the MTCP, the Department is entrusted with the responsibility of conducting an international training programme to representatives of countries participating in the MTCP, offering technical courses on occupational safety and health to ensure that the OSH level in using existing and current technologies will not adversely affect employees at the workplace. The training programme is conducted by the DOSH officers who are experts in their respective fields. In preparation for the sharing of expertise, the Department strengthens its knowledge and existing enforcement through field labs conducted by the DOSH officers from the Management and Professional Group with the purpose of improving the Department's ability to address OSH issues in a more effective and efficient manner. The field labs also gained the co-operation of research institutions.*

*In today's modernised world, we cannot run away from the rapid development of communication technologies. Communication in a world without borders allows the Department to interact with working and non-working Malaysians towards ensuring that the level of OSH in Malaysia is improved. The Department provides a website at [www.dosh.gov.my](http://www.dosh.gov.my), where visitors can obtain OSH-related information, download application forms, send applications, obtain guidelines, and many more. With the availability of the website, dealing with the Department is only a click away. In addition, the Department also has a Documentation Control System Version 3 (SKUD V3), which allows the approval of designs to be conducted online, and the Chemical Information Management System (CIMS), a platform for chemical suppliers to submit their inventory of chemical substances as required by regulations. This online facility will be further enhanced to facilitate transactions with the Department. In meeting the requirements and needs of its customers in a more effective manner, the Department has a service delivery system that meets the highest quality standards of ISO 9001:2008 Quality Management System and Client Charter. The Department is also concerned about its own safety and health management and as a result, it successfully acquired and utilised the Occupational Safety and Health Management System MS 1722:2005 and OHSAS 18001:2007.*

*On the whole, I am satisfied and proud of the achievements of the entire DOSH community throughout 2012. Employers, employees, and all Malaysians, including the DOSH community, need to be aware of and strive to deal with new hazards, such*

hazard baru yang akan datang seperti teknologi nuklear yang akan digunakan dalam masa dua atau tiga tahun lagi. Namun, persoalannya, sudahkah kita bersedia dengan keselamatan dan kesihatan pekerja di tempat kerja? Bagi nanoteknologi yang kini digunakan di kilang dan makmal dalam proses untuk menghasilkan bahan bersaiz nano; mekanisme apakah yang digunakan bagi mengurangkan kesan kepada kesihatan? Tidak ketinggalan juga, bioteknologi dan juga teknologi hijau yang menuntut jawapan kepada persoalan sama ada sudahkah kita bersedia untuk mereka bentuk jentera dan peralatan baharu yang akan digunakan di kilang yang dapat mengurangkan kesan pencemaran rumah hijau. Saya berharap agar semua pihak memainkan peranan untuk bersiap sedia dengan cabaran baharu dalam keselamatan dan kesihatan pekerjaan.

Akhir kata, saya berdoa agar JKKP terus relevan pada masa hadapan bagi memastikan aspirasi membudayakan keselamatan dan kesihatan di tempat kerja dapat direalisasikan sepenuhnya bukan sahaja dalam kalangan para pekerja malah seluruh rakyat Malaysia.

Sekian, terima kasih.

*as nuclear technology, which may be used in two or three years but the question is, are we prepared for it and can we ensure the safety and health of employees at the workplace? Nano-technology is now used in the process of making nano-sized materials in factories and laboratories, but what are the mechanisms used to reduce the impact on health? Not to mention bio-technology and green technology, where the question that begs an answer is whether we are ready to design new machinery and equipment to be used in the plants to reduce the impact of greenhouse pollution. I hope that all parties will play their respective roles in making the necessary preparation in facing any new challenges in occupational safety and health.*

*Lastly, I pray that the DOSH will continue to remain relevant in the future to ensure that the aspiration of attaining a culture of safety and health at the work place can be fully realised, not only among workers, but also among all Malaysians.*

*Thank you.*



**Dato' Ir. Dr. Johari bin Basri**

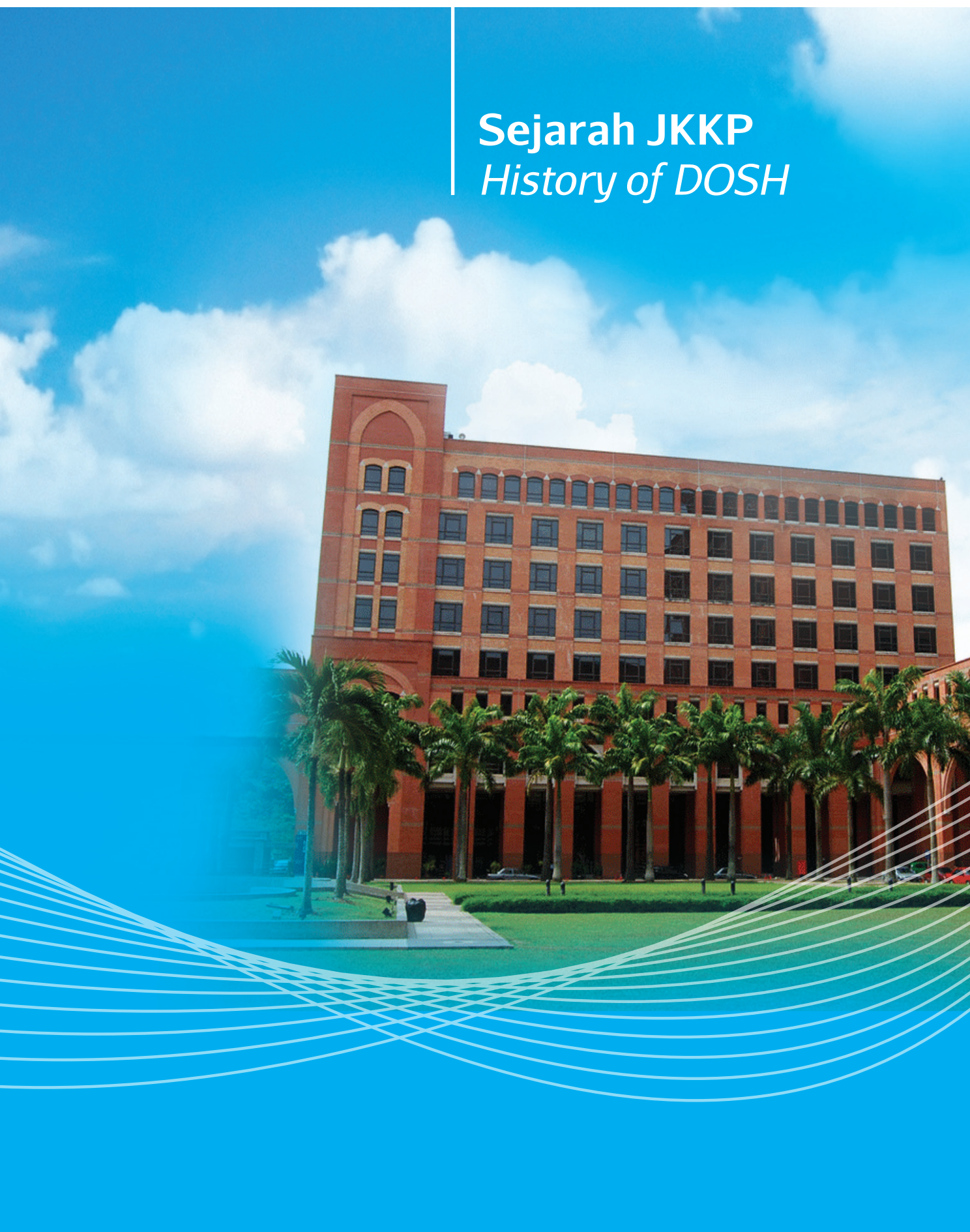
Ketua Pengarah JKKP Malaysia  
*Director-General of DOSH Malaysia*





# Sejarah JKPP

## *History of DOSH*



## Sejarah JKKP *History of DOSH*

### 132 Tahun Penguatkuasaan Keselamatan dan Kesihatan Pekerjaan di Malaysia

#### Unit Pemeriksa Jentera, Jabatan Perlombongan

Aspek keselamatan jentera mula dikuatkuasakan lebih seabad yang lalu. *The Steam Boilers Ordinance 1876* merupakan dokumen pertama yang menggariskan keperluan pemeriksaan berkala ke atas dandang stim dan penggerak utama bagi aktiviti perlombongan selain menekankan keselamatan manusia dan harta benda. Pemeriksaan ke atas kedua-dua jentera berkenaan dijalankan oleh pemeriksa dandang atau *Surveyors of Machinery and Boilers on Shore* di bawah Jabatan Perlombongan yang dilantik oleh Pendaftar Perlombongan Larut atau Ketua Pegawai Daerah.

Dua peringkat pemeriksaan dijalankan, iaitu pemeriksaan lengkap dan pemeriksaan biasa. Pemeriksaan lengkap dilakukan setiap bulan pertama Kalendar Cina yang ketika itu dandang dikosongkan, disejukkan, dan dibersihkan bahagian dalam dan luarnya termasuk semua saluran paip, lurang dan lubang lumpur, serta batang api dan titi api serta semua pemasangan yang berkaitan ditanggalkan. Pemeriksaan biasa pula dilakukan setiap bulan kelapan kalendar Cina semasa jentera enjin atau dandang sedang beroperasi. Selepas pemeriksaan, satu salinan sijil tersebut pengesahan ke atas jentera atau dandang berkenaan dikeluarkan dan salinan sijil diserahkan kepada Pendaftar Perlombongan di Larut atau Ketua Pegawai Daerah di daerah lain untuk dijadikan rujukan.

Bagi menjamin keselamatan dandang stim dan enjin, Kerajaan memperkenalkan Sijil Kompetensi kepada orang yang menjaga dandang stim dan enjin, iaitu Sijil Jurutera dan Sijil Drebar Enjin. Setiap kelas sijil pula terbahagi kepada dua, iaitu Sijil Jurutera Gred 1 dan Sijil Jurutera Gred 2 serta Sijil Drebar Enjin Gred 1 dan Sijil Drebar Enjin Gred 2 yang kelayakan kedua-duanya bergantung pada kuasa kuda dandang dan enjin.

Seterusnya, keselamatan dandang dipertingkatkan dengan pemasangan mangga berkunci pada injap keselamatannya melalui penguatkuasaan *The Steam Boiler Enactment 1903* yang secara tidak langsung menghapuskan khidmat *Licensed Surveyor* sebagai pemeriksa dandang. Manakala di bawah *The Machinery Enactment 1913*, keselamatan penggerak utama dipertingkatkan dengan mewajibkan setiap bahagian yang bergerak atau berputar dipasang pengadang. Enakmen berkenaan turut merangkumi pemeriksaan dandang dan enjin, kaedah mengawal dan cara bekerja dengan jentera lain. Ini telah memperluas skop tugas dan tanggungjawab pemeriksa kepada pemeriksaan bukan sahaja ke atas dandang dan enjin malah ke atas jentera dan pemasangan juga.

### 132 Years of Occupational Safety and Health Enforcement in Malaysia

#### Machinery Inspection Unit, Department of Mines

*The aspect of machinery safety came into force over a century ago. The Steam Boiler Ordinance 1876 was the first document to have recorded the periodic inspections of steam boilers and prime movers used in mining activities as well as to have emphasised on property and human safety. The inspection of both machineries was carried out by a Boiler Inspector or Surveyor of Machinery and Boilers On Shore from the Department of Mines, appointed by Larut Mining Registrar or the Head District Officer.*

*A two-stage inspection would be conducted on boilers and machinery, namely the full inspection and the regular inspection. A full inspection would be carried out every first month of the Chinese calendar during which the boilers were emptied, cooled, and cleaned on the inside and out, including all pipelines, manholes and mudholes, and the fire-bars and fire-bridges as well as all related installations removed. Regular inspections were carried out every eighth month of the Chinese calendar when the machines or boilers were in operation. After each inspection, a copy of certificate of verification would be issued and submitted to the Registrar of Larut Mines or the Chief District Officer in another area for reference.*

*In ensuring the safety of steam boilers and engines, the Government introduced the Certificate of Competency to those in charge of steam boilers and engines, namely the Certificate of Engineer and the Certificate of Engine Driver. Each class has two grades comprising of the Certificate of Engineer Grade 1 and Certificate of Engineer Grade 2, and the Certificate of Engine Driver Grade 1 and Certificate of Engine Driver Grade 2 of which qualifications would be based on the horsepower of the boiler and engine.*

*The safety of boilers was enhanced with the installation of padlocks on the safety valves under the enforcement of the Steam Boiler Enactment 1903, which indirectly made obsolete the services of licenced surveyors as boiler inspectors. Meanwhile, the safety of prime movers was enhanced by requiring all moving or rotating parts to be fitted with guard. The enactment covers boiler and engine inspections, control methods, and ways of working with other machinery. This expanded the scope of duties and responsibilities of inspectors. They did not only check the boilers and engines but also carried out inspection of machinery and installations.*



Penjawat awam Kerajaan di bawah Jabatan Perlombongan dilantik oleh Ketua Setiausaha Kerajaan Persekutuan Tanah Melayu sebagai Ketua Pemeriksa atau Ketua Pemeriksa Jentera, Pemeriksa Jentera atau Merinyu Pesawat, Penolong Pemeriksa dan *Overseer Inspectors of Machinery*. Pelaksanaan pemeriksaan secara keseluruhannya adalah di bawah kawalan Warden Perlombongan yang bergantung pada arahan semasa Warden Kanan Perlombongan.

## Pejabat Kejenteraan, Kementerian Buruh, dan Kebajikan Sosial

Pada awal 1950an, Kerajaan memutuskan agar Unit Pemeriksa Jentera di bawah Pejabat Perlombongan dipisahkan menjadi entiti baru, iaitu Pejabat Kejenteraan. Pejabat berkenaan diletakkan di bawah Kementerian Buruh dan Kebajikan Sosial yang kemudiannya ditukar menjadi Kementerian Buruh dan kini dikenali sebagai Kementerian Sumber Manusia.

Pada tahun 1953, Pejabat Kejenteraan dianggotai oleh 17 orang Pemeriksa Jentera yang terdiri daripada seorang Ketua Pemeriksa Jentera dan Penolong Ketua Pemeriksa Jentera di Ibu Pejabat Kuala Lumpur dan 15 orang Pemeriksa Jentera yang ditugaskan di pejabat negeri Pulau Pinang, Negeri Sembilan, Pahang, Perak, dan Johor.

Semua enakmen sebelum tahun 1953 dimansuhkan setelah rang undang-undang *The Machinery Ordinance 1953* (No 18/1953) diluluskan pada bulan April 1953. Ordinan yang meliputi seluruh Persekutuan Tanah Melayu ini menandakan bermulanya penguatkuasaan perundangan berkaitan keselamatan jentera di negeri Perlis, Kelantan, dan Terengganu. Skop penguatkuasaan keselamatan dan kesihatan di tempat kerja diperluas meliputi sektor pembinaan, pemeriksaan pemasangan, pengendalian, dan pemeriksaan jentera serta memastikan keselamatan, kesihatan, dan kebajikan pekerja yang sedang bekerja dengan jentera.

Catatan *Annual Report Machinery Department 1953* menunjukkan sebanyak 11,326 pemeriksaan telah dijalankan di seluruh Semenanjung Tanah Melayu yang merangkumi pemeriksaan 581 dandang, 4,435 penggerak utama, 1,371 penahan gas dan 3860 unit pemasangan. Setiap jentera diperiksa dengan teliti untuk mengesahkan jentera berada dalam keadaan selamat sebelum Sijil Perakuan Kelayakan dikeluarkan. Sijil berkenaan sah bagi tempoh 15 bulan atau kurang, tetapi Ketua Pemeriksa boleh membenarkan tempoh tersebut dilanjutkan sehingga 36 bulan bergantung pada keadaan dandang atau pengandung tekanan semasa proses pemeriksaan.

Empat jenis pemeriksaan dijalankan di premis kerja iaitu pemeriksaan berkala, pemeriksaan tambahan, pemeriksaan lanjutan dan pemeriksaan khas. Pemeriksaan berkala bertujuan memeriksa jentera dan mengeluarkan Sijil Perakuan Kelayakan; pemeriksaan tambahan bagi memeriksa keadaan loji stim dan tekanan injap keselamatan; pemeriksaan lanjutan bagi memeriksa kerja pembaikan, memastikan semua arahan Pemeriksa dipatuhi serta memastikan keadaan berbahaya atau kerosakan tidak berlaku dalam jangka waktu sah sijil, dan pemeriksaan khas adalah

*Public officials under the Department of mines were appointed as Chief Inspectors or Chief Inspectors of Machinery, Inspector of Machinery or Merinyu Pesawat and Overseer Inspectors of Machinery by the Chief Secretary to the Government of the Federation of Malaya. The implementation of the overall inspection fell under the supervision of the Mining Warden based on current instructions from the Senior Mining Warden.*

## Department of Machinery, Ministry of Labour and Social Welfare

*In the early 1950s, the Government decided to remove the Machinery Inspection Unit under the Department of Mines and formed a new entity called the Department of Machinery. The department was later placed under the Ministry of Labour and Social Welfare, which was later called the Ministry of Labour and currently known as the Ministry of Human Resources.*

*In 1953, the Department of Machinery had 17 machinery inspectors comprising of the Chief Inspector of Machinery and Assistant Chief Inspector of Machinery at its headquarters in Kuala Lumpur and 15 machinery inspectors assigned at the state offices in Pulau Pinang, Negeri Sembilan, Pahang, Perak, and Johor.*

*In April 1953, the Machinery Ordinance 1953 (No. 18/1953) bill was passed and henceforth, all related enactments prior to 1953 were repealed. The Ordinance covers the entire Federation of Malaya and marked the beginning of the enforcement of legislations on machinery safety in the states of Perlis, Kelantan, and Terengganu. The scope of enforcement of safety and health at the workplace was extended to cover the construction sector, inspection of installations, operation and inspection of machinery as well as ensuring the safety, health, and welfare of employees who handled the machinery.*

*The notes in the 1953 Annual Report of the Department of Machinery described a total of 11,326 inspections had been conducted throughout the Malay Peninsula which covers the inspection of 581 boilers, 4435 prime movers, 1371 gasholders, and 3860 units of installation. Each machinery would undergo a thorough examination to confirm the safe condition of the machinery before a Certificate of Fitness was issued. The validity period of the certificate of fitness was 15 months or less, but the Chief Inspector may permit an extension of up to 36 months depending on the condition of the boiler or pressure vessel at the time of inspection.*

*Four types of inspection were carried out at the workplace, namely periodic inspection, additional inspection, extended inspection, and special inspection. Periodic inspections were carried out to examine the machinery for the issuance of the Certificate of Fitness; additional inspections were carried out to check on the condition of the steam plant and pressure on safety valves; extended inspections were carried out to check on repair work, to ensure that all instructions from the inspectors had been complied, and to ensure that no hazardous conditions or faults*



khusus untuk menyaksikan ujian hidrostatik yang dijalankan.

Beberapa peraturan di bawah *The Machinery Ordinance 1953* telah diluluskan untuk dikuatkuasakan. *Machinery (Electric Passenger and Goods Lift) Regulations 1955* yang dikuatkuasakan pada 1 Januari 1956 menggariskan keperluan keselamatan meliputi pemasangan dan pengendalian lif bagi memastikan keselamatan pengguna. Pada 12 Jun 1956, satu perundangan sosial, iaitu *Machinery (Safety, Health and Welfare) Regulations 1956* telah dikuatkuasakan di Tanah Melayu yang meliputi standard minimum bagi keselamatan, kesihatan, dan kebajikan orang yang bekerja di premis yang mempunyai jentera.

*Machinery (Steam Boilers and Unfired Pressure Vessel) Regulations 1957* dikuatkuasakan untuk mengawal pengimportan, pengeluaran, pengendalian dan ujian ke atas dandang dan pengandung tekanan tak berapi. Keperluan pemeriksaan dandang dan pengandung tekanan tak berapi pula dinyatakan dalam *Machinery (Inspections and Certificates of Fitness) Regulations 1957*. Ia turut menerangkan tentang jenis jentera yang memerlukan Sijil Perakuan Kelayakan untuk digunakan di premis kerja serta peruntukan berkaitan dengan penggerak utama yang tidak lagi perlu diperiksa.

Mengikut perundangan sebelum ini, dandang dan enjin pembakaran dalam perlu dijaga oleh orang yang berkelayakan. *Machinery (Person-in-Charge) Regulations 1957* menerangkan tentang kriteria dan kelayakan jurutera dan drebar enjin sebagai orang yang menjaga dandang dan enjin pembakaran dalam. Pekerja disyaratkan mengikuti latihan menggunakan perkakasan keselamatan dan kaedah yang selamat sebelum dibenarkan bekerja dengan jentera pemacu.

Menurut *Machinery (Board of Examiners) Regulations 1957*, orang yang menjaga perlu menjalani peperiksaan mengikut kriteria dan kelayakan masing-masing. Proses peperiksaan dijalankan oleh pegawai yang diberi kuasa untuk menjalankan peperiksaan sijil kompetensi berkenaan. Setiap peperiksaan dikenakan bayaran yang berbeza.

Selain itu, perincian tanggungjawab Ketua Pemeriksa dan Pemeriksa turut dinyatakan dalam *Machinery (Administration) Regulations 1957*. Tanggungjawab berkenaan termasuk menjalankan siasatan kemalangan, mengadakan enkuiri dan pendakwaan ke atas kesalahan yang tidak mematuhi kehendak peraturan.

Pada tahun 1959, empat peraturan diluluskan, iaitu *Machinery (Transmission Machinery) Regulations 1959* dan *Machinery (Driven Machinery) Regulations 1959* yang mewajibkan pemasangan adang di semua jentera pemindah dan jentera pemacu. Peraturan lain ialah *Machinery (Dredging Installation) Regulations 1959* yang bertujuan menyeragamkan sistem penggera amaran sebelum memulakan atau memberhentikan jentera di kapal korek bijih timah. *Machinery (Foundry) Regulations 1959* pula menyatakan standard minimum keadaan premis yang menjalankan kerja melebur besi.

*had occurred during the validity period of the certificate; and special inspections were carried out for the purpose of observing the hydrostatic testings being conducted.*

*A number of regulations under the Machinery Ordinance 1953 were passed for enforcement. The Machinery (Electric Passenger and Goods Lift) Regulations 1955 came into force on 1 January 1956. These regulations set out the safety requirements for the installation and operation of lifts to ensure consumer safety. On 12 June 1956, a social law called the Machinery (Safety, Health and Welfare) Regulations 1956 was enforced in Malaya. These regulations cover the minimum standards of health, safety, and welfare of persons employed in premises equipped with machinery.*

*The Machinery (Steam Boiler and Unfired Pressure Vessel) Regulations 1957 aimed to regulate the importation, production, operation, and testing of boilers and unfired pressure vessels. The inspection requirements for boilers and unfired pressure vessels were described in the Machinery (Inspections and Certificates of Fitness) Regulations 1957. It includes the types of machinery that would require the certificate of fitness for their use in the work premises and provisions pertaining to prime movers which no longer required inspection.*

*According to the previous legislation, boilers and internal combustion engines should be handled by a qualified person. The Machinery (Person-in-Charge) Regulations 1957 sets out the criteria and qualifications of engineers and engine drivers as the persons-in-charge of boilers and internal combustion engines. Employees were required to attend training on the use of safety equipment and methods before they could start working with driven machinery.*

*Pursuant to the Machinery (Board of Examiners) Regulations 1957, the person-in-charge must undergo an examination according to the respective criteria and qualification. The examination process must be conducted by an officer authorised to conduct the certificate of competency examination under the Machinery (Board of Examiners) Regulations 1957. Different examination fees were applied, based on the criteria.*

*Apart from these, details of responsibilities of the Chief Inspector and Inspectors, which include investigating accidents, conducting inquiries, and prosecution of offences involving non-compliance to Regulations and requirements, were also described in the Machinery (Administration) Regulations 1957.*

*In 1959, four regulations were enacted, namely the Machinery (Transmission Machinery) Regulations 1959 and the Machinery (Driven Machinery) Regulations 1959 which stipulate the installation of guardrails on all transmission and driven machinery. Other regulations were the Machinery (Dredging Installation) Regulations 1959 which aims to standardise the alarm system before starting or stopping the machinery in tin dredgers, and the Machinery (Foundry) Regulations 1959 which stipulates the minimum standards of conditions in the premises that carry out iron smelting work.*

## Jabatan Kilang dan Jentera, Kementerian Sumber Manusia

Ruang lingkup penguatkuasaan *The Machinery Ordinance 1953* dan peraturan di bawahnya terhad kepada tempat kerja yang mempunyai jentera sahaja. Bagi kerja memproses getah yang menggunakan bahan asid, di ladang getah, ia tidak dilindungi secara langsung di bawah ordinan ini.

Pada tahun 1967, Akta Kilang dan Jentera 1967 (AKJ) digubal dan diluluskan. Skop penguatkuasaan keselamatan industri diperluas kepada pemeriksaan kilang dan jentera. Penguatkuasaan AKJ dilakukan oleh Ketua Pemeriksa Kilang dan Jentera, Timbalan Ketua Pemeriksa Kilang dan Jentera, Pemeriksa Kanan Kilang dan Jentera, dan Pemeriksa Kilang dan Jentera yang dilantik di bawah Seksyen 4, Akta berkenaan. Nama Jabatan turut bertukar daripada Jabatan Kejenteraan/Pejabat Kejenteraan kepada Jabatan Kilang dan Jentera (JKJ) yang beribu pejabat di Tingkat Bawah, Bangunan MIC di Jalan Maxwell/Jalan Tun Ismail, Kuala Lumpur.

### Akta Kilang dan Jentera 1967 (Akta 139)

Akta ini memperuntukkan piawaian minimum bagi keselamatan, kesihatan, dan kebajikan pekerja di tempat kerja yang mempunyai lima orang atau lebih pekerja di semua premis jentera digunakan, termasuk di kilang, tapak kerja binaan bangunan, dan kerja binaan kejuruteraan. Selain itu juga, ia turut merangkumi aspek perlindungan para pekerja yang bekerja di premis yang tidak menggunakan jentera, melaporkan penyakit industri serta memperlengkap peraturan kesihatan industri dalam sektor perkilangan, perlombongan dan pengkuarian serta pembinaan.

Penguatkuasaan AKJ bermula pada 1 Februari 1970 dengan lapan peraturan telah digubal. Ia telah diperluas kepada aspek pendaftaran dan pemeriksaan jentera, notis tentang kemalangan, kejadian berbahaya dan penyakit berbahaya, orang yang menjaga, sijil perakuan kelayakan serta hal berkaitan keselamatan, kesihatan, dan kebajikan pekerja. Peruntukan lain yang digariskan hampir serupa dengan yang terkandung dalam *The Machinery Ordinance 1953* yang dimansuhkan.

Peraturan-peraturan berkenaan adalah *Factories and Machinery (Steam Boiler and Unfired Pressure Vessel) Regulations 1970*, *Factories and Machinery (Electric Passenger and Goods Lift) Regulations 1970*, *Factories and Machinery (Fencing of Machinery and Safety) Regulations 1970*, *Factories and Machinery (Person-In-Charge) Regulations 1970*, *Factories and Machinery (Safety, Health and Welfare) Regulations 1970*, *Factories and Machinery (Administration) Regulations 1970*, *Factories and Machinery (Certification of Competency-Examination) Regulations 1970* dan *Factories and Machinery (Notification, Certificate of Fitness and Inspection) Regulations 1970*.

Selepas lapan tahun pelaksanaan penguatkuasaan AKJ, dua peraturan telah digubal, iaitu *Factories and Machinery*

## Department of Factories and Machinery, Ministry of Human Resources

*The scope of enforcement under the Machinery Ordinance 1953 and the regulations hitherto, extended only to workplaces equipped with machinery. Rubber processing work that used acid materials, in the rubber estates, were not covered under this ordinance.*

*In 1967, the Factories and Machinery Act 1967 was drafted and approved. The scope of enforcement for industrial safety was extended to factories and machinery. The enforcement of this Act was carried out by the Chief Inspector of Factories and Machinery, the Deputy Chief Inspector of Factories and Machinery, the Senior Inspector of Factories and Machinery, and the Inspector of Factories and Machinery appointed under Section 4 of the Act. The name of the Department was changed from the Department of Machinery/Machinery Office to the Department of Factories and Machinery (DFM) which had its headquarters located on the ground floor of the MIC Building in Jalan Maxwell/Jalan Tun Ismail, Kuala Lumpur.*

### Factories and Machinery Act 1967 (Act 139)

*This Act was designed to provide the minimum standards for safety, health, and welfare of employees in the workplaces having five or more employees in all the premises where machinery was used, including the factory, building construction site, and engineering construction site. Apart from these, the Act also covered the aspects of worker protection in premises with no machinery, notification of industrial diseases, and the provision of industrial health rules in the manufacturing, mining and quarrying, and construction sectors.*

*The Factories and Machinery Act (FMA) came into force on 1 February 1970 whereby eight regulations were enacted. The Act and regulations were extended to include aspects of registration and inspection of machinery, notification of accidents, dangerous occurrences, dangerous diseases, persons-in-charge, and certificates of competency as well as matters on the safety, health, and welfare of workers. Other provisions of the FMA were similar to those outlined in the Machinery Ordinance 1953, which was repealed upon the enactment of the FMA in 1970.*

*The regulations under this Act include the Factories and Machinery (Steam Boiler and Unfired Pressure Vessel) Regulations 1970, Factories and Machinery (Electric Passenger and Goods Lift) Regulations 1970, Factories and Machinery (Fencing of Machinery and Safety) Regulations 1970, Factories and Machinery (Person-In-Charge) Regulations 1970, Factories and Machinery (Safety, Health and Welfare) Regulations 1970, Factories and Machinery (Administration) Regulations 1970, Factories and Machinery (Certification of Competency-Examination) Regulations 1970, and Factories and Machinery (Notification, Certificate of Fitness and Inspection) Regulations 1970.*

*After eight years of FMA enforcement efforts, two regulations were enacted, namely the Factories and Machinery (Compounding*

*(Compounding Offences) Rules 1978 dan Factories and Machinery (Compounding Offences) Regulations 1978.* Kedua-dua peraturan ini adalah bagi menawarkan kompaun ke atas tempat kerja yang melanggar peruntukan di bawah AKJ 1967, mengikut jumlah tertentu. Pihak yang ditawarkan kompaun boleh membayar dalam bentuk tunai, kiriman wang, draf bank, dan kiriman wang pos.

Bahagian Higien Industri ditubuhkan sekitar tahun 1980an bagi memberikan kesedaran berkenaan kepentingan amalan higien industri dalam kalangan majikan dan pekerja. Bahagian ini menekankan kepada perlindungan kesihatan kepada pekerja daripada bahaya akibat persekitaran tempat kerja serta faktor kawalan yang diperlukan melalui penyiasatan dan pengukuran bahaya yang dijalankan. Antara aktiviti Bahagian Higen Industri ini termasuk pemeriksaan higien industri, pemantauan bahaya fizikal, pemantauan biologik dan penyiasatan aduan dan kemalangan berkaitan dengan higien industri.

Pemantauan yang pernah dijalankan ke atas industri adalah pemantauan kontamina udara dan tekanan fizikal terutama yang menggunakan timah hitam, asbestos, silika, kapas serta pemantauan premis kilang yang mengeluarkan bunyi bising. Selain itu, industri pemprosesan asbestos turut diberikan perhatian lanjut. Pada 1 September 1986, *Factories and Machinery (Asbestos Process) Regulations 1986* yang menekankan penggunaan perkakasan ekzos, pengumpul habuk, dan Orang Yang Kompeten telah dikuatkuasakan dalam proses pembuatan kecuali kerja di tapak binaan atau kerja kejuruteraan.

Pada masa yang sama, JKJ turut memfokus kepada industri pembinaan yang pesat membangun. Tapak pembinaan bangunan dan kejuruteraan serta jentera yang digunakan diperiksa di bawah *Factories and Machinery (Building Construction and Works of Engineering Contruction) (Safety) Regulations 1986*. Ia meliputi aspek keselamatan seperti jentera yang dipasang di paras atas aras tanah, bahaya tenggelam, bahaya terjatuh, laluan masuk, bahan terkakis, perlindungan mata, peralatan pernafasan, dan bahaya elektrik.

Beberapa tahun kemudian, JKJ menemui bahaya baru yang berkaitan dengan habuk galian. Bagi melindungi pekerja dalam industri berkenaan, majikan dikehendaki menyediakan peralatan perlindungan diri, kemudahan bilik menyalin pakaian dan menyimpan pakaian, serta kemudahan loker untuk pekerja mereka. Ini dinyatakan dalam *Factories and Machinery (Mineral Dust) Regulations 1989*. Bagi mengelakkan pendedahan para pekerja kepada habuk galian ini juga, peralatan yang mengawal habuk dipastikan berfungsi dengan baik dan pemeriksaan perubatan yang bersesuaian juga perlu dilakukan sekiranya terdapat pekerja yang terdedah kepada habuk ini.

Satu lagi elemen yang mendatangkan risiko kepada kesihatan ialah pekerja yang bekerja dengan jentera yang mengeluarkan bunyi bising. Peruntukan dalam peraturan *Factories and Machinery (Noise Exposure) Regulations 1989* adalah lanjutan daripada peruntukan pendedahan bunyi bising dalam ordinan sebelumnya.

*Offences) Rules 1978 and Factories and Machinery (Compounding Offences) Regulations 1978 that provided for a compound offer of a specified amount to workplaces found to be in violation of the provisions under the FMA 1967. The party being offered the compound may make the payment either in cash, money order, bank draft, or postal order.*

*The Industrial Hygiene Division was established in the 1980s to create awareness among employers and employees on the importance of industrial hygiene practices. This division gave focus to the health protection of employees against environmental hazards at the workplace and control factors needed through the investigation and measurement of hazards conducted. Among the activities of the Industrial Hygiene Division were industrial hygiene inspection, physical hazards monitoring, biological monitoring, and investigation of complaints and accidents related to hygiene industry.*

*Monitoring activities that had been conducted on the industry include the monitoring of air contaminants and physical stress, particularly involving the use of black tin, asbestos, silica, and cotton as well as factory premises with high levels of noise. Besides these, asbestos processing industry was given further attention. On 1 September 1986, the Factory and Machinery (Asbestos Process) Regulations 1986, which emphasized on the use of exhaust equipment, dust collector, and Competent Person was enforced for manufacturing processes. This provision, however, did not apply to work at construction sites or engineering work.*

*At the same time, the Department of Factories and Machinery also gave focus to the booming construction industry. Construction sites and machinery used during construction and engineering construction work were inspected under the Factories and Machinery (Building Construction and Works of Engineering Contruction) (Safety) Regulations 1986. It covers safety aspects, such as machinery that were installed on floors above the ground level, sinking hazards, falling hazards, entryways, corroded materials, eye protection, breathing apparatus, and electrical hazards.*

*In subsequent years, the Division of Industrial Hygiene discovered a new hazard associated with mineral dust. In order to protect workers in the related industries, employers were required to provide protective equipment, changing room, and lockers for storage of clothing for their employees. These requirements were included in the Factories and Machinery (Mineral Dust) Regulations 1989. To prevent workers from being exposed to mineral dust, the dust control equipment must be ensured to work properly and appropriate medical examination must be conducted on employees exposed to dust hazard.*

*Exposure to high level of noise emitted by certain machineries is another health risk to workers. The provisions under the Factories and Machinery (Noise Exposure) Regulations 1989 were extensions of the provisions on noise exposure in the previous ordinance. The regulations, however, further detailed the permissible exposure*



Namun, peraturan berkenaan telah diperincikan dengan had pendedahan yang dibenarkan, pemantauan pendedahan, kaedah pengawalan, dan program ujian audiometrik.

## Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP)

Apabila Akta Keselamatan dan Kesihatan Pekerjaan (AKKP) dikuatkuasakan pada tahun 1994, Jabatan Kilang dan Jentera (JKJ) telah ditukarkan kepada Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) manakala Pemeriksa dikenali sebagai Pegawai Keselamatan dan Kesihatan Pekerjaan. Pejabat Pentadbiran JKPP Ibu Pejabat pada ketika itu terletak di Bangunan KWSG, Jalan Kampung Attap, Kuala Lumpur.

Matlamat JKPP adalah untuk mewujudkan budaya kerja yang selamat dan sihat dalam kalangan majikan dan pekerja. Ia melindungi keselamatan, kesihatan dan kebajikan mereka dan orang lain yang terdedah kepada risiko yang berpunca daripada aktiviti orang bekerja.

Peranan JKPP telah diperluas kepada tiga aktiviti utama, iaitu penyediaan standard, penguatkuasaan, dan promosi. Dari semasa ke semasa, peraturan, kod amalan dan garis panduan digubal melalui proses tripatisme untuk membimbing dan meningkatkan kesedaran para majikan, pekerja dan juga masyarakat umum tentang kepentingan keselamatan dan kesihatan pekerjaan.

Aktiviti penguatkuasaan dijalankan melalui pemeriksaan berkala dan audit keselamatan dan kesihatan ke atas kilang, jentera dan tempat kerja lain yang diliputi oleh AKKP terutama sekali pegawai di pejabat negeri. Pegawai turut diberi latihan secukupnya untuk menjalankan penyiasatan kemalangan, serta penyakit dan keracunan pekerjaan. Sekiranya ketidakpatuhan oleh pihak industri dikenal pasti daripada kejadian kemalangan dan aduan, pendakwaan akan dilaksanakan.

Selain pemeriksaan dan audit, pegawai JKPP turut melakukan semakan bagi memperaku reka bentuk jentera berperakuan yang terdiri daripada dandang stim, pengandung tekanan tak berapi, mesin angkat, dan lif. Ia juga termasuk peralatan yang berkaitan dengan penggunaan bahan petroleum, peralatan higien industri, peralatan pelindung diri serta sistem pengstoran, penghantaran dan penggunaan bahan petroleum.

JKPP turut mengenal pasti dan menyemak laporan keselamatan, memantau bahaya kesihatan dan pelan tindakan kecemasan serta membuat pemeriksaan dan audit ke atas instalasi berbahaya besar. Di samping itu, JKPP turut menyediakan sukatan peperiksaan dan penilaian serta mengendalikan peperiksaan untuk pengiktirafan Orang Yang Kompeten dan Firma Yang Kompeten.

Aktiviti promosi turut menjadi keutamaan JKPP. Kempen dan seminar berkaitan keselamatan dan kesihatan pekerjaan dijalankan dengan aktif. Pada masa yang sama, JKPP turut membantu dan memberikan khidmat kepakaran dalam latihan, penyebaran maklumat, dan penyelidikan yang dikendalikan oleh

*limits, exposure monitoring, control methods, and audiometric testing programme.*

## Department of Occupational Safety and Health (DOSH)

*When the Occupational Safety and Health Act (OSHA) came into force in 1994, the Department of Factories and Machinery (DFM) had its name changed to the Department of Occupational Safety and Health (DOSH) and the inspectors known as Occupational Health and Safety Officers. The DOSH Headquarters and Administrative Office were then located at KWSG Building, Jalan Kampung Attap, Kuala Lumpur.*

*The DOSH was aimed to create a safe and healthy working culture amongst employers and employees in order to safeguard their health, safety, and welfare as well as other people against work-related risks.*

*The role of the DOSH was extended to include three main activities, namely drafting of standards, enforcement, and promotion. From time to time, the drafting of regulations, code of practice, and guidelines may be carry out through the process of tripatism to guide and enhance awareness amongst employers, workers, and the general public on the importance of occupational safety and health.*

*Enforcement activities were carried out by officers from the state offices through periodic inspections as well as safety and health audits on plants, machinery, and other workplaces covered by the OSHA. Officers were given sufficient training to conduct investigations on occupational accidents, diseases, and poisonings. If it is found that the occurrence of an accident or complaint is caused by the non-compliance of the industry, prosecution would be carried out.*

*Apart from inspections and audits, the DOSH officers also conducted reviews to certify the design of machinery such as steam boilers, unfired pressure vessels, hoisting machines, and lifts. This also included equipment associated with the use of petroleum substances, industrial hygiene equipment, personal protective equipment as well as the storage, transmission and dispensing system of petroleum substances.*

*The DOSH also identified and reviewed safety reports, monitored health hazards and emergency response plans as well as conducted inspections and audits on major hazard installations. In addition, the DOSH also prepared the examination syllabus and assessment as well as conducted the examination for the certification of competent persons and firms.*

*The DOSH also gave priority to promotional activities. Campaigns and seminars on occupational safety and health were actively being carried out. At the same time, the DOSH also provided assistance and expert services in training, dissemination of information, and research conducted by the Government and non-Government*

agensi Kerajaan dan bukan Kerajaan, institusi pengajian tinggi, persatuan majikan, pekerja dan profesional dalam usaha untuk meningkatkan lagi taraf keselamatan, kesihatan, dan kebajikan pekerjaan.

Usaha untuk memperkembang dan memperluas isu dan maklumat yang ada berkaitan dengan aspek keselamatan dan kesihatan pekerjaan diteruskan dengan meletakkan beberapa pegawai JKKP sebagai sekretariat Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKKP). Pemahaman dan pengetahuan sebegini amatlah diharapkan agar dapat disalurkan kepada pihak yang berkenaan, iaitu majikan dan pekerja di negara ini.

Bersama-sama dengan agensi lain di bawah Kementerian Sumber Manusia, MNKKP berjaya menganjurkan aktiviti tahunan seperti Sambutan Hari Sedunia bagi Keselamatan dan Kesihatan di Tempat Kerja, Minggu Keselamatan dan Kesihatan Pekerjaan, dan Majlis Anugerah Cemerlang Keselamatan dan Kesihatan Pekerjaan Kebangsaan. Penganjuran aktiviti ini turut mendapat kerjasama dan penglibatan yang amat memberangsangkan daripada semua pihak majikan dan pekerja di negara ini.

*agencies, institutions of higher learning, and associations of employers, employees and professionals in order to improve the standard of occupational health, safety, and welfare.*

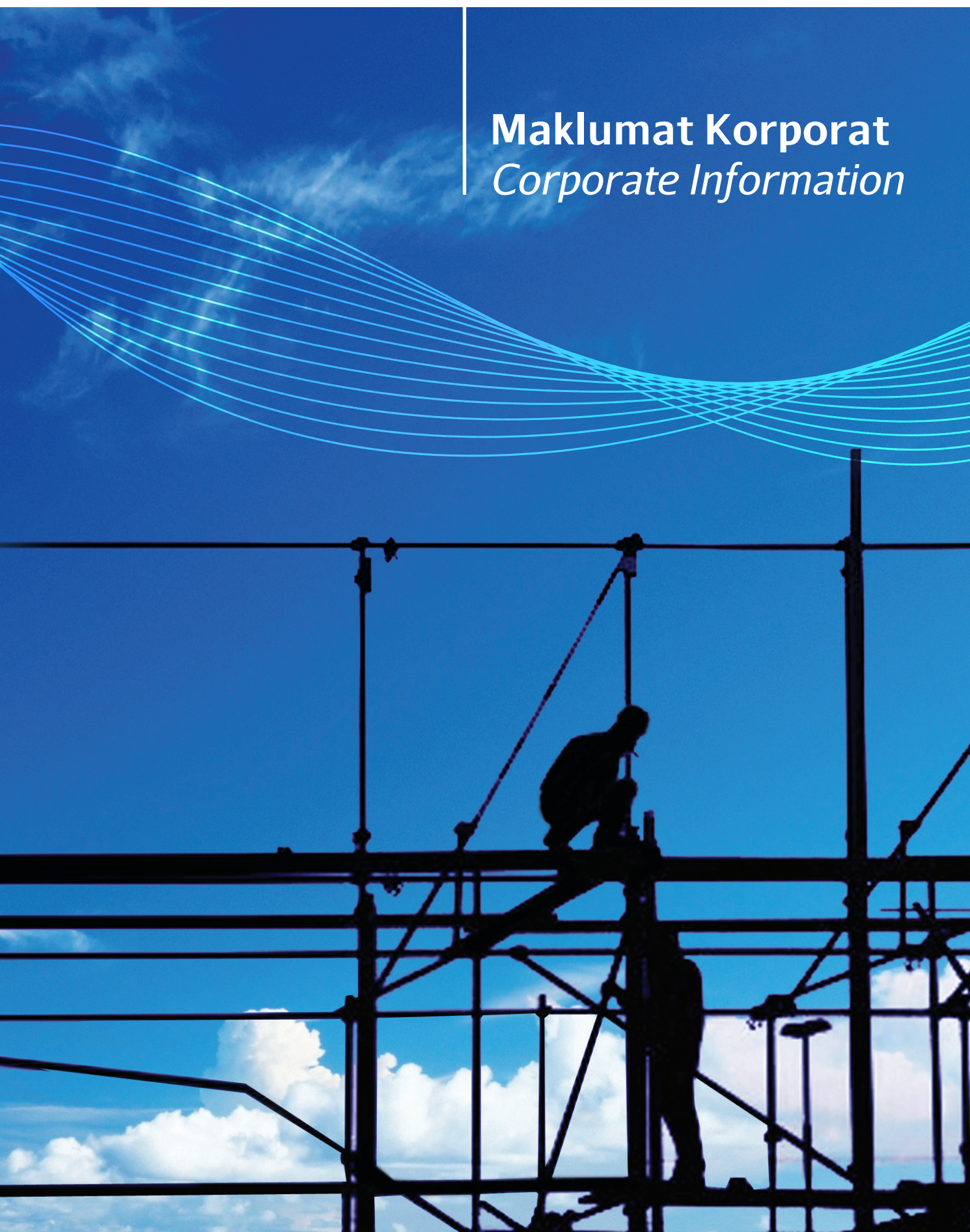
*Efforts to on available information regarding occupational safety and health continued to be pursued by placing several the DOSH officers as secretariat to the National Councilfor Occupational Safety and Health (NCOSH). It is hoped that the knowledge and understanding gained would be channeled to both the employers and employees in the country.*

*With the collaboration of other agencies under the Ministry of Human Resources, NCOSH had been successful in organising the annual event of World Day for Safety and Health at Workplace, the Occupational Safety and Health Week, and the annual National Occupational Safety and Health Excellence Award Ceremony. It also enjoys the co-operation and encouraging participation of all employers and employees in the country.*



# Maklumat Korporat

## *Corporate Information*



# Maklumat Korporat

## Corporate Information

### Latar Belakang

Kemajuan dan perubahan persekitaran di tempat kerja telah mewujudkan keperluan bagi mengadakan kawalan ke atas pekerja dan orang yang mungkin terjejas oleh aktiviti yang berpunca dari tempat kerja. Atas keperluan inilah Akta Keselamatan dan Kesihatan Pekerjaan 1994 (AKKP 1994) diwujudkan dan Jabatan yang dahulunya dikenali sebagai Jabatan Kilang dan Jentera kini telah bertukar kepada Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP).

Dengan adanya Akta ini, aktiviti Jabatan yang dahulunya tertumpu kepada sektor pembuatan telah berubah dan kini merangkumi kesemua sektor pekerjaan yang lain.

Sektor pekerjaan lain yang dimaksudkan (sebagaimana tersenarai dalam Jadual Pertama AKKP 1994) adalah:

- Perlombongan dan pengkuarian.
- Pembinaan.
- Hotel dan restoran.
- Pertanian, perhutanan dan perikanan.
- Pengangkutan, penyimpanan, dan komunikasi.
- Perkhidmatan awam dan pihak berkuasa berkanun.
- Kemudahan – gas, elektrik, air, dan perkhidmatan kebersihan.
- Kewangan, insurans, hartanah, dan perkhidmatan perniagaan.
- Perniagaan borong dan runcit.

Dengan ini, JKKP adalah satu-satunya agensi Kerajaan yang bertanggungjawab mentadbir, mengurus, dan menguatkuasakan perundangan yang berkaitan dengan keselamatan dan kesihatan pekerjaan di negara ini dengan wawasan membudayakan setiap pekerjaan yang dijalankan adalah selamat dan sihat. Secara tidak langsung, ia juga dapat mempertingkatkan kualiti hidup semasa bekerja.

### Aktiviti Utama

Bagi merealisasikan hala tuju Jabatan ke arah mewujudkan budaya kerja selamat dan sihat di tempat kerja, Jabatan menjalankan tiga aktiviti penting yang melibatkan Ibu Pejabat, lima belas pejabat negeri, dan lima pejabat cawangan. Aktiviti penting tersebut adalah (i) penyediaan standard, (ii) penguatkuasaan, dan (iii) promosi. Tumpuan aktiviti di Ibu Pejabat adalah penyediaan standard, kelulusan, pengiktirafan, dan analisis data. Manakala aktiviti di pejabat dan cawangan negeri lebih tertumpu kepada penguatkuasaan Akta dan Peraturan, pemeriksaan, audit, siasatan, dan tindakan undang-undang.

Aktiviti penting tersebut adalah bersesuaian dengan agenda kerja berhemah Kementerian Sumber Manusia, iaitu melaksanakan amalan keselamatan dan kesihatan pekerjaan yang dinamik.

### Background

*The advances and changes to the workplace environment had created the need to establish controls over the workers and other persons who may be adversely affected by the activities at the workplace. In addressing this need, the Occupational Safety and Health Act 1994 (OSHA 1994) was enacted, and the formerly known Department of Factories and Machinery was renamed as the Department of Occupational Safety and Health (DOSH).*

*With the advent of this Act, the activities of the Department, which previously focused on the manufacturing sector, had changed to include all other employment sectors.*

*The other employment sectors, as referred to and listed in the First Schedule of OSHA 1994, include:*

- Mining and quarrying.
- Construction.
- Hotel and restaurant.
- Agriculture, forestry, and fishery.
- Transport, storage, and communication.
- Public services and statutory authorities.
- Utilities – gas, electricity, water, and sanitary services.
- Finance, insurance, real estate, and business services.
- Wholesale and retail trade.

*The Department of Occupational Safety and Health (DOSH) is the only Government agency responsible for administering, managing, and enforcing the occupational safety and health legislations in the country, with the vision of developing a safe and healthy culture in every job. Indirectly, this would also improve the quality of working life.*

### Key Activities

*In realising its vision of creating a safe and healthy work culture at the workplace, the Department carried out three key activities; involving the Headquarters, fifteen state offices, and five branch offices; namely standard-setting, enforcement, and promotional activities. The activities at the Headquarters focused on standard-setting, approval, certification, and data analysis; while the activities at the state and branch offices focused more on enforcement of the Act and Regulations, inspection, auditing, investigation, and litigation.*

*The key activities were in line with the Decent Work agenda of the Ministry of Human Resources of implementing dynamic occupational safety and health practices.*



## 1. Penyediaan Standard

Standard yang berkaitan dengan keselamatan, kesihatan, dan kebajikan pekerja dikaji, digubal dan perlu disediakan dari semasa ke semasa. Ini bertujuan memastikan standard yang digubal adalah relevan dengan keselamatan dan kesihatan di tempat kerja.

### a) Kajian Dasar

Kajian ke atas dasar KKP yang sedia ada dijalankan dari semasa ke semasa untuk menilai sejauh mana dasar tersebut mencapai tujuan asal seperti yang dirancang. Perubahan akan dibuat, jika perlu, untuk memastikan matlamat dapat dicapai dan terhalu ke arah peraturan sendiri dalam kalangan majikan dan pekerja.

### b) Penggubalan Peraturan, Garis Panduan, dan Kod Amalan Industri

Jabatan telah dan sedang dalam proses meminda peraturan, kod tataamalan industri, dan garis panduan yang baharu. Ini bertujuan membantu pihak industri mematuhi dan memenuhi tanggungjawab sebagai majikan seperti yang dikehendaki oleh Akta Keselamatan dan Kesihatan Pekerjaan 1994.

## 2. Penguatkuasaan

Jabatan menjalankan aktiviti penguatkuasaan untuk memastikan keselamatan, kesihatan dan kebajikan orang yang sedang bekerja, dan juga untuk melindungi orang lain daripada bahaya-bahaya yang berpunca dari aktiviti pekerjaan, yang meliputi di bawah Akta yang berikut:

- Akta Keselamatan dan Kesihatan Pekerjaan 1994 (Akta 514);
- Akta Kilang dan Jentera 1967 (Akta 139); dan
- Akta Petroleum (Langkah-Langkah Keselamatan) 1984 (Akta 302).

Aktiviti penguatkuasaan yang dijalankan oleh JKPP adalah:

### a. Kelulusan dan Kebenaran

Kelulusan dan kebenaran prosedur baik pulih yang dikeluarkan oleh Jabatan ialah kelulusan bagi reka bentuk dan dandang stim, pengandung tekanan tak berapi dan mesin angkat. Manakala kebenaran memasang adalah untuk jentera am.

### b. Pendaftaran

Pendaftaran kilang dan pemasangan, tempat kerja, dan jentera yang memerlukan perakuan kelayakan seperti dandang stim, pengandung tekanan tak berapi, mesin angkat, lif penumpang, dan eskalator.

### c. Pengiktirafan

Persijilan kompetensi dikeluarkan ke atas inividu dan firma yang mempunyai kelayakan pengalaman, kepakaran, dan pengetahuan dalam bidang yang diperlukan oleh akta dan peraturan yang

## 1. Standard-Setting

*The standards on safety, health, and welfare had to be reviewed, drafted, and finalised from time to time. This ensured that the prepared standards were relevant to the safety and health conditions of the workplace.*

### a) Policy Study

*Studies on existing OSH policies were conducted from time to time to assess the extent to which these policies had achieved their original objectives. Changes would be made, if necessary, to ensure that the goals and the practice of self-regulation among employers and employees were achieved.*

### b) Drafting Regulations, Guidelines, and Industrial Codes of Practice

*The Department had and currently in the process of amending the new industrial Regulations, Codes of Practice, and Guidelines. This was intended to assist the industry in complying with and fulfilling its responsibilities as an employer, as required by the Occupational Safety and Health Act 1994.*

## 2. Enforcement

*The Department carried out enforcement activities aimed at ensuring the safety, health, and welfare of workers and other persons from the hazards of work activities, as required under the following Acts:*

- *Occupational Safety and Health Act 1994 (Act 514);*
- *Factories and Machinery Act 1967 (Act 139); and*
- *Petroleum (Safety Measures) Act 1984 (Act 302).*

*Enforcement activities carried out by the DOSH include:*

### a. Approval and Authorisation

*The approval and authorisation procedures issued by the Department were for the design of steam boilers, unfired pressure vessels, and hoisting machinery, whereas the authorisation to install was issued for general machinery.*

### b. Registration

*Registration of factories and installations, workplaces, and machinery that require certification of fitness such as steam boilers, unfired pressure vessels, hoisting machinery, passenger lifts, and escalators.*

### c. Certification

*Certificates of competency would be issued to individuals and firms with the necessary qualifications, experience, expertise, and knowledge in the relevant fields as required by the Act*



dikuatkuasakan. Bidang kompetensi yang diiktiraf oleh Jabatan adalah seperti yang berikut:

#### **i. Firma Yang Kompeten**

- Pusat pengajar pengendali perancah.
- Pusat pengajar pengendali kren.
- Pusat pengajar pegawai keselamatan dan kesihatan.
- Pembuat/pembaik pulih/pemasang bagi pengandung tekanan tak berapi dan dandang.
- Kontraktor gas.
- Pembekal/pembuat lif and eskalator.
- Pembuat mesin angkat.
- Pemasang/perombak kren menara dan mesin angkat.
- Pembuat perancah.
- Badan berkuasa memeriksa.
- Syarikat audiometrik tidak bergerak (klinik).
- Syarikat audiometrik tidak bergerak (kilang).
- Makmal.
- Pusat pengajar kualiti udara dalaman.

#### **ii. Orang Yang Kompeten**

- Orang yang kompeten major hazard.
- Jurutera stim Gred Satu dan Dua.
- Jurutera enjin pembakaran dalam Gred Satu dan Dua.
- Drebar enjin stim Gred Satu dan Dua.
- Drebar Enjin Pembakaran dalam Gred Satu dan Dua.
- Orang kompeten lif.
- Pegawai keselamatan dan kesihatan.
- Pemasang mesin angkat penumpang/kren menara.
- Pemasang/perombak perancah.
- Pengendali kren.
- Tenaga pengajar kursus Induksi keselamatan dan kesihatan dalam sektor binaan.
- Permonitoran bising.
- Doktor kesihatan pekerjaan.
- Pengapit.
- Juruteknik higien I dan II.
- Pengapit kualiti udara dalaman.
- Penguji gas bertauliah.

#### **iii. Pemeriksaan**

Pemeriksaan awal, ulangan, dan tambahan ke atas dandang stim, pengandung tekanan tak berapi, mesin angkat, kilang dan pemasangan serta tempat kerja lain. Penyiasatan ke atas aduan, kemalangan, penyakit, dan keracunan pekerjaan.

#### **iv. Tindakan Undang-undang**

Tindakan undang-undang diambil dalam bentuk notis larangan dan pembaikan, kompaun serta pendakwaan di mahkamah.

*and regulations. The fields of competency recognised by the Department are as follows:*

#### **i. Competent firms**

- *Scaffolding operator training centre.*
- *Crane operator training centre.*
- *Safety and health officer training center.*
- *Unfired pressure vessel and boiler manufacturer/repairer/installer.*
- *Gas contractor.*
- *Elevator and escalator supplier/manufacture.*
- *Hoisting machine manufacturer.*
- *Tower crane and hoisting machine installer/dismantler.*
- *Scaffolding manufacturer.*
- *Inspection authorities.*
- *Stationary audiometric companies (clinic).*
- *Stationary audiometric companies (factory).*
- *Laboratories.*
- *Indoor air quality training centre.*

#### **ii. Competent Persons**

- *Competent Person on Major Hazards.*
- *Steam Engineer Grades 1 and 2.*
- *Internal Combustion Engine Engineer Grades 1 and 2.*
- *Steam Engine Driver Grades 1 and 2.*
- *Internal Combustion Engine Driver Grades 1 and 2.*
- *Competent Person on Lifts.*
- *Safety and Health Officer.*
- *Passenger Hoisting Machine/Tower Crane Assembler.*
- *Scaffolding Installer/Dismantler.*
- *Crane Operator.*
- *Trainers of the Safety and Health Induction Courses for the Construction Sector.*
- *Noise Monitor.*
- *Occupational Health Doctor.*
- *Assessor.*
- *Hygiene Technicians I and II.*
- *Indoor Air Quality Assessor.*
- *Licensed Gas Tester.*

#### **iii. Inspection**

*This comprised the initial, annual, and additional inspections of steam boilers, unfired pressure vessels, hoisting machinery, factories and installations, and other workplaces. Investigations would be carried in the event of complaints, accidents, and occupational diseases and poisoning.*

#### **iv. Litigation**

*Legal action may be taken in the form of prohibition and improvement notices, compounds, and prosecution in the Courts.*

### 3. Aktiviti Promosi

Dalam usaha Jabatan untuk meningkatkan kesedaran keselamatan dan kesihatan pekerjaan dalam kalangan pekerja, majikan, dan pelanggan Jabatan; penerangan dan tunjuk ajar berkaitan dengan perundangan keselamatan dan kesihatan telah dijalankan supaya semua perundangan yang berkaitan dengan keselamatan dan kesihatan pekerjaan dapat dipatuhi. Antara aktiviti promosi dan publisiti yang dijalankan oleh JKKP adalah:

- Memberikan ceramah dan penerangan serta latihan yang berkaitan dengan keselamatan dan kesihatan pekerjaan;
- Menganjurkan kempen dan pameran yang berkaitan dengan keselamatan dan kesihatan pekerjaan;
- Memberikan khidmat kepakaran berkaitan dengan keselamatan dan kesihatan pekerjaan kepada agensi awam, swasta, persatuan majikan dan pekerja serta kumpulan profesional;
- Mengumpulkan dan menyediakan bahan maklumat yang berkaitan dengan keselamatan dan kesihatan pekerjaan untuk rujukan, pinjaman, dan sebaran.

### 4. Aktiviti Lain Jabatan

Selain aktiviti utama di atas, Jabatan juga bertanggungjawab memantau pembangunan projek utama negara dari aspek keselamatan dan kesihatan pekerjaan (KKP). Antara projek tersebut adalah:

- Lapangan Terbang Antarabangsa Kuala Lumpur 2.
- Transit Aliran Berat (MRT).
- Kompleks Petroleum Bersepadu Pengerang.
- Projek Penyaluran Air Mentah Pahang-Selangor.
- Jambatan Kedua Pulau Pinang.

### 3. Promotional Activities

*In the effort to improve occupational safety and health awareness among workers, employers, and customers, the Department disseminated information and provided guidance pertaining to the safety and health legislation. This was to ensure compliance to all occupational safety and health laws. Among the publicity and promotional activities conducted by the DOSH include:*

- *Giving talks and explanations as well as trainings on occupational safety and health;*
- *Organising campaigns and exhibitions on occupational safety and health;*
- *Providing expertise on occupational safety and health to public agencies, the private sectors, associations of employers and employees as well as professional bodies; and*
- *Collecting and providing informational materials on occupational safety and health for reference, lending, and dissemination.*

### 4. Other Activities

*Apart from the above-mentioned key activities, the Department was also responsible to monitor the occupational safety and health aspects during the development of the nation's key projects such as:*

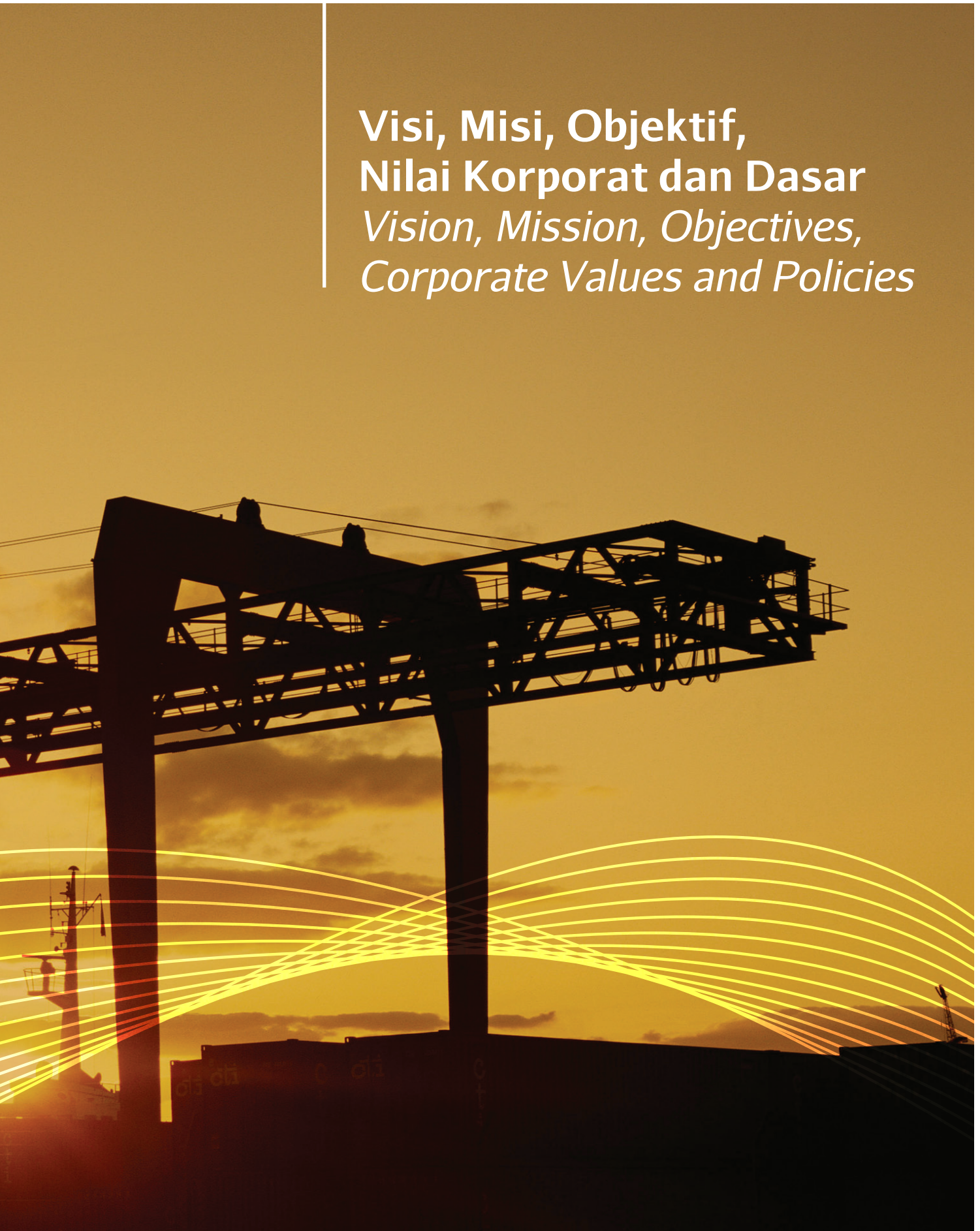
- *Kuala Lumpur International Airport 2 (KLIA2).*
- *Mass Rail Transit (MRT).*
- *Pengerang Integrated Petroleum Complex.*
- *Pahang-Selangor Raw Water Project.*
- *Pulau Pinang Second Bridge.*





# Visi, Misi, Objektif, Nilai Korporat dan Dasar

*Vision, Mission, Objectives,  
Corporate Values and Policies*



## Visi, Misi, Objektif, Nilai Korporat dan Dasar *Vision, Mission, Objective, Corporate Values and Policies*

### Visi *Vision*

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Menjadi Peneraju Keselamatan dan Kesihatan Pekerjaan  
*To be the Leader in Occupational Safety and Health*

### Misi *Mission*

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Memastikan Keselamatan dan Kesihatan Pekerja Terjamin  
*To Ensure Safety and Health at Work*



# Objektif *Objective*

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Mencegah kemalangan industri dan penyakit pekerjaan menjelang tahun 2015 seperti yang berikut:  
*To prevent industrial accidents and occupational diseases by the year 2015, by:*

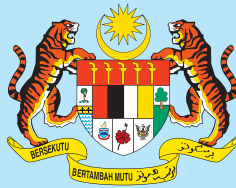
1. Pengurangan kadar kemalangan maut sehingga 20%;  
*Reducing the rate of fatalities by up to 20%;*
2. Pengurangan kadar kemalangan yang dilaporkan (maut, hilang upaya kekal, tanpa hilang upaya kekal) sehingga 30%;  
*Reducing the rate of reported accidents (death, permanent loss of ability, temporary loss of ability) by up to 30%;*
3. Peningkatan bilangan penguatkuasaan dan pemeriksaan tempat kerja sebanyak 20%;  
*Increasing the number of enforcement and inspection at the workplace by 20%;*
4. Pertambahan orang yang kompeten dalam bidang KKP sebanyak 30%.  
*Increasing the number of OSH competent persons by 30%;*

# Nilai Korporat *Corporate Values*

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Tegas, Adil, dan Mesra  
*Firm, Fair and Friendly*





**Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Kementerian Sumber Manusia**

## **Dasar Keselamatan dan Kesihatan Pekerjaan**

Adalah menjadi dasar Jabatan Keselamatan dan Kesihatan Pekerjaan untuk menyediakan persekitaran kerja yang selamat dan sihat untuk semua pekerjaanya dan orang-orang lain yang mungkin terjejas oleh aktiviti-aktivitinya.

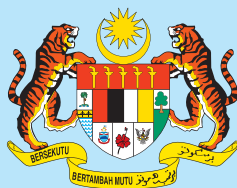
Pihak pengurusan dan pekerja akan sama-sama berusaha untuk mencapai matlamat dan objektif-objektif dasar ini melalui rundingan dan kerjasama. Khususnya, dasar Jabatan adalah:

- ❖ Untuk menyediakan dan menyenggarakan suatu tempat dan sistem kerja yang selamat dan sihat;
- ❖ Untuk memastikan bahawa semua kakitangan diberikan maklumat, arahan, latihan dan penyeliaan berkenaan cara untuk menjalankan tugas dengan selamat dan tanpa risiko kepada kesihatan;
- ❖ Untuk menyiasat semua kemalangan, penyakit, keracunan dan kejadian berbahaya dan mengambil langkah-langkah untuk memastikan kejadian-kejadian tersebut tidak berulang lagi;
- ❖ Untuk mematuhi kehendak perundangan dan kehendak lain mengenai keperluan berhubung dengan keselamatan dan kesihatan seperti yang ditetapkan dalam Akta Keselamatan dan Kesihatan Pekerjaan 1994, peraturan-peraturannya dan tataamalan industri yang diluluskan;
- ❖ Untuk menyediakan kemudahan-kemudahan kebajikan bagi semua pekerja; dan
- ❖ Untuk mengkaji semula dasar ini apabila perlu.

Jabatan yakin bahawa keselamatan dan kesihatan yang dipertingkatkan secara berterusan mestilah diintegrasikan ke dalam aktiviti-aktiviti harian kita, dan penggunaan cara kerja yang selamat dan sihat adalah faktor utama ke arah memastikan kejayaan misi kita.

**DATO' IR. DR. JOHARI BIN BASRI**

Ketua Pengarah  
Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Malaysia



**Department of Occupational Safety and Health  
Ministry of Human Resources**

## **Occupational Safety and Health Policy**

*It is the policy of the Department of Occupational Safety and Health to provide a safe and healthy work environment for all its employees and protect others who may be affected by its activities.*

*The management and staff will work together to achieve the aims and objectives of this policy through discussion and co-operation. Specifically, the policy of the Department is:*

- ❖ *To prepare and preserve a workplace with a safe and healthy working system;*
- ❖ *To ensure that all members of staff are provided with the relevant information, instruction, training, and supervision regarding methods to carry out their duties in a safe manner and without causing any risk to health;*
- ❖ *To investigate all accidents, diseases, poisonings, and dangerous occurrences and to take actions to ensure that these occurrences will not be repeated;*
- ❖ *To comply with the requirements of legislation and other matters related to safety and health as stated in the Occupational Safety and Health Act 1994, as well as regulations and codes of practice which have been approved;*
- ❖ *To provide basic welfare facilities to all workers; and*
- ❖ *To revise and improve on this policy whenever necessary.*

*The Department believes that continuous improvement in safety and health must be integrated into our daily activities, and that the proper practice of safe and healthy work procedures is the main factor in determining the success of our mission.*

**DATO' IR. DR. JOHARI BIN BASRI**

*Director-General*

*Department Of Occupational Safety And Health  
Malaysia*



**Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Kementerian Sumber Manusia**

## **Dasar Kualiti**

JKKP komited untuk meningkatkan sistem pengurusan kualiti dalam aspek keselamatan dan kesihatan di tempat kerja dengan memastikan:

- ❖ Kualiti memenuhi keperluan pelanggan dan kehendak undang-undang;
- ❖ Kualiti sentiasa dikawal dan dipertingkatkan pada setiap peringkat pengurusan organisasi;
- ❖ Semua keperluan kualiti dipatuhi;
- ❖ Integriti sistem pengurusan kualiti dipelihara;
- ❖ Keberkesanan sistem pengurusan kualiti dinilai dan dibuat penambahbaikan berterusan;
- ❖ Objektif kualiti sentiasa disemak dan dinilai semula;
- ❖ Kualiti difahami dan disampaikan kepada setiap kakitangan dan menjadi teras amalan budaya kerja JKKP.

Dasar kualiti ini akan disampaikan kepada kakitangan melalui media yang sesuai.

**DATO' IR. DR. JOHARI BIN BASRI**  
Ketua Pengarah  
Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Malaysia





**Department of Occupational Safety and Health  
Ministry of Human Resources**

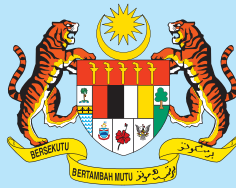
## **Quality Policy**

*The Department of Occupational Safety and Health is committed in ensuring and upgrading occupational safety and health at the workplace by enforcing established laws through the implementation of a quality management system (QMS). The Department shall ensure that:*

- ❖ Quality meets customers' needs and requirements of the law;
- ❖ Quality is controlled and enhanced at every level of the management;
- ❖ All quality requirements are being complied with;
- ❖ The integrity of the QMS is preserved;
- ❖ The effectiveness of the QMS is evaluated whilst continuous improvement is being carried out;
- ❖ The objective of quality is constantly verified and revised;
- ❖ The concept of quality is conveyed to and understood by all staff, thus becoming the core culture of the Department.

*This quality policy shall be made known to all members of staff through suitable media.*

**DATO' IR. DR. JOHARI BIN BASRI**  
*Director-General  
Department Of Occupational Safety And Health  
Malaysia*



**Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Kementerian Sumber Manusia**

## Dasar Latihan

Adalah menjadi matlamat Jabatan untuk membangunkan tenaga kerja yang cekap, terlatih, berintegriti dan profesional melalui pengurusan latihan yang sistematik dan terancang selaras dengan misi dan objektif Jabatan bagi mencapai tujuan berikut:

- ❖ Menyediakan tenaga kerja yang berkelayakan, berpengetahuan, berkebolehan dan berintegriti;
- ❖ Meningkatkan kemahiran, kecekapan dan kepakaran;
- ❖ Mencapai hasil kerja yang produktif dan bermutu tinggi; dan
- ❖ Meningkatkan pembangunan kerjaya.

Sesungguhnya Jabatan adalah komited untuk menyediakan sumber dan kemudahan yang diperlukan bagi mencapai matlamat di atas.

**DATO' IR. DR. JOHARI BIN BASRI**  
Ketua Pengarah  
Jabatan Keselamatan Dan Kesihatan Pekerjaan  
Malaysia



**Department of Occupational Safety and Health  
Ministry of Human Resources**

## **Training Policy**

*It is the aim of the Department to develop an efficient, trained, virtuous, and professional workforce through a systematic and well-planned training management system devised in accordance with the mission and objectives of the Department, in order to:*

- ❖ *Groom a qualified, educated, capable, and virtuous workforce;*
- ❖ *Improve skill, efficiency, and expertise;*
- ❖ *Achieve productive and high quality work performance; and*
- ❖ *Improve career development.*

*The Department is committed to preparing the required resources and facilities to achieve the aims stated above.*

**DATO' IR. DR. JOHARI BIN BASRI**  
*Director-General*  
Department Of Occupational Safety And Health  
Malaysia







# Pengurusan Tertinggi *Top Management*





# Pengurusan Tertinggi

## *Top Management*



**Dato' Ir. Dr. Johari bin Basri**

Ketua Pengarah  
*Director General*





**Zabidi bin Dato' Md. Adib**

Timbalan Ketua Pengarah (Dasar)  
*Deputy Director General (Policy)*



**Ir. Mohtar bin Musri**

Timbalan Ketua Pengarah (Operasi)  
*Deputy Director General (Operation)*

## Bahagian *Division*



**Abdul Aziz bin Yahaya**

Pengarah Bahagian  
Keselamatan Industri  
*Director of Industrial Safety  
Division*

**Dr. Majahar  
bin Abdul Rahman**

Pengarah Bahagian  
Pengurusan Kimia  
*Director of Chemical  
Management Division*

**Ir. Hj. Saiful Azhar  
bin Mohd Said**

Pengarah Bahagian Major Hazard  
*Director of Major Hazard Division*

**Ir. Ibrahim  
bin Md Dol**

Pengarah Bahagian  
Luar Pantai  
*Director of Offshore  
Division*

**Dr. Jaseema Begum  
binti Nazir Khan**

Pengarah Bahagian Kesihatan  
Pekerjaan  
*Director of Occupational  
Health Division*





**Syed Abdul Hamid  
bin Syed Hassan**

Pengarah Bahagian Dasar dan  
Penyelidikan  
*Director of Policy and Research  
Division*

**Ke Geok Chuan**

Pengarah Bahagian  
Kejuruteraan Forensik  
*Director of Forensic  
Engineering Division*

**Husdin bin Che Mat**

Pengarah Bahagian Higen  
Industri dan Ergonomik  
*Director of Hygiene and  
Ergonomic Division*

**Nor Hisham  
bin Ibrahim**

Pengarah Bahagian Khidmat  
Pengurusan  
*Director of Corporate Services  
Division*

**Azman bin  
Hussin @ Hussain**

Setiausaha MNKKP  
*Secretary of NCOSH*



## Pejabat JKPP Negeri *DOSH State Office*



**Omar bin Mat Piah**

Pengarah JKPP Johor  
*Director of DOSH Johore*

**Abdul Kahar bin Husain**

Pengarah JKPP W.P Kuala Lumpur  
*Director of DOSH F.T. Kuala Lumpur*

**Mohd Anuar bin Embi**

Pengarah JKPP Pulau Pinang  
*Director of DOSH Penang*

**Zahrim bin Osman**

Pengarah JKPP Selangor  
*Director of DOSH Selangor*

**Hj. Kormain bin Hj.  
Mohd. Noor**

Pengarah JKPP Terengganu  
*Director of DOSH Terengganu*



**Hj. Ahmad Kahar bin Abu Bakar**

Pengarah JKPP Negeri Sembilan  
*Director of DOSH Negeri Sembilan*

**Ir. Mohamad Razak bin Ismail**

Pengarah JKPP Sabah  
*Director of DOSH Sabah*

**Mohammad Jais bin Suratman**

Pengarah JKPP Kedah  
*Director of DOSH Kedah*

**Ir. Hj. Dasuki bin Mohd Heak**

Pengarah JKPP Sarawak  
*Director of DOSH Sarawak*

**Hj. Jaafar bin Lenan**

Pengarah JKPP Perak  
*Director of DOSH Perak*





**Ahmad Fauzi  
bin Awang**

Pengarah JKKP Pahang  
*Director of DOSH Pahang*

**Nazaruddin bin  
Mat Ali**

Pengarah JKKP Melaka  
*Director of DOSH Melaka*

**Idris bin  
Abdul Rahman**

Pengarah JKKP Perlis  
*Director of DOSH Perlis*

**Ir. Zulkifli  
bin Zainuddin**

Pengarah JKKP Kelantan  
*Director of DOSH Kelantan*

**Kasman bin Nasir**

Pengarah JKKP W.P. Labuan  
*Director of DOSH F.T. Labuan*

## Pejabat JKPP Cawangan *DOSH Branch Office*



**Muhammad Najib  
bin Jaafar**  
Ketua Cawangan Tawau  
*Head of Tawau Branch*

**Zainee bin Mohamad**  
Ketua Cawangan Miri  
*Head of Miri Branch*

**Jinurah Sintian**  
Ketua Cawangan Sandakan  
*Head of Sandakan Branch*

**Chai Chong Foong**  
Ketua Cawangan Sibu  
*Head of Sibu Branch*

**Sadiyuk Henry Rigit**  
Ketua Cawangan Bintulu  
*Head of Bintulu Branch*



# Carta Organisasi Organization Chart



**Dato' Ir. Dr. Johari bin Basri**  
Ketua Pengarah  
Director General

**Zabidi bin Dato' Mohd Adib**  
Timbalan Ketua Pengarah (Dasar)  
Deputy Director General (Policy)

**JKKP Negeri**  
**DOSH State**

**Bahagian Dasar & Penyelidikan**  
**Policy & Research Division**

**Bahagian Kejuruteraan Forensik**  
**Forensic Engineering Division**

Seksyen Kajian Dasar & Penyelidikan  
*Policy Study & Research Section*

Seksyen Penggubalan Akta / Peraturan & Kod Amalan  
*Drafting Act / Rules & Code of Practice Section*

Unit Kajian Dasar & Urusetia SWO  
*SWO Basic Research & The Secretariat Unit*

Unit Penyelidikan & Pembangunan KKP  
*Research & OSH Development Unit*

**Majlis Negara Bagi Keselamatan & Kesihatan Pekerjaan**  
**National Council For Occupational Safety & Health**

Seksyen Pengurusan Acara  
*Event Management Section*

Unit Khidmat Sokongan  
*Support Services Unit*

Seksyen Penyelarasan  
*Coordination Section*

Seksyen Pembangunan Modal Insan  
*Human Capital Development Section*

Unit Peperiksaan  
*Examination Unit*

Unit Latihan  
*Training Unit*

Seksyen Kejuruteraan Mekanikal  
*Mechanical Engineering Section*

Seksyen Kejuruteraan Pembinaan  
*Construction Engineering Section*

Seksyen Kejuruteraan Pembinaan  
*Construction Engineering Section*

Seksyen Petrokimia  
*Petrochemical Section*

Seksyen Makmal Ujian  
*Laboratory Tests Section*

Cawangan | **Branch**

Sandakan

Tawau

Cawangan | **Branch**

Bintulu

Sibu

Miri

Selangor  
*Selangor*

Johor  
*Johore*

Perak  
*Perak*

W.P. Kuala Lumpur  
*F.T. Kuala Lumpur*

Terengganu  
*Terengganu*

Pulau Pinang  
*Penang*

Kedah  
*Kedah*

Pahang  
*Pahang*

Melaka  
*Malacca*

Negeri Sembilan  
*Negeri Sembilan*

Kelantan  
*Kelantan*

Perlis  
*Perlis*

W.P. Labuan  
*F.T. Labuan*

Sabah  
*Sabah*

Sarawak  
*Sarawak*







# Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan JKPP

*DOSH Occupational Safety and  
Health Management System*



# Sistem Pengurusan Keselamatan dan Kesihatan Pekerjaan JKKP

## *DOSH Occupational Safety and Health Management System*

### Sistem Pengurusan Keselamatan Dan Kesihatan Pekerjaan

Hasil daripada Audit Pemantauan pada 16 Oktober 2012, JKKP telah mengekalkan persijilan OHSAS 8001:2007 dan mengemaskini sistem kepada MS1722:2011. Maka kesinambungan Sistem Keselamatan dan Kesihatan Pekerjaan (SPKKP) yang bermula dari tahun 2009 diteruskan lagi. Beberapa aktiviti yang berkaitan juga telah dilaksanakan bagi mendukung pelaksanaan sistem tersebut.

### Bengkel Penambahbaikan HIRARC

Bengkel penambahbaikan Hazard Identification Risk Analysis and Risk Control (HIRARC) telah dibuat bagi menyemak, mengemaskini, menambahbaik dan juga menambah beberapa HIRARC yang baru bagi meliputi beberapa aktiviti baru. Sehingga kini, jumlah HIRARC yang telah diwujudkan adalah sebanyak 40 aktiviti. Jumlah ini adalah termasuk dengan 4 dokumen HIRARC yang baru diwujudkan.

### Mesyuarat Jawatankuasa Pelaksana KKP

Untuk memastikan SPKKP berjalan lancar, Jawatankuasa Pelaksana KKP telah mengadakan mesyuarat dari 26 – 27 April 2012, bertempat di Puri Pujangga, UKM, Bangi. Mesyuarat ini dihadiri oleh 27 orang pegawai JKKP yang terdiri daripada pegawai keselamatan dan kesihatan yang telah dilantik oleh pejabat masing-masing untuk membincangkan aktiviti KKP, serta menyemak dan mengemas kini dokumen-dokumen berkaitan.

### Statistik Kemalangan

Sepanjang tahun 2012, terdapat 3 kemalangan Tanpa Hilang Upaya Kekal (THUK) dan 2 kejadian berbahaya telah dicatatkan di JKKP. Sebagai gambaran kasar, kesemua kemalangan adalah tidak serius dan melibatkan aktiviti di sekitar pejabat, kecuali kejadian yang melibatkan satu kemalangan jalan raya kecil. Rujuk Jadual A.

### *Occupational Safety And Health Management System*

*In lieu with the Surveillance Audit conducted on 16 October 2012, DOSH has maintained the certification of OHSAS 8001:2007 and being updated to MS1722:2011. Hence the continuation of the Occupational Safety and Health Management System (OSHMS) obtained since 2009 carries on. Related activities were planned and undertaken to support the implementation of the system.*

### *Workshop On Improvement of HIRARC*

*Workshop on improvement of Hazard Identification Risk Analysis and Risk Control (HIRARC) has been conducted to evaluate, update, improve as well as add a few HIRARC documents to include relevant new activities which have been identified. Currently, the total no of HIRARC document generated is 40 units, including the 4 new documents which are newly formed.*

### *OSH Implementation Committee Meeting*

*To ensure the smooth running of OSHMS, the Implementation Committee has conducted a meeting on 26 – 27 April 2012, held at Puri Pujangga, UKM, Bangi. The meeting was participated by 27 Safety and Health Officer of DOSH from respective State Offices and Divisions to discuss matters related to OSH activities, evaluation and updates of relevant OSH documents.*

### *Accident Statistics*

*Throughout 2012, there has been 3 Non-permanent Injury and 2 dangerous occurrence in DOSH. As a brief overview, all accidents were minor in nature and revolved around office environment, except for a minor road accident. Refer to Table A.*

**Jadual A: Statistik kemalangan di JKPP tahun 2012.****Table A: Accident statistics of DOSH 2012.**

Kemalangan   <i>Accidents</i>	Statistik   <i>Statistics</i>
Maut   <i>Fatal</i>	0
Hilang Upaya Kekal   <i>Permenant Disability</i>	0
Tanpa Hilang Upaya Kekal   <i>Non-Permenant Disability</i>	3
Penyakit   <i>Diseases</i>	0
Keracunan   <i>Poisoning</i>	0
Kejadian bahaya   <i>Dangerous Occurrence</i>	2

**Audit Dalaman**

Audit dalaman dilaksanakan sebelum pengawasan audit dilakukan oleh Badan Persijilan untuk tujuan penambahbaikan kepada sistem. Pada tahun 2012, sebanyak 16 pejabat telah diaudit dan 15 penemuan positif diperoleh dan 48 pemerhatian telah dikesan. Jadual audit dalaman adalah seperti dalam Jadual B.

**Internal Audit**

*Internal audits were conducted prior to surveillance audits by the Certification Body for the purpose of system improvement. In 2012, 16 offices has been audited, resulting in a total of 48 general observation, with 15 positive observation. The schedule of the internal audits is shown in Table B below.*

**Jadual B: Aktiviti audit dalaman di pejabat JKPP.****Table B: Internal audits conducted at the DOSH offices.**

Bil.   No.	Negeri / Bahagian   <i>States / Divisions</i>	Tarikh   <i>Date</i>
1.	JKPP Perak   <i>DOSH Perak</i>	20 - 22 Mac 2012 / 20 - 22 March 2012
2.	JKPP Negeri Sembilan   <i>DOSH Negeri Sembilan</i>	
3.	JKPP W.P. Kuala Lumpur   <i>DOSH F.T. Kuala Lumpur</i>	
4.	JKPP Sarawak   <i>DOSH Sarawak</i>	
5.	JKPP Perlis   <i>DOSH Perlis</i>	27 - 29 Mac 2012 / 27 - 29 March 2012
6.	JKPP Terengganu   <i>DOSH Terengganu</i>	
7.	JKPP W.P. Labuan   <i>DOSH F.T. Labuan</i>	
8.	JKPP Sabah   <i>DOSH Sabah</i>	
9.	JKPP Selangor   <i>DOSH Selangor</i>	26 - 28 Jun 2012 / 26 - 28 June 2012
10.	JKPP Johor   <i>DOSH Johore</i>	
11.	JKPP Pulau Pinang   <i>DOSH Penang</i>	
12.	JKPP Pahang   <i>DOSH Pahang</i>	
13.	JKPP Melaka   <i>DOSH Malacca</i>	3 - 5 Julai 2012 / 3 - 5 July 2012
14.	JKPP Kedah   <i>DOSH Kedah</i>	
15.	JKPP Ibu Pejabat   <i>DOSH Headquarters</i>	7 - 9 Ogos 2012 / 7 - 9 August 2012
16.	JKPP Kelantan   <i>DOSH Kelantan</i>	



## Audit Luaran

Audit luaran dijalankan oleh NIOSH Certification Sdn Bhd (NCSB). Pada tahun 2012, sebanyak lima pejabat negeri berserta ibu pejabat telah di audit. Hasil audit tersebut, sebanyak 21 penemuan positif, 7 ketidakpatuhan kecil dan 35 pemerhatian umum telah diperoleh. Maklumat lokasi audit adalah seperti dalam Jadual C.

## External Audit

External audits are conducted by NIOSH Certification Sdn Bhd (NCSB). In 2012, a total of five state offices as well as DOSH Headquarters were audited. This exercise resulted in 21 positive findings, 7 minor non-conformity report (NCR) minor and 35 general observations. Table C shows the detail audited location.

**Jadual C: Aktiviti pengawasan audit kedua di pejabat JKKP.**

**Table C: The second surveillance audits conducted at the DOSH offices.**

Bil.   No.	Negeri / Bahagian   States / Divisions	Tarikh Audit   Date
1.	JKKP Perak   <i>DOSH Perak</i>	10 - 11 Sept 2012 / 10 - 11 Sept 2012
2.	JKKP Johor   <i>DOSH Johore</i>	
	JKKP W.P. Kuala Lumpur   <i>DOSH F.T. Kuala Lumpur</i>	11 - 12 Sept 2012 / 11 - 12 Sept 2012
3.	JKKP Pulau Pinang   <i>DOSH Penang</i>	12 - 13 Sept 2012 / 12 - 13 Sept 2012
4.	JKKP Melaka   <i>DOSH Malacca</i>	
5.	JKKP Ibu Pejabat   <i>DOSH Headquarters</i>	15 - 16 Okt 2012 / 15 - 16 Oct 2012

## Kursus dan Latihan

JKKP sentiasa mengadakan latihan untuk pegawai dan kakitangan, berkaitan dengan KKP, untuk meningkatkan lagi pengetahuan tentang KKP supaya pelaksanaannya lebih berkesan. Sepanjang tahun 2012, sebanyak lapan latihan telah diadakan seperti dalam Jadual D.

## Courses and Training

DOSH conducts OSH-related training on a regular basis to its officers and staff to enhance their knowledge and understanding of OSH for a more effective implementation of the system. In 2012, a total of eight training sessions were conducted as shown in Table D below.

**Jadual D : Kursus dan latihan KKP yang dihadiri oleh pegawai dan kakitangan JKKP sepanjang tahun 2012**

**Table D : OSH courses and training attended by DOSH officers and staff in 2012**

Bil.   No.	Kursus/Latihan   Course/Training	Tempat   Venue	Tarikh Audit   Date
1.	Kursus Bekerja Selamat di Ruang Terkurung (Pahang) <i>Work Safety in A Confined Space (Pahang)</i>	Kompleks Dagangan Indera Mahkota, Pahang <i>Indera Mahkota Trade Complex, Pahang</i>	14 - 15 Februari 2012 / 14 - 15 February 2012
2.	SOEM-MMA Occupational Medicine CPD : Update on Occupational Health 2012	Grand Season Hotel, Kuala Lumpur	18 Februari 2012 / 18 February 2012
3.	Wilderness Advande First Aid Course (WAFA)	Wilderness Centre Sdn Bhd / Malaya University, Kuala Lumpur	20 - 24 Februari 2012 / 20 - 24 February 2012
4.	Kursus Bekerja Selamat di Ruang Terkurung (Melaka) <i>Work Safety in A Confined Space (Malacca)</i>	JKKP Melaka   <i>DOSH Malacca</i>	28 - 29 Februari 2012 / 28 - 29 February 2012

Bil.   No.	Kursus/Latihan   Course/Training	Tempat   Venue	Tarikh Audit   Date
5.	Kursus Bekerja Selamat di Ruang Terkurung (Sabah & W.P. Labuan) <i>Work Safety in A Confined Space (Sabah &amp; F.T. Labuan)</i>	Menara Persekutuan, Kota Kinabalu, Sabah <i>Federal Building, Kota Kinabalu, Sabah</i>	20 - 21 Mac 2012 / <i>20 - 21 March 2012</i>
6.	Kursus Bekerja Selamat di Ruang Terkurung (Johor) <i>Work Safety in A Confined Space (Johore)</i>	JKKP Johor   <i>DOSH Johore</i>	10 - 11 April 2012 / <i>10 - 11 April 2012</i>
7.	Kursus Occupational Health Doctor (Modul 1) / <i>Occupational Health Doctor Course (Module 1)</i>	NIOSH, Bangi	20 - 22 April 2012 / <i>20 - 22 April 2012</i>
8.	Kursus Keselamatan Elektrik di Tempat Kerja / <i>Electrical Safety at Work Place Course</i>	FNR Consultants Sdn Bhd	2 - 3 Mei 2012 / <i>2 - 3 May 2012</i>
9.	Kursus Bekerja Selamat di Ruang Terkurung (W.P. Kuala Lumpur) <i>Work Safety in A Confined Space (F.T. Kuala Lumpur)</i>	JKKP W.P. Kuala Lumpur   <i>DOSH F.T. Kuala Lumpur</i>	8 - 9 Mei 2012 / <i>8 - 9 May 2012</i>
10.	Kursus Bekerja Selamat di Ruang Terkurung (Selangor) <i>Work Safety in A Confined Space (Selangor)</i>	JKKP Selangor   <i>DOSH Selangor</i>	22 - 23 Mei 2012 / <i>22 - 23 May 2012</i>
11.	Kursus Occupational Health Doctor (Modul 2) / <i>Occupational Health Doctor Course (Module 2)</i>	NIOSH, Bangi	25 - 27 Mei 2012 / <i>25 - 27 May 2012</i>
12.	Kursus Pertolongan Cemas - Siri I / <i>First Aid Course - Series I</i>	NIOSH, Bangi	29 - 31 Mei 2012 / <i>29 - 31 May 2012</i>
13.	Kursus Bekerja Selamat di Ruang Terkurung (Kedah) <i>Work Safety in A Confined Space (Kedah)</i>	JKKP Kedah   <i>DOSH Kedah</i>	11 - 12 Jun 2012 / <i>11 - 12 June 2012</i>
14.	Kursus Bekerja Selamat di Ruang Terkurung (Perlis) <i>Work Safety in A Confined Space (Perlis)</i>	JKKP Perlis   <i>DOSH Perlis</i>	13 - 14 Jun 2012 / <i>13 - 14 June 2012</i>
15.	<i>BOSET Basic Offshore Safety Emergency Test</i>	CONSIST	18 - 20 Jun 2012 / <i>18 - 20 June 2012</i>
16.	Kursus Occupational Health Doctor (Modul 3) <i>Occupational Health Doctor Course (Module 3)</i>	NIOSH, Bangi	22 - 24 Jun 2012 / <i>22 - 24 June 2012</i>
17.	Kursus Pertolongan Cemas Siri II <i>First Aid Course - Series II</i>	NIOSH, Bangi	26 - 28 Jun 2012 / <i>26 - 28 June 2012</i>
18.	Kursus Bekerja Selamat di Ruang Terkurung (Kelantan) <i>Work Safety in A Confined Space (Kelantan)</i>	JKKP Kelantan   <i>DOSH Kelantan</i>	10 - 11 Julai 2012 / <i>10 - 11 July 2012</i>
19.	Kursus Bekerja Selamat di Ruang Terkurung (Pulau Pinang) <i>Work Safety in A Confined Space (Penang)</i>	JKKP Pulau Pinang   <i>DOSH Penang</i>	24 - 25 Sept 2012 / <i>24 - 25 Sept 2012</i>
20.	Kursus Bekerja Selamat di Ruang Terkurung (Perak) <i>Work Safety in A Confined Space (Perak)</i>	JKKP Perak   <i>DOSH Perak</i>	17 - 18 Okt 2012 / <i>17 - 18 Oct 2012</i>
21.	<i>Lead Auditor Course for OSHMS 1722 &amp; OSHAS 18001 Module 1 &amp; 2</i>	NCSB	20 - 23 Okt 2012 / <i>20 - 23 Oct 2012</i>
22.	Kursus Bekerja Selamat di Ruang Terkurung (Ibu Pejabat) - Siri I <i>Work Safety in A Confined Space (Headquarters) - Series I</i>	NIOSH, Bangi	27 - 28 Nov 2012 / <i>27 - 28 Nov 2012</i>
23.	Kursus Bekerja Selamat di Ruang Terkurung (Ibu Pejabat) - Siri II <i>Work Safety in A Confined Space (Headquarters) - Series II</i>	NIOSH, Bangi	18 - 19 Dis 2012 / <i>18 - 19 Dec 2012</i>









# Sistem Pengurusan Kualiti JKKP *DOSH Quality Management System*

## Sistem Pengurusan Kualiti JKKP *DOSH Quality Management System*

Kualiti ialah aspek yang terus diberikan penekanan, terutamanya dalam pengurusan organisasi di JKKP. Dalam usaha Jabatan untuk mengekalkan Sistem Kualiti Jabatan, Mesyuarat Jawantankuasa Pelaksanaan ISO diadakan tiga kali tahun. Antara agenda utama mesyuarat adalah semakan semula dokumen kualiti, terutamanya yang melibatkan urusan hakiki Jabatan.

Jabatan juga sentiasa memantau pelaksanaan sistem pengurusan kualiti (SPK) dan melaksanakan penambahbaikan berterusan di semua Pejabat JKKP Negeri, Bahagian, dan Cawangan. Antara pemantauan yang dijalankan adalah melalui kerja audit kualiti dalaman, audit kualiti luaran serta audit silang. Pemantauan juga dapat dilakukan melalui maklum balas daripada pelanggan yang datang berurusan di pejabat dan daripada kaji selidik kepuasan pelanggan mengikut sektor industri untuk mengetahui mutu perkhidmatan yang diberikan oleh Jabatan.

Di JKKP, sistem pengurusan kualiti yang diamalkan telah Berjaya meningkatkan kecekapan kakitangan mengendalikan tugas harian. Ini dapat dilihat melalui beberapa aktiviti yang dilaksanakan dalam SPK sepanjang tahun 2012 seperti yang ditunjukkan dalam Jadual berikut :

*Quality is one of the key aspects that is given emphasis especially in the organizational management of DOSH. In its effort to maintain the Department's Meeting is held three times a year. Among the main agenda of the meeting is the review of documents pertaining to quality management, especially those related to the Department's core business.*

*The Department also constantly monitors the implementation of the quality management system (QMS) and executes continuous improvement in all State DOSH Offices, Divisions, and Branches. Monitoring is done through internal quality audits, external quality audits and cross audits. It can also be done based in the feedback of customer satisfaction surveys by industrial sectors in order to assess the quality of services provided by the Department.*

*At DOSH, the QMS in place has successfully improved employees' efficiency in handling daily tasks. This is visible through various QMS-related activities undertaken in 2012 as shown in the table below :*

Bil.   No.	Aktiviti   Activity	Tarikh   Date
1.	Audit Kualiti Luanan   <i>External Quality Audit</i> (Moody International Certification (M) Sdn Bhd)	9 - 10 April 2012 / <i>9 -10 April 2012</i>
	i) JKKP Sarawak   <i>DOSH Sarawak</i>	
	ii) JKKP Sabah   <i>DOSH Sabah</i>	
	iii) JKKP Negeri Sembilan   <i>DOSH Negeri Sembilan</i>	
	iv) JKKP Perak   <i>DOSH Perak</i>	
	v) JKKP Terengganu   <i>DOSH Terengganu</i>	
	vi) JKKP W.P. Labuan   <i>DOSH F.T. Labuan</i>	
2.	Audit Kualiti Dalaman   <i>Internal Quality Audit</i>	26 - 28 Jun 2012 / <i>26 - 28 June 2012</i>
	i) JKKP Selangor   <i>DOSH Selangor</i>	
	ii) JKKP Johor   <i>DOSH Johore</i>	
	iii) JKKP Pulau Pinang   <i>DOSH Penang</i>	
	iv) JKKP Pahang   <i>DOSH Pahang</i>	3 - 5 Julai 2012 / <i>3 - 5 July 2012</i>
	v) JKKP Kedah   <i>DOSH Kedah</i>	
	vi) JKKP Kelantan   <i>DOSH Kelantan</i>	7 - 9 Ogos 2012 / <i>7 - 9 August 2012</i>
	vii) Bahagian Khidmat Pengurusan   <i>Corporate Service Division</i>	
	viii) Bahagian Dasar dan Penyelidikan   <i>Policy and Research Division</i>	3 - 5 Mei 2012 / <i>3 - 5 May 2012</i>
	ix) Majlis Negara Bagi Keselamatan dan Kesihatan Pekerjaan   <i>National Council For Occupational Safety and Health</i>	
	x) Bahagian Kejuruteraan Forensik   <i>Forensic Engineering Division</i>	



Bil.   No.	Aktiviti   Activity	Tarikh   Date
	xi) Bahagian Keselamatan Industri   <i>Industrial Safety Division</i>	
	xii) Bahagian Major Hazard   <i>Major Hazard Division</i>	
	xiii) Bahagian Higien Industri dan Ergonomik   <i>Industrial Hygiene and Ergonomic Division</i>	
	xiv) Bahagian Kesihatan Pekerjaan   <i>Occupational Health Division</i>	
	xv) Bahagian Pengurusan Kimia   <i>Chemical Management Division</i>	
3.	Mesyyarat Jawatankuasa Pelaksana ISO Bil. 1/2012 <i>ISO Implementation Committee</i>	8 – 9 Mei 2012 / <i>8 – 9 May 2012</i>
4.	Mesyyarat Jawatankuasa Pelaksana ISO Bil. 2/2012 <i>ISO Implementation Committee</i>	28 – 29 Nov 2012 / <i>28 – 29 Nov 2012</i>
5.	Mesyyarat Kajian Semula Pengurusan (MKSP) 2012 <i>Management Review Meeting (MRM) 2012</i>	6 Dis 2012 / <i>6 Dec 2012</i>

Bagi memenuhi kehendak standard MS ISO, pada tahun 2012, Jabatan telah melaksanakan audit kualiti dalaman dan luaran, kaji selidik kepuasan pelanggan, dan mesyyarat kajian semula pengurusan (MKSP). Antara tujuannya adalah untuk memastikan sistem pengurusan kualiti Jabatan pada tahap yang memuaskan dan pelanggan berpuas hati dengan perkhidmatan yang diberikan.

Melalui audit kualiti dalaman, senarai 25 orang ketua juruaudit dan 40 juruaudit dalaman jabatan, telah menjalankan audit di semua pejabat negeri dan bahagian. Hasil penemuan audit tersebut, juruaudit kualiti dalaman Jabatan telah merumuskan sebanyak tujuh ketakakuran dan 63 pemerhatian. Punca masalah segala ketakakuran dan pemerhatian yang diperoleh telah dikenal pasti dan tindakan pembedulan serta pencegahan telah diambil dengan sewajarnya. Untuk audit kualiti luaran pula, Moody International Certification (M) Sdn Bhd telah dilantik untuk menjalankan audit di Pejabat JKPP Negeri dan Ibu Pejabat JKPP Putrajaya. Hasil audit didapati tiada ketakakuran dikeluarkan daripada audit ini. Walau bagaimanapun, terdapat tiga pemerhatian yang boleh diambil oleh Jabatan untuk meningkatkan mutu sistem pengurusan kualiti.

Disamping itu, Jabatan menjalankan kaji selidik di sektor awam dan badan berkanun serta sektor hotel dan restoran bagi mendapatkan maklum balas kepuasan pelanggan. Melalui maklum balas yang diterima, penambahbaikan berterusan dapat dilakukan dan Jabatan dapat mempertingkatkan perkhidmatan yang berkualiti kepada pelanggan. Daripada maklum balas yang diperoleh dalam kaji selidik tersebut, rata-rata, pelanggan berpuas hati dengan perkhidmatan yang diberikan oleh Jabatan. Bagi menilai semula keberkesanan dan kesesuaian sistem pengurusan kualiti Jabatan untuk meningkatkan kualiti perkhidmatan yang diberikan, Jabatan telah menjalankan mesyyarat kajian semula pengurusan (MKSP) dan dibentangkan dalam Mesyyarat Pengarah-pengarah JKPP pada 6 Disember 2012. Keputusan daripada mesyyarat akan diambil perhatian dan tindakan sewajarnya akan diambil.

*In order to meet the requirement of MS ISO standards, in 2012, the Department has conducted internal and external quality audits, customer satisfaction surveys, and management review meetings (MRM). Among the objectives were to ensure that the Department's quality management system is maintained at a satisfactory level and that the Department has recorded excellent customer satisfaction with all the services provided.*

*With the involvement of 25 lead auditors and 40 internal auditors, internal quality audits were carried out at all State and divisional offices. As a result, the internal quality auditors have issued seven non-conformity reports (NCR) and identified 63 observations. The causes of all NCRs and observations have since been identified, and corrective as well as preventive measures have duly been taken. For external quality audit, Moody International Certification (M) Sdn Bhd was appointed to conduct audit exercises in State DOSH Offices and the Headquarters in Putrajaya. No NCR was issued. However, there were three observations that can be scrutinized by the Department in order to improve its quality management system (QMS).*

*In addition, the Department has also conducted surveys in the public sector, statutory bodies as well as in hotels and restaurants to obtain feedback on customer satisfaction; hence, allowing continuous efforts to improve the service and enabling the provision of quality service to customers. From the survey results, on average, customers were generally satisfied with the services provided by the Department. To reassess the effectiveness and suitability of the QMS in improving the quality of services, the Department has conducted a management review meeting (MRM), the result of which were later presented at the DOSH Directors' Meeting on 6 December 2012. Outcome of the meeting has been noted and appropriate action have been taken.*







# Pelan Induk KKP 2010-2015 (OSH-MP15)

## *OSH Master Plan 2010-2015 (OSH-MP15)*





## Pelan Induk KKP 2010-2015 (OSH-MP15)

### *OSH Master Plan 2010-2015 (OSH-MP15)*

#### Pengenalan Pelan Induk KKP (OSH-MP15)

Sejajar dengan kestabilan dan pengukuhan Malaysia sebagai penyumbang ekonomi serantau dan juga komuniti ekonomi dunia, Malaysia tidak terkecuali daripada menghadapi cabaran dalam aspek persekitaran tempat kerja. Sehubungan itu, Malaysia perlu melihat jauh ke hadapan untuk mempelajari pengalaman negara luar yang lebih maju.

Secara khususnya dalam konteks KKP, Malaysia dapat mempelajari, mengadaptasi, dan melaksanakan program KKP dari negara luar selaras dengan perkembangan industri dan ekonomi negara. Oleh itu, Plan Induk KKP telah diwujudkan dengan mengambil kira segala kemungkinan yang akan berlaku.

Pelan Induk Keselamatan dan Kesihatan Pekerjaan (*Occupational Safety and Health – Master Plan*) 2015 ini telah dilancarkan oleh YAB Perdana Menteri Malaysia pada 02 Mei 2009 dengan matlamat utama untuk membangunkan modal insan yang selamat, sihat, dan produktif dengan menerapkan, memupuk, dan mengekalkan budaya kerja selamat dan sihat di tempat kerja. Pelan Induk ini dibangunkan selaras dengan hala tuju kerajaan dengan setiap strategi yang dibangunkan menyokong asas ke arah sebuah negara Berpendapatan Tinggi, Berteknologi Tinggi menjelang 2020.

#### *Introduction To OSH Master Plan (OSH-MP15)*

*With Malaysia's growing stability and strength as a contributor to the economy of the region as well as to the global economic community, we are not spared challenges of safety in the workplace. In this regard, Malaysia needs to look ahead to learn from the experience of the more advanced countries.*

*In the specific case of Occupational Safety and Health, Malaysia is able to learn, adapt and execute the OSH programmes from foreign countries, to keep in step with the industrial and economic development of the country. Thus, the OSH Master Plan has been drafted by taking into account all possible scenarios that may become realities in the future.*

*The Occupational Safety and Health Master Plan 2015 was launched by the Right Honorable Prime Minister of Malaysia on 2 May 2009 with the main objective of developing human resources that are safe, healthy, and productive by applying, inculcating, and sustaining a culture that emphasises safety and health in the workplace. This master plan was developed in line with the direction in which the government is moving, that is, towards making Malaysia a nation with "High Income, Advanced Technology" by 2020, and every strategy that has ever been developed is geared towards making that vision a reality.*





## JAWATANKUASA OSH-MP15

Jawatankuasa Kerja OSH MP terdiri daripada tiga komponen utama dimana ia diterajui oleh JK Pemandu, diikuti oleh JK Pelaksana, dan JK Teknikal. Jawatankuasa yang dicadangkan adalah bertujuan untuk membincangkan dan melaksanakan sepenuhnya segala strategi yang dirancang di bawah OSH-MP15. Objektif penubuhan jawatankuasa adalah seperti berikut:

- Jawatankuasa Pemandu** ditubuhkan bagi memantau, mengemukakan cadangan dan membuat keputusan yang bermanfaat untuk menjayakan strategi OSH-MP 15.
- Jawatankuasa Pelaksana** berfungsi merancang, memantau, dan menganalisis pelaksanaan strategi OSH-MP15.
- Jawatankuasa Teknikal** berfungsi merancang dan melaksanakan segala program yang dirancang.

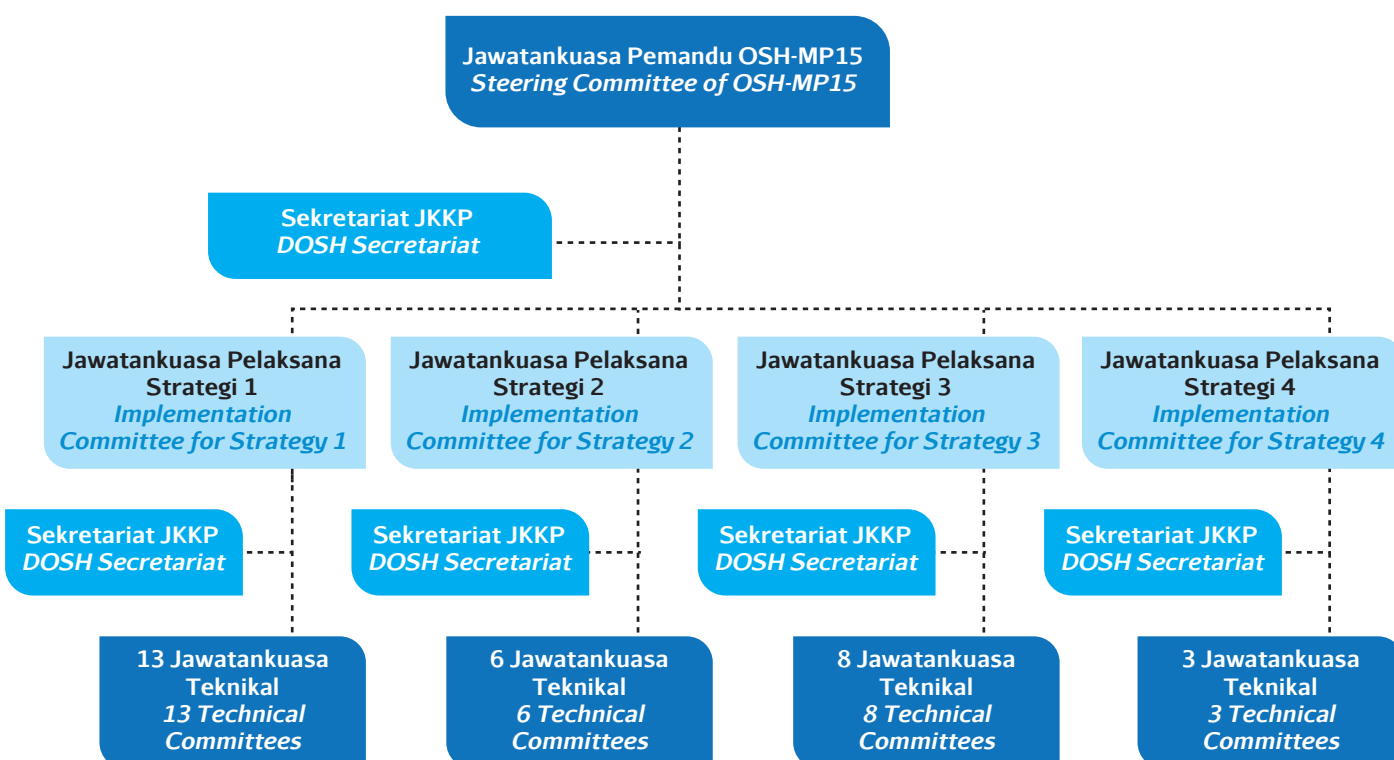
## Committees of OSH-MP15

*The Working Committee of the OSH-MP consists of three key components headed by the Steering Committee, followed by the Implementation Committee and the Technical Committee. The proposed committees are tasked with discussing and fully implementing all strategies that are being planned under the OSH-MP15. The committees are formed to realise the following objectives:*

- The **Steering Committee** is to monitor, propose, and make decisions that are advantageous to the success of the OSH-MP15 strategies.*
- The **Implementation Committee** is to plan, monitor and analyse the implementation of the OSH-MP15 strategies.*
- The **Technical Committee** is to plan and implement all programmes that have been planned.*

Rajah 1: Struktur jawatankuasa kerja OSH-MP15.

Figure 1: Structure of the working committee of the OSH-MP15.



Rajah 2: Konsep tripartisme dalam pelaksanaan OSH-MP15, dan hubungan OSHMP dalam menyokong keberhasilan agenda KKP nasional.

Figure 2: Concept of tripartitism in the implementation of the OSH-MP15 and how the OSH Master Plan provides support for the fruitfulness of the national OSH agenda.

## To Support National OSH Agenda



## Outcome

- 1) Government promotes a high level of workplace health and safety performance, and has excellent health and safety practices in its own workplaces.
- 2) Work-related fatality rate down by 20%, and work-related injury rate down by 30%
- 3) Industries lead improvements in workplace health & safety practices, and there is strong support for workplace health & safety in the wider community.
- 4) Internally; strong correlation between OSH practitioner & Government. Externally, more bilateral agreements on OSH implemented.



## Kerangka OSH-MP 15

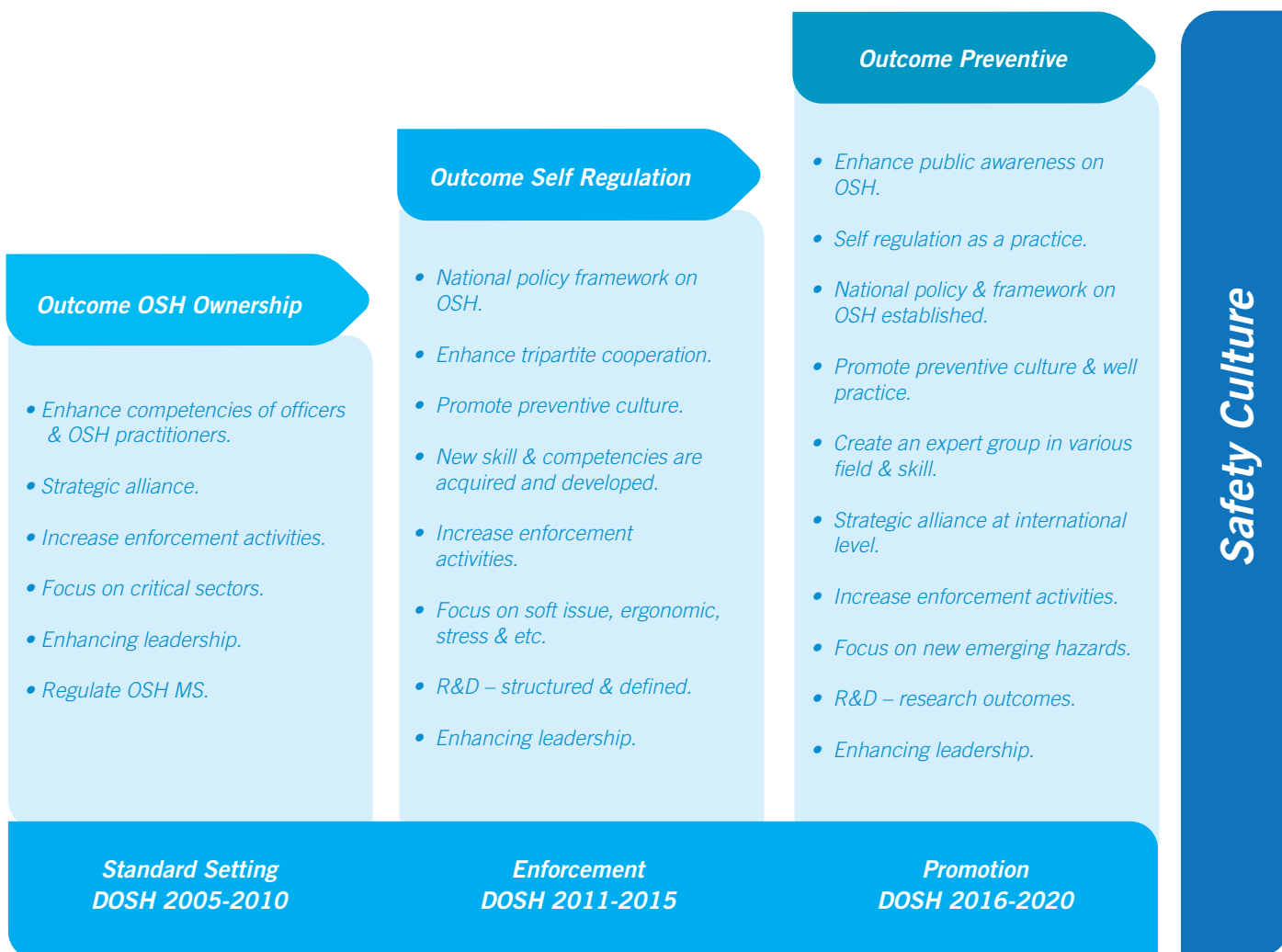
Matlamat utama pelaksanaan OSH-MP15 adalah bagi memindahkan kebertanggungjawaban KKP daripada Kerajaan kepada pihak industri. Bagi mencapai matlamat ini, JKPP telah merancang tiga fasa peralihan. OSH-MP15 merupakan fasa kedua yang bertujuan mewujudkan modal insan yang selamat, sihat dan produktif serta meningkatkan fungsi kerajaan dan industri dalam melaksanakan KKP di Malaysia. Pelan pelaksanaan OSH-MP15 merangkumi empat strategi utama; iaitu memperkasakan KKP di peringkat kerajaan, membudayakan budaya kerja selamat, menggalakkan penglibatan dan kepimpinan komuniti/industri, dan meningkatkan hubungan tempatan dan antarabangsa.

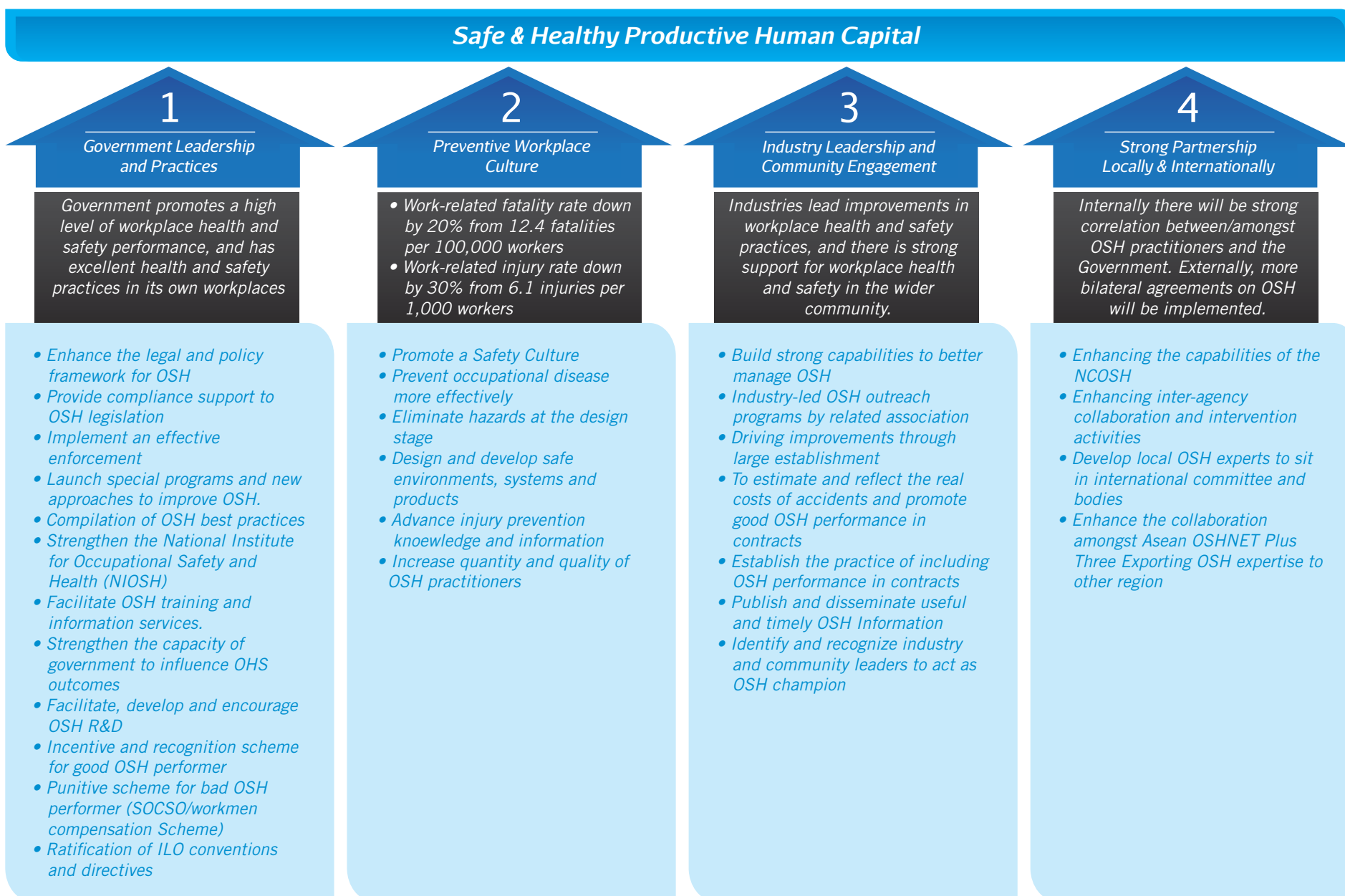
## OSH-MP15 Framework

*The principal objective of the OSH-MP15 is to shift the OSH responsibilities from the government to the industrial sector. In order to do this, the DOSH has planned for the transition to take place in three phases. The OSH-MP15 is the embodiment of the second phase which aims to bring into existence human resources that are safe, healthy, and productive as well as to enhance the function of the government and the industries in implementing OSH in Malaysia. The implementation programme of the OSH-MP15 covers four key strategies, i.e., to implement OSH at the government level, to inculcate a work safety culture, to encourage involvement and leadership of communities/industries, and to improve relationships with local and international entities.*

Rajah 3: Carta perbatuan Pelan Induk KKP Kebangsaan (2005 – 2020) ke arah budaya pencegahan.

Figure 3: The National OSH Master Plan milestones chart (2005-2020): towards a culture of prevention.







## Pencapaian Tahun 2012

Secara umumnya, pelaksanaan program di bawah OSH-MP15 dilaksanakan mengikut perancangan, tetapi terdapat sedikit penurunan jumlah purata pencapaian setiap strategi jika dibandingkan dengan pencapaian tahun 2011. Laporan pencapaian ini telah dibentangkan secara terperinci kepada pihak pengurusan tertinggi Jabatan.

Pelbagai kejayaan dan output berjaya dicapai sepanjang tahun 2012. Antaranya adalah peningkatan jumlah organisasi kerajaan yang dipersijilkan dengan persijilan OSHMS, pelancaran program WIND/WISE/WISCON dalam sektor PKS, pelaksanaan KKP di Sekolah, pembangunan garis panduan bersama pihak industri, program Mentor-Mentee, kalkulator kemalangan OSH (OSHACC), pengenalan MyOSH Forum, pelaksanaan program kerjasama antarabangsa (MTCP), dan peningkatan jumlah pegawai yang membentangkan kertas kerja di peringkat antarabangsa.

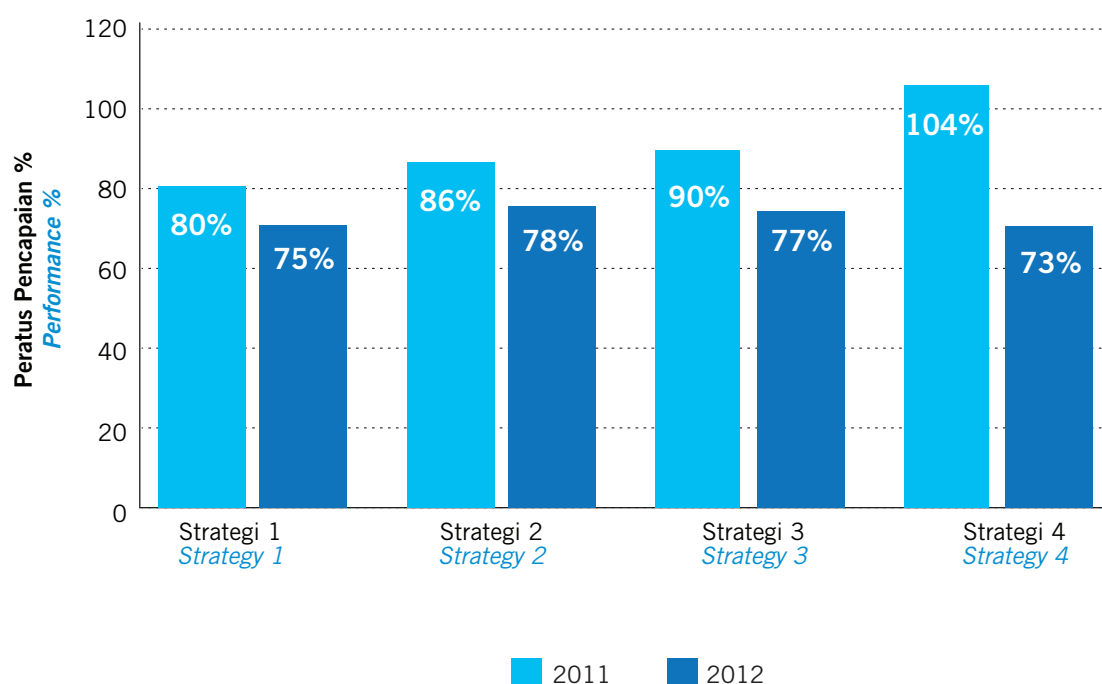
## Achievements In 2012

Generally, programmes under the OSH-MP15 were implemented according to plan. However, there was a slight decline in the average performance of every strategy when compared to the achievements of 2011. Detailed performance report was presented to the senior managers of the Department.

Various achievements and successful outputs were obtained throughout 2012, among others, an increase in the number of government organisations awarded with the certification of Occupational Safety and Health Management System (OSHMS), the launching of the WIND/WISE/WISCON Programmes in the small and medium enterprise (SME) sector, the implementation of OSH in schools, guidelines jointly developed with entities in the industries, the Mentor-Mentee Programme, the OSH accident calculator (OSHACC), the introduction of MyOSH Forum, the implementation of Malaysian Technical Cooperation Programme (MTCP), and an increase in the number of officers presented papers in international conferences/forums.

Rajah 5: Peratusan pencapaian strategi di bawah OSH-MP15 pada tahun 2012.

Figure 5: Achievement percentage of strategies under the OSH-MP15 for 2012.



## Strategi 1: Memperkasakan dan Memantapkan Peranan Kerajaan Sebagai Peneraju KKP

### Strategy 1: Empowering and consolidating the role of the Government as a leader in OSH

Program 1: Memperkasakan Polisi dan Perundangan KKP <i>Programme 1: Empowering OSH policies and legislations</i>	
<p><b>Aktiviti (b):</b> Mengkaji keberkesanan dan kesesuaian perundangan yang sedia ada.</p> <p><i>Activity (b): Reviewing the effectiveness and relevance of existing laws.</i></p>	<p>Penyediaan Laporan <i>Study of Relevance and adequacy of existing legislation.</i></p> <p><i>Preparing the report Study of relevance and adequacy of existing legislation.</i></p>
Program 2: Menyediakan sokongan dan pemuatan terhadap Perundangan KKP <i>Programme 2: Providing support and conformance with OSH legislations</i>	
<p><b>Aktiviti (a):</b> Membangunkan, mengkaji, menyelaraskan dan menilai piawaian, tataamalan, dan panduan selaras dengan perundangan.</p> <p><i>Activity (a): Developing, reviewing, coordinating, and evaluating standards, codes of practice, and guidelines in accordance with the law.</i></p>	<p>Mengadakan Bengkel Penguatkuasaan IKS Negeri.</p> <p><i>Organising state-level Enforcement Workshops for SMI.</i></p>
<p><b>Aktiviti (b):</b> Membangunkan rancangan pemudah untuk pemuatan KKP.</p> <p><i>Activity (b): Developing simplified programme for OSH conformance.</i></p>	<p>Draf akhir SIRAC telah disiapkan. Model HIRARC akan turut dipertimbangkan untuk diguna pakai.</p> <p><i>The final draft of SIRAC was completed. Application of the HIRARC model will be deliberated.</i></p>
Program 3: Melaksanakan penguatkuasaan yang berkesan <i>Programme 3: Executing effective enforcements</i>	
<p><b>Aktiviti (a):</b> Membangunkan, melaksanakan, dan memantau strategi pencegahan kemalangan dalam tujuh sektor utama. Mengukuhkan KKP dalam tujuh sektor yang berisiko tinggi.</p> <p><i>Activity (a): Developing, implementing, and monitoring accident-prevention strategies in seven key sectors. Consolidating OSH in seven high-risk sectors.</i></p>	<p>Buku panduan pelaksanaan WIND telah dibangunkan dan arahan pelaksanaan telah dikeluarkan.</p> <p><i>Guidebook on the implementation of the WIND was compiled and implementation directive was issued.</i></p>
<p><b>Aktiviti (b):</b> Menambah baik pengumpulan data kemalangan dan penyakit pekerjaan.</p> <p><i>Activity (b): Improving the collection of data on accidents and occupational diseases.</i></p>	<p>Kajian bersama KSM sedang dijalankan.</p> <p><i>A joint study with the Ministry of Human Resources (MHR) is in progress.</i></p>
<p><b>Aktiviti (c):</b> Menjalankan kajian tentang kaitan bahaya terhadap kesihatan yang melibatkan pekerja dalam industri berisiko tinggi yang terpilih.</p> <p><i>Activity (c): Conducting a study on the relationship between hazards and health of workers in selected high-risk industries.</i></p>	<p>Buku berkaitan telah diterbitkan pada 2010 (KKM, SOCSO, OHD). Akan dipanjangkan kepada bahagian kesihatan pekerjaan (BKP).</p> <p><i>The relevant book was published in 2010 (Health Ministry, SOCSO, OHD). Will be extended to the Occupational Health Division (OHD).</i></p>
Program 4: Melancarkan program khas dan pendekatan baru untuk meningkatkan kesedaran KKP <i>Programme 4: Launching special programmes and adopting new approaches for raising OSH awareness</i>	
<p><b>Aktiviti (a):</b> Pembangunan serta pelaksanaan projek WIND/WISE/WISCON.</p> <p><i>Activity (a): Developing and implementing the WIND/WISE/WISCON projects.</i></p>	<p>Modul latihan prarintis WIND dan WISE dan latihan rintis WIND untuk pegawai JKPP telah dijalankan.</p> <p><i>Training modules, Pre-Pilot WIND &amp; WISE and Pilot WIND for the DOSH officers were carried out.</i></p>



**Aktiviti (b):** Membangunkan program *Good Neighbourhood*.  
*Activity (b): Developing the Good Neighbourhood programme.*

Sebanyak 45 program *Good Neighbourhood* telah dijalankan sehingga 2010.  
*Until 2010, 45 Good Neighbourhood programmes were carried out.*

**Program 5: Penyusunan bagi amalan KKP terbaik**  
**Programme 5: Compilation of OSH best practices**

Aktiviti (a): Mengenal pasti dan menggabungkan amalan KKP terbaik untuk dijadikan penanda aras.  
*Activity (a): Identifying and combining OSH best practices and making them benchmarks.*

- JK telah mengenal pasti amalan terbaik OSH dalam sektor perikanan.
- *The Committee identified OSH Best Practices in the timber sector.*
- Audit ke atas 31 tempat kerja dan analisis telah dijalankan.
- *31 workplaces were audited and analyses were performed.*

Aktiviti (c): Menjalankan kajian peringkat kebangsaan untuk mengenal pasti hubungan antara amalan KKP terbaik dengan kelebihannya dalam kemajuan industri.  
*Activity (c): Conducting a national level study to identify the relationship between OSH best practices and their advantage in bringing improvements to the industries.*

Pembangunan senarai semak berkaitan pelaksanaan KKP dan cadangan untuk memulakan audit pada November 2011.  
*Establishing a check list for OSH implementation and a proposal for starting audit in November 2011.*

**Program 6: Memperkasakan Institut Keselamatan dan Kesihatan Pekerjaan Negara (NIOSH)**  
**Programme 6: Empowering the National Institute of Occupational Safety and Health (NIOSH)**

Aktiviti (a): Memperkasakan aktiviti kajian dan penyelidikan.  
*Activity (a): Empowering survey activities and research.*

- Lima projek penyelidikan telah siap dan sedia dibentangkan kepada Board of NIOSH, iaitu Starter Pack Kit, Muconic Acid, Noise, Commuting Accident, dan IAQ untuk bangunan baharu NIOSH.
- *Five research projects were completed and are ready for presentation to the Board of NIOSH. They are Starter Pack Kit, Muconic Acid, Noise, Commuting Accidents, and IAQ for the new NIOSH building.*
- Bekerjasama dengan MOSTI untuk mengembangkan projek P&P.
- *Widening the scope of R&D projects in collaboration with MOSTI.*

Aktiviti (b): Memajukan perkhidmatan penyelidikan.  
*Activity (b): Improving research services.*

Dua makmal sedia ada memberikan perkhidmatan yang berterusan.  
*Two existing laboratories provide continual service.*

<p>Aktiviti (c): Mengukuhkan perkhidmatan sebagai konsultan.  <i>Activity (c): Consolidating services to levels comparable to those provided by professional consultants.</i></p>	<p>Perkhidmatan yang disediakan adalah seperti AGT, ujian audiometrik, penaksiran CHRA dll. NIOSH turut memberikan perkhidmatan HIRARC dan OSH MS untuk kilang sawit FELDA dan PLKN.  <i>Services currently available are AGT, audiometric test, IAQ assessment, CHRA, and others. NIOSH also provides HIRARC and OSH MS services for FELDA and PLKN palm oil factories.</i></p>
<p>Aktiviti (d): Mewujudkan suatu sistem untuk menarik dan mengekalkan pakar KKP di NIOSH – Revise Terms and Condition Service.  <i>Activity (d): Creating a system for attracting OSH experts to the NIOSH and retaining those who are already in NIOSH - Revise Terms and Conditions of Service.</i></p>	<p>Satu sistem telah diwujudkan yang pegawai NIOSH berpeluang melanjutkan pelajaran di peringkat Sarjana atau Doktor Faksafah dengan perjanjian mengekalkan jawatan di NOISH.  <i>A system has been established whereby NIOSH officers are provided opportunities to further their study to the Master and Ph.D levels and are bound by contract to stay in NIOSH.</i></p>
<p>Aktiviti (f): Menaik taraf pusat latihan dengan peralatan dan teknologi terkini.  <i>Activity (f): Giving training centres an upgrade with the latest apparatus and technologies.</i></p>	<p>Pusat pameran baru telah siap dibina dan telah digunakan sepenuhnya.  <i>A new exhibition centre completed and fully utilised.</i></p>
<p><b>Program 7: Menyediakan kemudahan latihan KKP dan perkhidmatan maklumat</b>  <b>Programme 7: Providing OSH training facilities and information services</b></p>	
<p>Aktiviti (a): Membangunkan dan menggabungkan program dan kursus sedia ada berdasarkan NOSS untuk meningkatkan kesedaran pekerja terhadap KKP.  <i>Activity (a): Developing and integrating existing programmes and courses based on NOSS with the aim of raising the awareness of workers towards the importance of OSH.</i></p>	<ul style="list-style-type: none"> <li>• 32 NOSS telah dikenal pasti untuk disuntik elemen KKP.</li> <li>• 32 NOSS were identified as suitable for injection of OSH elements.</li> <li>• Templat untuk menambah baik NOSS sedia ada telah dibangunkan.</li> <li>• Template for the improvement of existing NOSS was developed.</li> </ul>
<p>Aktiviti (b): Membangunkan skim insentif latihan untuk menggalakkan peningkatan skil pekerja.  <i>Activity (b): Developing a training incentive scheme to encourage workers to upgrade their skills.</i></p>	<ul style="list-style-type: none"> <li>• Kertas cadangan skim telah siap dibangunkan.</li> <li>• A feasibility paper for the scheme was readied.</li> </ul>
<p>Aktiviti (c): Menyepadukan KKP dalam sukatan pelajaran akademik untuk kursus profesional yang berkaitan.  <i>Activity (c): Integrating OSH into academic syllabi of the relevant professional courses.</i></p>	<p>Bengkel pembangunan silibus akademik untuk mendapatkan kelulusan MQA.  <i>Workshop for developing an academic syllabus for approval by MQA.</i></p>



Aktiviti (d): Mewujudkan dan melaksanakan Skim Pengiktirafan Pelatih KKP (OTRS).

*Activity (d): Establishing and implementing a scheme for Recognising OSH Trainees (OTRS).*

Skim yang dikenalpasti adalah OTRS pegawai keselamatan dan kesihatan di tapak bina. Kertas cadangan skim telah siap dibangunkan. *Scheme that has been identified is the OTRS for safety and health officers in construction sites. A proposal paper for the scheme has been developed.*

**Program 8: Memperkasakan kapasiti kerajaan bagi mempengaruhi keberkesanan KKP**  
**Programme 8: Empowering the capacity of the government to influence the effectiveness of OSH**

Aktiviti (a): Menyediakan bimbingan KKP melalui peranan kerajaan.

*Activity (a): Providing OSH guidance through government initiatives.*

Lapan daripada 14 Bengkel Kesedaran KKP untuk 40 agensi sektor awam yang kritikal dari aspek KKP (Jabatan Kimia, Jabatan Kerja Raya, dan Jabatan Pertanian) telah dijalankan. *Eight out of 14 OSH Awareness Workshops was carried out for 40 public sector agencies considered critical from an OSH perspective (such as the Chemistry Department, Public Works Department, and Agriculture Department)*

Aktiviti (b): Menyepadukan taksiran bagi prestasi KKP melalui proses penilaian kontrak.

*Activity (b): Incorporating the OSH performance assessment into contract evaluation process.*

Dokumen akhir telah disiapkan oleh jawatankuasa - *Bill of Quantity*. *Final document has been prepared by the committee - Bill of Quantity.*

**Program 9: Menyediakan, membangunkan, dan menggalakkan program penyelidikan (P&P) bagi KKP**  
**Programme 9: Providing, developing, and encouraging R&D programmes for OSH**

Aktiviti (a): Menjalankan penyelidikan terhadap kemalangan dan siasatan kes serta memaparkan keputusan penyelidikan bagi meningkatkan pengurusan KKP. *Activity (a): Conducting research on accidents and case investigations and displaying the research findings with the aim of improving OSH management.*

- Penyediaan soalan kaji selidik bagi 10 kajian dan ujian rintis bagi kaji selidik tersebut.
- *Preparing questionnaires for 10 surveys and pilot tests for the research mentioned above.*
- Kertas terbitan bertajuk Hubungan tingkah laku (BBS) dengan kemalangan dan penyakit pekerjaan dan Hubungan kepercayaan dan amalan KKP dengan kemalangan telah disediakan.
- *Titles of published papers are Correlation between Behaviours (BBS) and Accidents-and-Occupational Diseases and Correlation between OSH Beliefs and Practices and Accidents.*

Aktiviti (b): Pengiraan kos kemalangan.

*Activity (b): Calculating the costs of accidents.*

Model kalkulator kos kemalangan bagi sektor IKS telah disiapkan. *A model of an accident cost calculator has been completed for the SMI sector.*

<b>Program 10: Skim insentif dan pengiktirafan kepada pengamal KKP terbaik</b> <b>Programme 10: Incentive scheme and recognition for good OSH practitioners</b>	
Aktiviti (a): Membangunkan sistem insentif yang merangkumi (pengecualian cukai, penganugerahan, pengurangan pemeriksaan dan pengiktirafan). <i>Activity (a): Developing an incentive scheme that covers (tax exemption, award of honorific titles, lower number of inspections, and certification).</i>	JK telah mengenal pasti dua skim untuk pelaksana KKP yang baik, dan satu laporan berkaitan pengiktirafan bukan monetari telah dibangunkan. <i>The committee identified two schemes for good OSH practitioners. One report relating to non-monetary recognition was completed.</i>
<b>Program 11: Pengenalan risiko berdasarkan skim keselamatan sosial</b> <b>Programme 11: Introducing risks-based social security schemes</b>	
Aktiviti (a): Menjalankan kajian dan pengenalan risiko berdasarkan skim keselamatan sosial. <i>Activity (a) : Carrying out a study to introduce risks-based social security scheme.</i>	Pengumpulan maklumat bagi Kajian perbandingan bagi skim keselamatan sosial (tempatan dan luar negara). <i>Collecting data for a comparative study of Social Security Schemes (local and foreign schemes).</i>
<b>Program 12: Ratifikasi bagi konvensyen ILO dan arahan</b> <b>Programme 12: Ratification of ILO conventions and directives</b>	
Aktiviti (a): Mematuhi konvensyen yang sesuai dan yang berkaitan. <i>Activity (a): Complying with applicable and relevant conventions.</i>	JK telah mengenal pasti semua konvensyen dan arahan yang berkaitan dengan KKP. Kaji selidik akan dilakukan untuk meneliti konvensyen yang sesuai untuk dipatuhi. Untuk tahun 2012, Jabatan telah meratifikasi konvensyen ILO No. C187. <i>The committee has identified all conventions and directives related to OSH. A study will be carried out to study in detail relevant conventions. In 2012, the Department ratified ILO Convention No. C187.</i>
<b>Program 13: Pemulihan dan program kembali bekerja</b> <b>Programme 13: Rehabilitation and the back-to-work programme</b>	
Aktiviti (a): Membangunkan dan membina pusat pemulihan kembali bekerja. <i>Activity (a): Developing and building a rehabilitation and back-to-work centres.</i>	Telah siap sepenuhnya oleh PERKESO. <i>The programme has been fully completed by the SOCSO.</i>



## Strategi 2: Menyemai Budaya Mencegah di Tempat Kerja

### Strategy 2: Inculcating a culture of prevention at the workplace

Program 1: Menggalakkan budaya kerja selamat Programme 1: Promoting a work safety culture	
Aktiviti (a): Hari KKP Sedunia. <i>Activity (a): World OSH Day.</i>	Program telah dilaksanakan pada 28 April 2012 di Muadzam Shah, Pahang. <i>The programme was carried out on 28 April 2012 in Muadzam Shah, Pahang.</i>
Aktiviti (b): Perayaan Minggu KKP Sedunia. <i>Activity (b): Celebration of World OSH Week.</i>	Program telah dilaksanakan pada 9 – 13 Julai 2012 di Pusat Maritim, Putrajaya. <i>The programme was carried out in the week of 9 – 13 July 2012 in the Maritime Centre, Putrajaya.</i>
Aktiviti (d): Pengenalan KKP di sekolah. KKP diserapkan dalam modul atau silibus yang sesuai. <i>Activity (d): Introduction of OSH in schools. Incorporating OSH into relevant study modules and syllabi.</i>	Empat program KKP di Sekolah telah dilaksanakan di Wilayah Persekutuan KL (Sek. Men. Padang Tembak, 19 Julai) , Melaka, (Sek. Men. Teknik, 12 Julai) dan Terengganu (Sek. Men. Teknik, 8 Julai) <i>Four OSH in School programmes were carried out in the KL Federal Territory (Sek. Men. Padang Tembak – 19 July), Melaka (Sek. Men. Teknik – 12 July), and Terengganu (Sek. Men. Teknik – 8 July).</i>
Inisiatif 1: Menjalankan dua program Mentor-Mentee. <i>Initiative 1: Conducting two Mentor-Mentee programmes</i>	Dua program Mentor-Mentee: i. SMK Muadzam, JKPP, dan BASF Petronas Chemicals. ii. Sek Men Teknik Terengganu dan Kerteh Terminal Sdn Bhd. <i>Two Mentor-Mentee programmes:</i> i. SMK Muadzam, JKPP and BASF Petronas Chemicals. ii. Sek. Men. Teknik Terengganu and Kerteh Terminal Sdn Bhd.
Inisiatif 2: Menjalankan empat audit susulan. <i>Initiative 2: Conducting four follow-up audits.</i>	Menjalankan empat audit susulan: i. Sabah – SMK Likas. ii. Perlis – SMK Putra. iii. Sarawak – SMK Santubong. iv. Pahang – SMK Muadzam. <i>Conducting four follow-up audits:</i> i. Sabah – SMK Likas. ii. Perlis – SMK Putra. iii. Sarawak – SMK Santubong. iv. Pahang – SMK Muadzam.

<b>Program 2: Mencegah penyakit pekerjaan dengan lebih efektif</b> <b>Programme 2: More effective prevention of occupational diseases</b>	
Aktiviti (a): Membangunkan dan melaksanakan program Perkhidmatan Kesihatan Pekerjaan Asas. <i>Activity (a): Formulating and implementing the Basic Occupational Health Services Programme (BOH).</i>	JK Teknikal telah menjalankan sebanyak 304 lawatan pada 2012. <i>The Technical Committee conducted 304 visits in 2012.</i>
Aktiviti (c): Menambah bilangan OHN, OHD, OHP. <i>Activity (c): Increasing the number of OHN, OHD, and OHP.</i>	Mengadakan Program Sehari Bersama Pengamal Perubatan: i. Sarawak – 11 Oktober. ii. NIOSH – 11 dan 19 September. <i>Carried out the One Day with Medical Practitioners programme:</i> <i>i. Sarawak – 11 October.</i> <i>ii. NIOSH – 11 and 19 September.</i>
<b>Program 3: Penghapusan hazard pada peringkat reka bentuk</b> <b>Programme 3: Elimination of hazards at the design stage</b>	
Aktiviti (a): Meningkatkan kesedaran kepentingan reka bentuk yang selamat dalam kalangan pereka, pelanggan, dan komuniti. <i>Activity (a): Raising the awareness of the importance of safe designs among designers, customers, and the community.</i>  Inisiatif 1: Mengadakan satu sesi dialog berkaitan penghapusan hazard pada peringkat reka bentuk dan membangunkan Skim Persijilan Keselamatan. <i>Initiative 1: Conducting a dialogue session on the elimination of hazards at the design stage and formulating a Safety Certification Scheme.</i>	Dialog berkaitan penghapusan hazard pada peringkat reka bentuk belum dilaksanakan. Kerja-kerja asas untuk pembangunan Skim Persijilan Keselamatan telah dilaksanakan di peringkat JK Teknikal. <i>Dialogue session on the elimination of hazards at the design stage has yet been started. Basic works for the establishment of a Safety Certification Scheme have begun at Technical Committee level.</i>
<b>Program 4: Mereka bentuk, dan membangunkan persekitaran kerja, sistem dan produk yang selamat</b> <b>Programme 4: Designing and building safe working environments, systems, and products</b>	
Aktiviti (a): Melaksanakan Pengurusan OSH MS/RISK. <i>Activity (a): Implementing OSH MS/RISK management.</i>  Inisiatif 1: Membangunkan Pekeliling Ketua Pengarah berkenaan dengan kriteria juruaudit OSHMS. <i>Initiative 1: Developing a Director-General circular on the criteria of OSHMS auditors.</i>  Inisiatif 2: Membangunkan Pengkalan Data (SMBF) Senarai Semak Pemuatan Peraturan Sistem Pengurusan KKP 201X. <i>Initiative 2: Establishing a Database for OSHMS Reg. 201X Conformance Check List.</i>  Inisiatif 3: Menganjurkan satu lawatan teknikal. <i>Initiative 3: Organising one technical visit.</i>	Draf telah dibangunkan. Menunggu sehingga Peraturan diwartakan sebelum dibentangkan dalam Mesyuarat Semakan Dasar (MSDJ). <i>A draft circular has been prepared. Will only be submitted to the Policy Review Meeting (MSDJ) when the relevant regulations have been gazetted.</i>  Senarai semak alternatif dibangunkan dengan menggunakan perisian SPSS Analytical. <i>An alternative check list was developed using the SPSS Analytical software.</i>  Lawatan teknikal di UNIMAP pada 8 –10 Ogos 2012. <i>Technical visit to UNIMAP was carried out on 8 – 10 August 2012.</i>

Inisiatif 4: Melaksanakan tiga sesi Taklimat Peraturan OSH-MS .  
*Initiative 4: Conducting three sessions of Briefings on the OSHMS Regulations.*

- i. 16 Februari 2012: Royale Bintang, Seremban (Anjuran NSILC dan JKPP Negeri Sembilan), 100 peserta.  
*i. 16 February 2012: Royale Bintang, Seremban (organised by the NSILC and DOSH Negeri Sembilan), 100 participants.*
- ii. 24 April 2012: Recron (M) Sdn Bhd (Anjuran JKPP Negeri Sembilan), 100 peserta.  
*ii. 24 April 2012: Recron (M) Sdn Bhd (organised by the Negeri Sembilan DOSH), 100 participants.*
- iii. 15 Mei 2012: Klana Resort, Seremban (Anjuran FMM & JKPP Negeri Sembilan), 80 peserta.  
*iii. 15 May 2012: Klana Resort, Seremban (organised by the FMM and Negeri Sembilan DOSH), 80 participants.*

Inisiatif 5: Memperkenalkan Safe Malaysian Product Logo (SMPL) di Malaysia.  
*Initiative 5: Introducing the Safe Malaysian Product Logo (SMPL) in Malaysia.*

Kertas kerja tidak mendapat kelulusan. Justeru, JK mencadangkan agar logo mengguna pakai kepala surat pemenang anugerah KKP peringkat kebangsaan.  
*Working paper was not approved. Hence, the committee proposed that the letter head of the national level OSH award winner be used as the logo instead.*

Inisiatif 6: Melaksanakan program intervensi.  
*Initiative 6: Implementing the Intervention Programme.*

Satu senarai program intervensi untuk tahun 2012 telah disediakan. Keseluruhannya, 17 program telah diperkenalkan oleh Bahagian ibu pejabat dan pejabat negeri.  
*A list of intervention programmes for the year 2012 has been completed. Overall, a total of 17 programmes were introduced by the head office and the state offices.*

#### Program 5: Pengetahuan maklumat pencegahan yang terkini *Programme 5: Getting to know the latest information on prevention*

Aktiviti (a): Menjalankan lawatan teknikal di Industri Bio-Tech, dan menerbitkan risalah berkaitan pencegahan kecederaan lanjutan.  
*Activity (a): Conducting technical visits to the bio-tech industry and publishing booklets relating to the topic of advanced injury prevention.*

JK Teknikal telah menjalankan 10 lawatan di tempat kerja dan telah mengenal pasti hazard yang wujud di tempat kerja, dan maklumat berkaitan kaedah pelaksanaan pencegahan kecederaan lanjutan.  
*The technical committee conducted 10 visits to work places and identified existing hazards in work places, as well as gathered information relating to the implementation approach of advanced injury prevention.*



<b>Program 6: Menambah kualiti dan kuantiti Pengamal KKP</b> <b>Programme 6: Improving the quality and quantity of OSH practitioners</b>	
Aktiviti (a): Membangunkan borang kaji selidik OYK, melaksanakan analisis data OYK dan pusat pengajar, seterusnya mengemukakan satu kertas cadangan. <i>Activity (a): Developing a OYK survey form, implementing OYK data analysis and a teaching centre, and presenting one proposal paper.</i>	Borang kaji selidik telah dibangunkan. Draf cadangan telah diibentangkan kepada JK Pelaksana ST02, tetapi masih memerlukan penambahbaikan. <i>The survey form has been drafted. A draft proposal has been presented to the ST02 Implementation Committee, but still needs to be improved.</i>
Aktiviti (d): Mengemukakan kertas cadangan pembangunan dan pelaksanaan Smart Card System. <i>Activity (d): Presenting a proposal paper on the establishment and implementation of a Smart Card System.</i>	Draf cadangan pembangunan dan pelaksanaan Smart Card System telah dibentangkan kepada JK Pelaksana ST02 tetapi masih terdapat penambahbaikan. Latihan sistem akan diberikan semula kepada pegawai JKPP. <i>A draft proposal for the establishment and implementation of a Smart Card System has been submitted to the ST02 Implementation Committee, but still needs some improvements. Systematic training will be conducted again for officers of the DOSH.</i>

### Strategi 3: Kepimpinan Industri bersama penglibatan Komuniti dalam membudayakan amalan KKP

#### Strategy 3: Industry leadership with community involvement in the inculcation of OSH practices

<b>Program 1: Membina keupayaan yang kukuh dalam menambahbaik kepimpinan KKP</b> <b>Programme 1: Building strong capability to better manage OSH</b>	
Inisiatif 1: Lima puluh syarikat dipersijilkan OSH-MS Certified. <i>Initiative 1: 50 companies certified with OSH-MS.</i>	Mensasarkan syarikat berstatus GLC. <i>Companies with GLC status were targeted.</i>
Inisiatif 2: Mengadakan satu dialog/seminar. <i>Initiative 2: Conducting one dialogue/seminar.</i>	Satu sesi dialog berkaitan kepimpinan KKP telah diadakan di Kelantan. <i>One dialogue session on OSH leadership was carried out in Kelantan.</i>
Inisiatif 3: Membangunkan risalah Pengenalan KKK. <i>Initiative 3: Developing pamphlet on Pengenalan KKKP.</i>	Risalah telah dibangunkan, dan dalam proses semakan akhir. <i>Pamphlet has been drafted and is in the stage of final editing.</i>
Inisiatif 4: Dua ribu syarikat mempunyai peruntukan dan pasukan KKP. <i>Initiative 4: Two thousands companies having OSH allocations and an OSH team.</i>	Dua ribu syarikat telah mempunyai peruntukan dan pasukan KKP. <i>Two thousands companies already had OSH allocations and an OSH team.</i>
Inisiatif 5: Mengadakan enam dialog dengan fokus kepada sektor perusahaan kecil dan sederhana (PKS). <i>Initiative 5: Conducting six dialogue sessions with emphasis on the small and medium enterprise (SME) sector.</i>	Satu sesi dialog bersama sektor PKS telah diadakan. <i>One dialogue session with the SME sector was held.</i>

**Program 2: Industri menerajui pogram *outreach* yang melibatkan persatuan industri**  
***Programme 2: Industry-led OSH outreach programmes with the involvement of industrial associations***

Inisiatif 1: Sektor berisiko tinggi menjalankan seminar tahunan (tumpuan pada tiga sektor, iaitu pertanian (lima seminar), pembuatan (lima seminar), perikanan (lima seminar)).

*Initiative 1: High-risk sectors to conduct annual seminars (focusing on three sectors: agriculture, manufacturing, and fishery).*

Inisiatif 2: Program *Outreach* memberikan tumpuan kepada empat sektor.

*Initiative 2 : Outreach programmes to focus on four sectors.*

Inisiatif 3: Program SR - satu modul, tiga bengkel, tiga dialog.

*Initiative 3: SR programmes - one module, three workshops, three dialogue sessions.*

JK telah melaksanakan seminar dalam sektor yang dikenal pasti berisiko; iaitu pertanian (lima seminar), pembuatan (lima seminar), perikanan (lima seminar).

*The committee conducted seminars for high-risk sectors: agriculture, five seminars; manufacturing, five seminar; and fishery, five seminars.*

JK telah menjalankan program *outreach* dalam sektor iaitu pertanian (satu program), dan pembuatan (satu program).

*The committee organised one outreach programme each for agriculture sector and manufacturing sector.*

JK telah membangunkan satu modul kesedaran, dan turut menjalankan dua sesi dialog dan bengkel yang melibatkan MACRA dan AROWANA.

*The committee developed one awareness module, and conducted two dialogue sessions and workshops involving the MACRA and AROWANA.*

**Program 3: Program penambahbaikan melalui kepimpinan organisasi besar (GLC, MNC) kepada pengeluar, pembekal, dan subkontraktor**

***Programme 3: Improvement programmes for exporters, suppliers, and sub-contractors with large organisations (GLC, MNC) leading the way***

Inisiatif 1: Dialog.

*Initiative 1: Dialogue sessions.*

Inisiatif 2: Program Mentor-Mentee.

*Initiative 2: Mentor-Mentee programmes.*

Dialog telah diadakan di negeri Johor, Selangor, Sabah, Perlis, Kedah, Negeri Sembilan, Terengganu, Sarawak, Pahang Pulau Pinang, Kelantan, W.P. Kuala Lumpur, Perak, dan Melaka.  
*Dialogue sessions were conducted in Johore, Selangor, Sabah, Perlis, Kedah, Negeri Sembilan, Terengganu, Sarawak, Pahang, Penang, Kelantan, F.T. Kuala Lumpur, Perak, and Malacca.*

Selangor, lima MoU; Sabah, dua MoU; Terengganu, tiga MoU; Pulau Pinang, tiga MoU; Perak, dua MO, Kedah, empat MoU; Sarawak, dua MoU; Pahang, dua MoU; Negeri Sembilan, tiga MoU; Melaka, tiga MoU; Johor, lima MoU; W.P. Kuala Lumpur, tiga MoU; Perlis, dua MoU, dan Kelantan, dua MoU.

*Selangor, five MoU's; Sabah, two MoU's; Terengganu, three MoU's; Penang, three MoU's; Perak, two MoU's; Kedah, four MoU's; Sarawak, two MoU's; Pahang, two MoU's; Negeri Sembilan, three MoU's; Melaka, three MoU's; Johore, five MoU's; F.T. Kuala Lumpur, three MoU's; Perlis, two MoU's; and Kelantan, two MoU's.*

**Program 4: Menganggar kos sebenar kemalangan dan kesannya, seterusnya mempromosi sistem pengurusan KKP**  
**Programme 4: Estimating the actual costs of accidents and its impact, followed by promoting good OSH management**

Inisiatif 1: Kajian dan pembangunan kalkulator untuk mengira kos kemalangan.

*Initiative 1: Studying and developing a calculator for calculating the costs of accidents.*

Berdasarkan statistik, OSHACC telah mencatat 9746 kunjungan untuk tempoh Januari - September 2012. JK sedang menjalankan kajian untuk dua sektor baru yang dikenal pasti untuk menambah baik OSHACC sedia ada.  
*Based on available statistics, the OSHACC recorded 9746 visits during the January - September 2012 period. The committee is in the process of studying two newly identified sectors for the purpose of improving their existing OSHACC.*

**Program 5: Menerapkan amalan KKP dalam amalan kerja**  
**Programme 5: Incorporating OSH practices into work practices**

Inisiatif 1: Membangunkan prestasi KKP dalam garis panduan kontrak.

*Initiative 1: Including OSH performance in contract guidelines*

Draft terakhir garis panduan kontrak telah siap dibangunkan. JK sedang membandingkan garis panduan yang dibangunkan dengan garis panduan JKR/CIDB sebelum dibentangkan kepada MSDJ.  
*Final draft of the contract guidelines has been completed. The committee is comparing the contract guidelines with the PWD/CIDB Contract Guidelines before submitting to MSDJ.*

**Program 6: Menerbitkan dan menyampaikan maklumat berkaitan KKP**  
**Programme 6: Publishing and presenting information on OSH**

Inisiatif 1: Membangunkan forum dalam portal JKKP.

*Initiative 1: Developing a forum in the DOSH portal.*

Talian forum My-OSH telah dibangunkan dan masih dalam proses ujian. Akan diserahkan kepada MNKKP untuk tujuan pemantauan.  
*My-OSH online forum has been constructed and is still in the testing stage. Will be handed over to the NCOSH for monitoring purposes.*

**Program 7: Mengenal pasti dan mengiktiraf wakil industri dan komuniti sebagai juara KKP (jurucakap)**  
**Programme 7: Identifying and recognising industry and community representatives as OSH Champions (spokespersons)**

Inisiatif 1: Kenal pasti jurucakap mengikut industri.

*Initiative 1: Identifying spokesperson by industry.*

Draf surat untuk pencalonan wakil telah dibangunkan.  
*Draft of letter requesting for nomination of candidates has been prepared.*



## Strategi 4: Meningkatkan hubungan KKP di peringkat antarabangsa *Strategy 4: Enhancing OSH partnerships at the international level*

### Program 1: Mempertingkatkan keupayaan dan fungsi MNKKP (NCOSH) *Programme 1: Enhancing the capacity and functions of the NCOSH*

Inisiatif 1: Satu kajian untuk mengkaji, meningkatkan struktur dan fungsi MNKKP, dan meningkatkan laporan prestasi keselamatan dan kesihatan.

*Initiative 1: Conducting one research on ways to enhance the structure and functions of the NCOSH, and improving safety and health performance reports.*

Inisiatif 2: Memberikan kepimpinan dan hala tuju dalam mempromosi keselamatan dan kesihatan (dua seminar, empat lawatan, dan dua dialog).

*Initiative 2: Providing leadership and direction in promoting occupational safety and health (two seminars, for visits, and two dialogue sessions).*

Inisiatif 3: Mengadakan bengkel KKP secara usahasama antara JKPP/MNKKP bersama agensi lain.

*Initiative 3: DOSH/NCOSH co-hosting OSH workshops with other agencies.*

- i. Draf akhir kertas cadangan penambahbaikan KKP dan Laporan Prestasi KKP Negara telah dibentangkan kepada JK Pelaksana OSH-MP15 ST04. Menunggu untuk dibentangkan kepada pihak pengurusan tertinggi Jabatan.  
*i. The final draft of a paper on the OSH improvement proposals and the National OSH Performance Report was submitted to the OSH-MP15 ST04 Implementation Committee. Will be submitted to the highest management of the Department.*
- ii. MNKKP dengan kerjasama JK Teknikal ST04 PR01 telah melaksanakan tujuh seminar, empat lawatan teknikal, dua dialog, dan tiga majlis sambutan KKP.  
*ii. The NCOSH, with the cooperation of the ST04 PR01 Technical Committee, conducted seven seminars, four technical visits, two dialogue sessions, and three OSH reception parties.*
- iii. Satu Bengkel HIRARC dianjurkan secara usaha sama oleh JKPP, MNKKP, dan SMIDEC di Terengganu pada 5 - 6 Nov. 2012.  
*iii. One HIRARC workshop was conducted in Terengganu on 5 - 6 Nov. 2012 with the DOSH, NCOSH, and SMIDEC as the co-hosts.*

**Program 2: Memperkasakan Kerjasama Antarabangsa (OSHNet)**  
**Programme 2: Empowering international collaboration (OSHNet)**

Inisiatif 1: Program MTCP.

*Initiative 1: MTCP programmes.*

Inisiatif 2: Mengadakan program perkongsian amalan KKP terbaik di peringkat ASEAN.

*Initiative 2: Conducting sharing OSH best practices programmes with ASEAN partners.*

Inisiatif 3: Menyertai dialog/bengkel pembangunan KKP peringkat ASEAN, OSHNet plus Three .

*Initiative 3: Participating in dialogue/workshop on OSH development at ASEAN level – OSHNet plus Three.*

i. MTCP: Satu program MTCP (pengurusan perancangan projek pembinaan) telah diadakan pada 11 – 22 Jun 2012, anjuran bersama JKKP dan Wisma Putra, KLN.

*i. MTCP: one MTCP programme (construction project planning management) was conducted on 11 – 22 June 2012, co-sponsored by the DOSH and Wisma Putra, MFA.*

ii. Jabatan telah menghantar wakil untuk memberi pembentangan berkaitan SHO di Cambodia pada 31 Jul-3 Ogos 2012.

*ii. The Department sent representatives for OSH-related presentations in Cambodia in the 31 Jul. – 3 Aug. 2012 period.*

iii. Dua pegawai (BDP) telah menghadiri satu sesi bengkel ASEAN OSHNet di Singapura pada 28 Feb – 1 Mac 2012, berkaitan garis panduan OSH-MS.

*iii. Two officers (from PRD) took part in the ASEAN OSHNet workshop session in Singapore on 28 Feb. – 1 March 2012. The workshop was about OSH-MS guidelines.*

iv. Penyertaan pegawai DOSH dalam mesyuarat CBM di Filipina pada 18 – 20 April 2012.

*iv. DOSH officers took part in CBM Conference in the Philippines on 18 – 20 April 2012.*

**Program 3: Membangunkan pakar KKP untuk bersama dalam jawatankuasa dan badan antarabangsa**  
**Programme 3: Developing OSH experts to sit in international committees and bodies**

Inisiatif 1: Membangunkan direktori pakar/rujukan dan menentukan pegawai JKKP semasa dalam Jawatankuasa Teknikal Antarabangsa (ITC).

*Initiative 1: Developing an experts/reference directory and designating DOSH officers to sit in International Technical Committee (ITC).*

Inisiatif 2: Membina rangkaian dan pembentangan kertas kerja dalam seminar dan konvensyen antarabangsa.

*Initiative 2: Establishing networks and presenting working papers at international seminars and conventions.*

Inisiatif 3: Mengenal pasti dan membina rangkaian untuk jalinan kerjasama bersama Institut kajian antarabangsa.

*Initiative 3: Identifying and building networks for collaboration with international research institutes.*

i. Pembangunan direktori kepakaran Jabatan (OYK/OYB) sedang dibangunkan.

*i. Department Experts Directory (OYK/OYB) is now being developed by the experts in the IT Department.*

ii. Penyertaan di seminar WSO bertajuk *OSH Leader* pada 8 – 9 Mac 2012.

*ii. Participated in WSO Seminar entitled OSH Leader on 8 - 9 March 2012.*

iii. Dua pembentangan antarabangsa; CHEMCON USA, dan Bangkok.

*iii. Two international presentations; CHEMCON USA and Bangkok.*

iv. Pembentangan dalam *10<sup>th</sup> International Healthy Air Conference* oleh Ir. Hj Anuar pada 8 – 12 Julai 2012.

*iv. Presentation at the 10th International Healthy Air Conference by Ir. Hj Anuar on 8 – 12 July 2012.*

v. Tujuh pembentangan dalam IOHA pada 16 – 20 Sept. 2012.

*v. Seven presentations in IOHA on 16 – 20 Sept. 2012.*

vi. Satu lawatan ke World Safety Organisation (WSO).

*vi. One visit to the World Safety Organisation (WSO).*

vii. Satu perangkaian bersama Korean Gas Safety Corporation (KGST) diwujudkan. MoU kerjasama masih dalam peringkat penyediaan.

*vii. One networking with the Korean Gas Safety Corporation (KGST) was created. An MoU on cooperation is in the process of being prepared.*









# Bahagian Khidmat Pengurusan *Corporate Service Division*



## Bahagian Khidmat Pengurusan *Corporate Service Division*

### Perbelanjaan Mengurus

Peruntukan Belanja Mengurus yang diluluskan oleh Kementerian Kewangan kepada JKKP pada tahun 2012 adalah sebanyak RM98 juta. Peruntukan ini digunakan oleh JKKP bagi melaksanakan fungsinya yang terbahagi kepada tiga aktiviti utama, iaitu pengurusan, operasi, dan pemeriksaan berkanun. Peruntukan yang disediakan di bawah Dasar Sedia Ada (DSA) bagi aktiviti pengurusan adalah sebanyak RM10.8 juta, aktiviti operasi pula diperuntukkan sejumlah RM10.6 juta, manakala aktiviti pemeriksaan berkanun diluluskan sebanyak RM71 juta. Peruntukan yang disediakan di bawah Dasar Baru adalah sebanyak RM4.6 juta dan di bawah *one-off* adalah sebanyak RM1 juta.

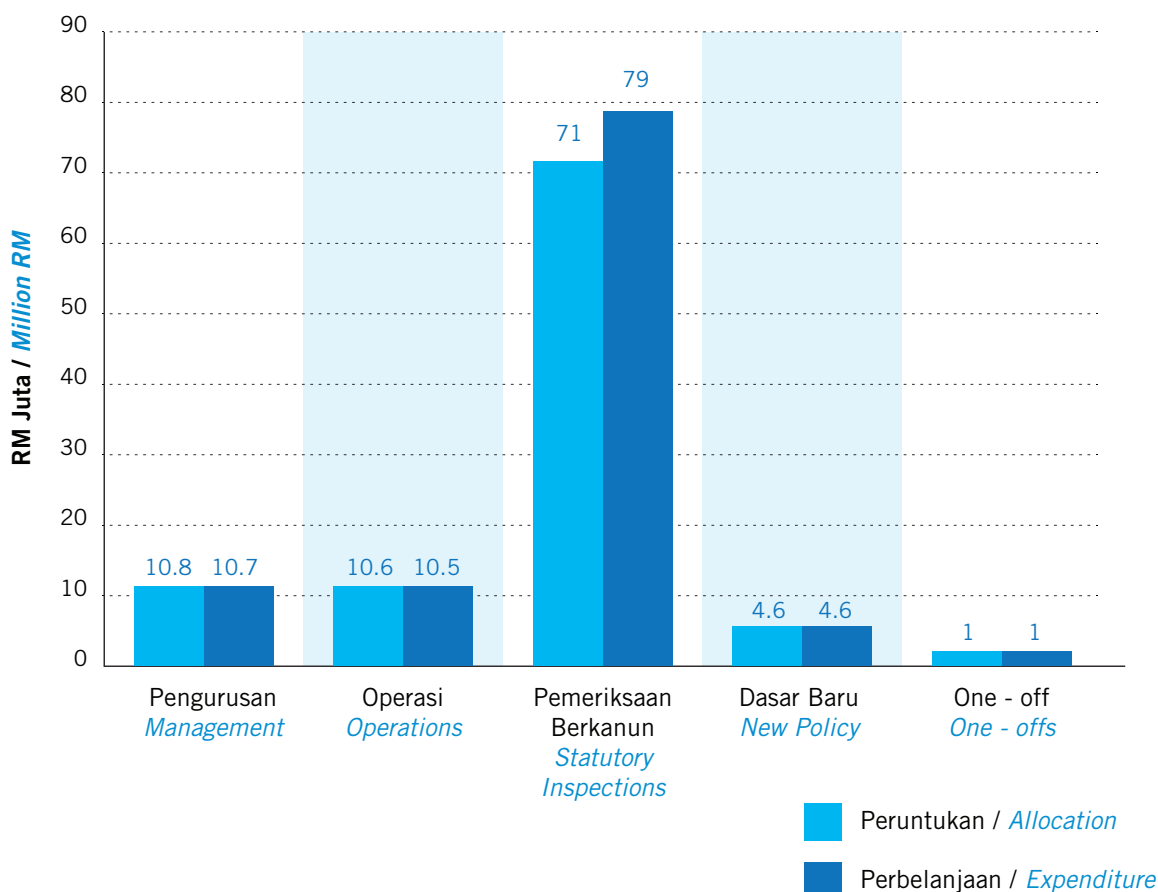
Carta yang berikut menunjukkan prestasi perbelanjaan mengurus untuk setiap aktiviti yang dinyatakan.

### Operational Expenditure

*The Operational Expenditure allocation approved by the Ministry of Finance to the DOSH for the year 2012 stood at RM98 million. The allocation was used by the DOSH to carry out its functions comprising three main activities, namely management, operations, and statutory inspections. The allocations approved for management, operations, and statutory inspections under the existing policy (EP) stood at RM10.8 million, RM10.6 million, and RM71 million, respectively. The allocation for new policy stood at RM4.6 million and for one-offs, RM1 million.*

*The following shows the performance of operational expenditure for each of the activities specified.*

Peruntukan dan Prestasi Perbelanjaan 2012 / *Expenditure Allocation and Performance 2012*





## Kutipan Hasil

Selaras dengan penguatkuasaan Akta Kilang dan Jentera 1967, JKPP juga menjalankan kutipan hasil untuk Kerajaan. Kutipan hasil JKPP terdiri daripada bayaran permohonan kelulusan jentera berperakuan, pendaftaran dan pemeriksaan berkanun ke atas kilang, pemasangan jentera berperakuan kelayakan serta bayaran kompaun. Pada tahun 2012 kutipan hasil JKPP adalah sebanyak RM26.84 juta.

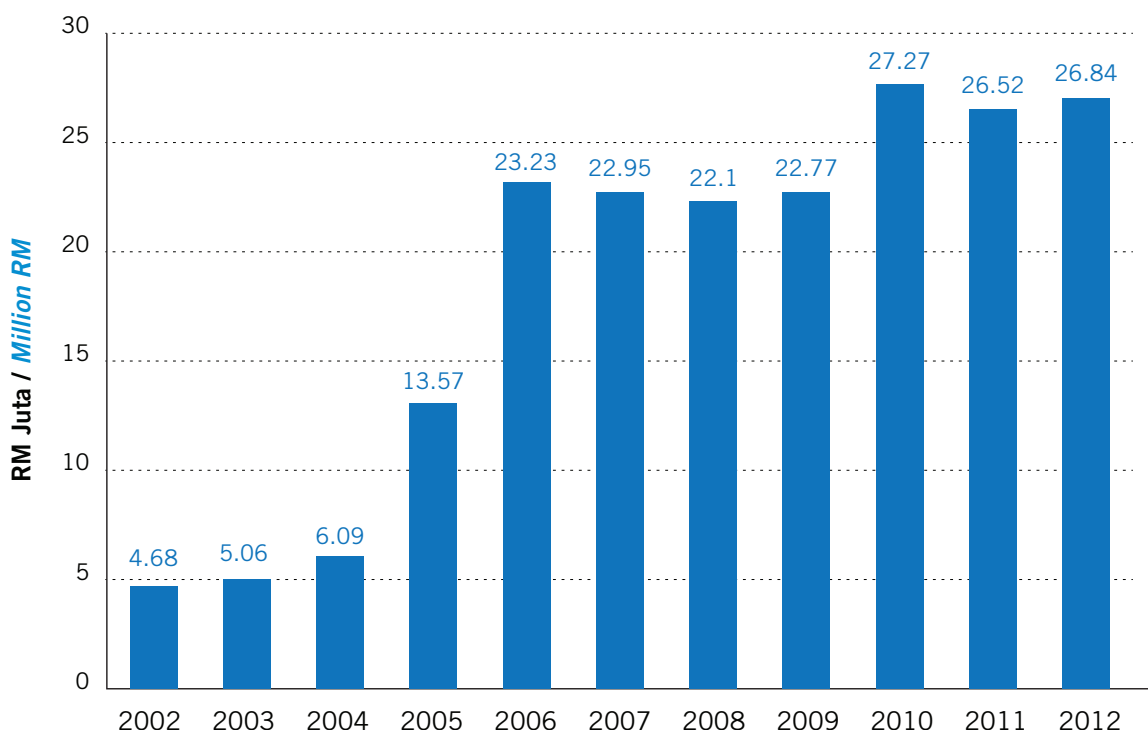
Berikut adalah kutipan hasil JKPP dari tahun 2002 hingga 2012.

## Revenue Collection

*In enforcing the Factories and Machinery Act 1967, the DOSH also collects revenue for the Government. The DOSH revenue collection includes fees for machinery approval application, registration and statutory inspection of factories, certified machinery installation fees as well as compounds. In 2012, the revenue collection of the DOSH stood at RM26.84 million.*

*The following is the revenue collection of DOSH from 2002 to 2012.*

**Kutipan Hasil dari Tahun 2002 hingga 2012 / Revenue Collection from 2002 till 2012**



## Pengurusan Sumber Manusia

Sektor Perkhidmatan Awam berhadapan dengan realiti semasa yang teras Perkhidmatan Awam adalah untuk menyampaikan perkhidmatan yang mempunyai nilai tambah kepada rakyat. Derap langkah perlu dipertingkatkan sejajar dengan pacuan momentum transformasi. Bagi melancarkan lagi momentum transformasi ini, usaha segenap lapisan dan peringkat dalam perkhidmatan awam digembleng untuk melaksanakan peranan masing-masing dengan penuh komited dan secara menyeluruh.

Pengurusan Sumber Manusia merupakan satu aspek penting dalam menentukan tahap kualiti sistem penyampaian perkhidmatan awam sentiasa berada di tahap yang tinggi. Selaras dengan perkembangan ini, Jabatan telah merangka aspek pengurusan sumber manusia yang lebih kemas dan teratur.

Bagi tahun 2012, Jabatan telah menumpukan usaha untuk memantapkan organisasi dengan melaksanakan urusan pengambilan pegawai baru serta kemajuan kerjaya pegawai sedia ada. Ini bagi menampung keperluan Jabatan seiring dengan pembukaan pejabat cawangan, iaitu pejabat cawangan JKKP W.P. Labuan, Sandakan, Tawau, Sibul, Miri, dan Bintulu yang telah beroperasi.

Jumlah keseluruhan jawatan pada 2012 adalah 1813 dengan pecahan perjawatan kepada tiga kategori utama, iaitu teknikal (1285 jawatan), guna sama persekutuan (369 jawatan), dan kader (159 jawatan). Atas kerjasama Jabatan Perkhidmatan Awam (JPA), Suruhanjaya Perkhidmatan Awam Malaysia (SPA), dan Kementerian Sumber Manusia (KSM), pengisian jawatan di JKKP adalah sebanyak 1509 jawatan. Melalui Jawatankuasa Pertukaran dan Penempatan Jabatan, perkara seperti pengetahuan, kemahiran, kelulusan dan aspek keperibadian penjawat awam berkenaan diberikan perhatian. Sepanjang tahun 2012, seramai 17 orang kakitangan Jabatan telah bersara wajib dan secara pilihan.

Peluasan pelaksanaan HRMIS ke agensi kerajaan telah dijalankan secara berperingkat dan melalui arahan Kementerian Sumber Manusia, Jabatan telah melaksanakan beberapa modul secara berperingkat. Modul yang dilaksanakan di Jabatan ialah Modul Pentadbiran Sistem, Modul Pengurusan Rekod Peribadi, Modul Pengurusan Saraan, Faedah dan Ganjaran, Modul Pengurusan Prestasi, Modul Penamatan Perkhidmatan, Modul Perolehan Sumber Manusia, dan Modul Data Perjawatan. Sehingga 31 Disember 2013, Jabatan telah mencapai prestasi pelaksanaan sistem HRMIS yang memberangsangkan, iaitu bagi Submodul Profil Perkhidmatan, 99.92%; Submodul Rekod Peribadi, 100%; dan Submodul Perisytiharan Harta, 99.54%.

## Human Resource Management

*The Public Service Sector is now faced with the current expectation of delivering value-added services to the people. Efforts must be intensified in line with the momentum of transformation. To facilitate the smooth process of transformation, efforts from every level of the civil service need to be mobilised so that everyone carry out their responsibilities with full commitment and in a comprehensive manner.*

*Human Resource Management is an important aspect in ensuring that the quality of public service delivery system is always at a high level. Toward this end, the Department has developed a more streamlined and orderly human resource management system.*

*In 2012, the Department focused its efforts in strengthening the organisation by recruiting new officers and promoting the career development of existing officers. This is to accommodate the needs of the Department with the opening of several new DOSH branches in the Wilayah Persekutuan Labuan, Sandakan, Tawau, Sibul, Miri, and Bintulu.*

*There were a total number of 1813 positions in 2012 under three main categories, namely technical (1285 posts), federal common user services (369 positions), and cadre (159 positions). In collaboration with the Public Service Department (PSD), the Malaysian Public Service Commission (PSC), and the Ministry of Human Resources (MHR), a total of 1509 positions at DOSH were filled. Through the Department's Exchange and Placement Committee, the areas that were given focus include knowledge, skills, qualification, and personality of the civil servants. Throughout 2012, a total of 17 staff in the Department attained the mandatory retirement age or have opted for optional retirement.*

*The implementation of the HRMIS to Government agencies was conducted in stages and the Department, through the Ministry of Human Resources, implemented several modules in stages. These comprised the System Administration Module, the Personal Records Management Module, the Remuneration, Benefits and Rewards Management Module, the Performance Management Module, the Service Termination Module, the Human Resource Procurement Module, and the Personnel Data Module. Up till 31 December 2012, the Department has recorded an impressive performance in implementing the Service Profile Sub-Module (99.92%), the Personal Record Sub-Module (100%), and the Asset Declaration Sub-Module (99.54%) of the HRMIS system.*

**Jadual 1: Butiran sumber manusia JKKP bagi tahun 2012**
**Table 1: Details of DOSH human resource 2012.**

Bil. No.	Kumpulan Jawatan <i>Position Group</i>	Perjawatan <i>Post</i>	Pengisian <i>Filled</i>	Kosong <i>Vacant</i>
1.	Pengurusan Tertinggi <i>Top Management</i>	5	5	0
2.	Pengurusan Dan Profesional <i>Management and Professional</i>			
	Pemeriksa Kilang dan Jentera (PKJ) <i>Factories and Machinery Inspectors (FMI)</i>	518	392	126
	Pegawai Skim Perkhidmatan Guna Sama <i>Officers Under the Common User Services Scheme</i>	27	21	6
	Pegawai Kader <i>Cadres</i>	37	26	11
3.	Sokongan <i>Support</i>			
	Penolong Pemeriksa Kilang dan Jentera <i>Assistant Inspectors of Factories and Machinery</i>	483	462	21
	Pembantu Pemeriksa Kilang dan Jentera <i>Factories and Machinery Inspection Helpers</i>	279	187	92
	Pegawai Sokongan Skim Perkhidmatan Guna Sama <i>Support Officers Under the Common User Services Scheme</i>	342	323	19
	Pegawai Sokongan Kader <i>Support Cadres</i>	122	93	29
<b>Jumlah   Total</b>		<b>1813</b>	<b>1510</b>	<b>303</b>

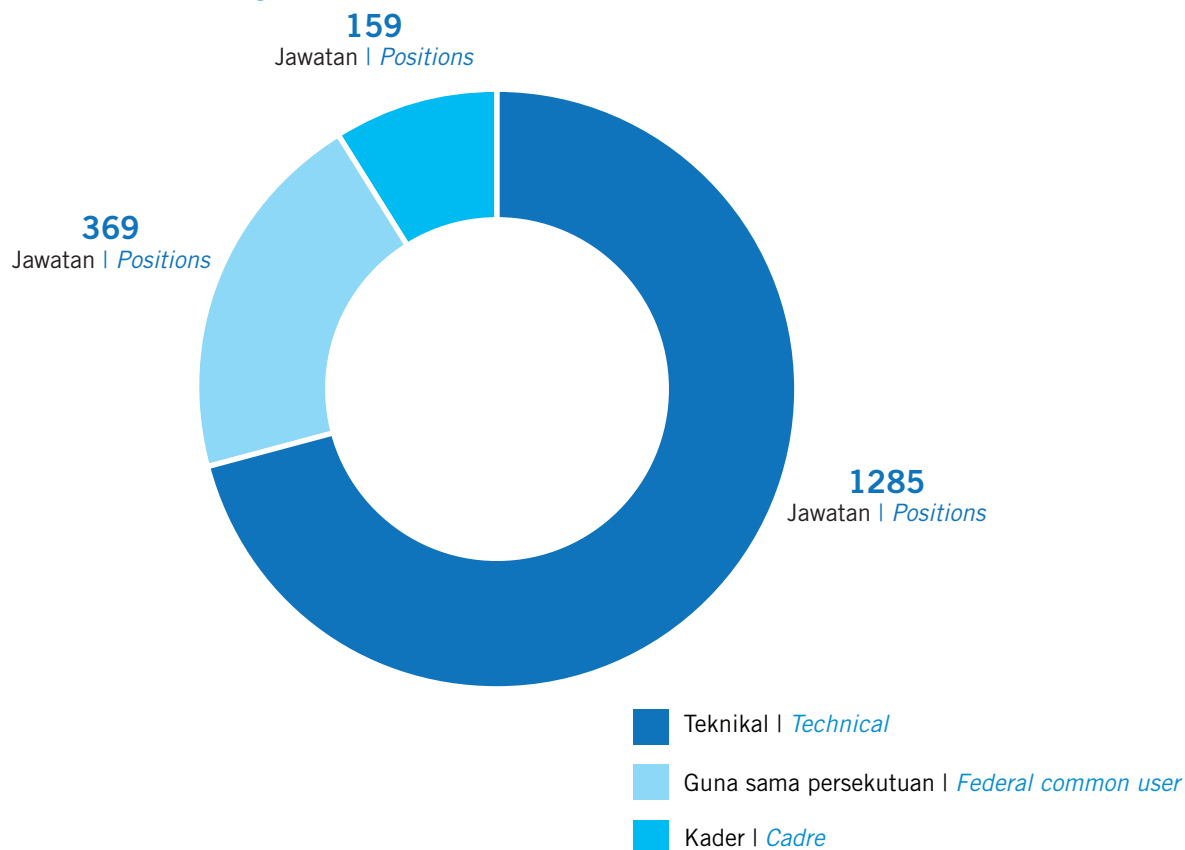


Jadual 2: Senarai pegawai yang bersara pada tahun 2012.

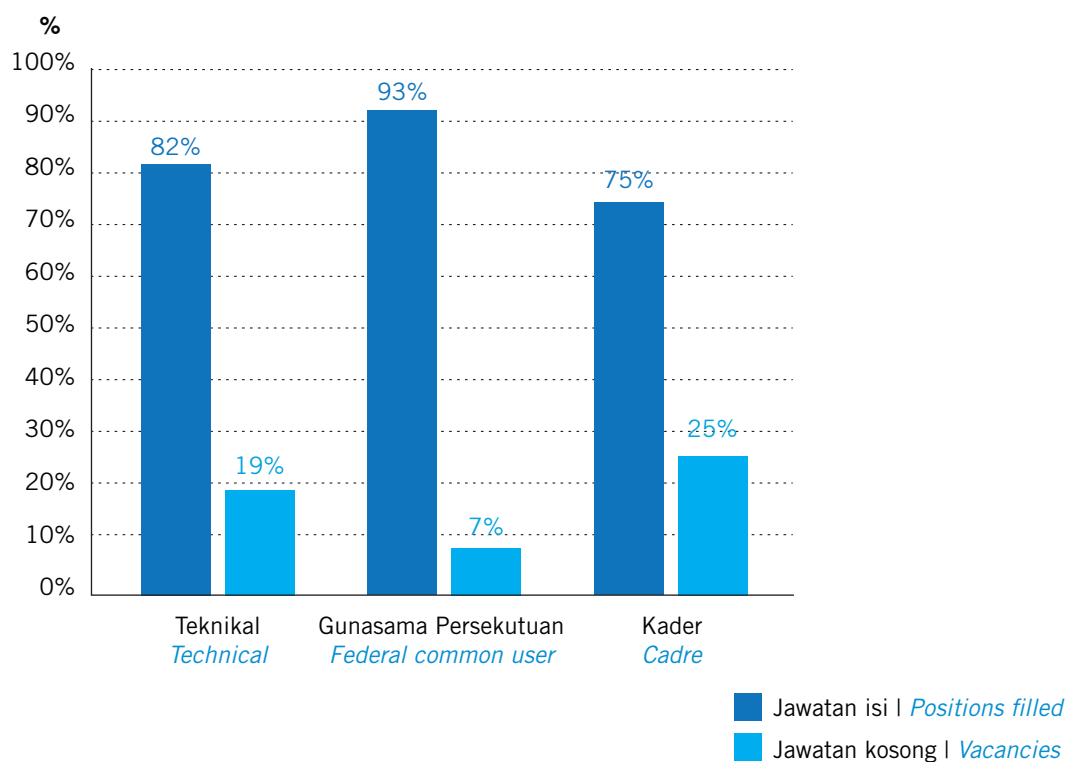
Table 2: List of officers retiring in 2012.

Bil. No.	Nama Name	Jawatan Designation	Gred Grade	Tarikh Persaraan Retirement Date
1.	Norngashikin binti Awang	Ketua Jururawat <i>Head Nurse</i>	U32	3.1.2012
2.	Hawilizah binti Abd. Rahman	Ketua Jururawat <i>Head Nurse</i>	U32	25.1.2012
3.	Hj. Razak bin Mohamed Sheh	Penolong Pemeriksa Kilang dan Jentera <i>Assistant Inspector of Factories and Machinery</i>	J38	30.1.2012
4.	Harun bin Majid	Pembantu Pegawai Pertanian <i>Assistant Agriculture Officer</i>	G22	6.3.2012
5.	Jamilah binti Othman	Pembantu Tadbir (Kewangan) <i>Administrative Assistant (Finance)</i>	W22	2.5.2012
6.	Zainab binti Yassin	Pembantu Tadbir (Perkeranian/Operasi) <i>Administrative Assistant (Clerical/Operation)</i>	N22	1.6.2012
7.	Noraini binti Said	Pembantu Tadbir (Kewangan) <i>Administrative Assistant (Finance)</i>	W22	1.6.2012
8.	Hamzah binti Ahmad	Penolong Pemeriksa Kilang dan Jentera <i>Assistant Inspector of Factories and Machinery</i>	J38	1.6.2012
9.	Siti Eshah binti Saari	Pembantu Tadbir (Perkeranian/Operasi) <i>Administrative Assistant (Clerical/Operation)</i>	N22	30.7.2012
10.	Che Rogayah binti Ayob	Pembantu Tadbir (Perkeranian/Operasi) <i>Administrative Assistant (Clerical/Operation)</i>	N22(KUP)	1.8.2012
11.	Hj. Mohd. Zainudin bin Mohd. Jailani	Penolong Pegawai Pertanian <i>Assistant Agriculture Officer</i>	G32	4.8.2012
12.	Halim Maseruni	Pembantu Pegawai Pertanian <i>Agricultural Helper</i>	G22	15.8.2012
13.	Nordin bin Sanusing	Penolong Pemeriksa Kilang dan Jentera <i>Assistant Inspector of Factories and Machinery</i>	J38	22.8.2012
14.	Roslan bin Ariffin	Pembantu Tadbir (Perkeranian/Operasi) <i>Administrative Assistant (Clerical/Operation)</i>	N22(KUP)	1.10.2012
15.	Samsuddin bin Abd. Shukor	Penolong Pemeriksa Kilang dan Jentera <i>Assistant Inspector of Factories and Machinery</i>	J36	15.11.2012
16.	Rosadah binti Ahmad	Penolong Pegawai Tadbir <i>Assistant Administrative Officer</i>	N27	1.12.2012
17.	Zai binti Sudin	Pembantu Pemeriksa Kilang dan Jentera <i>Assistant Inspector of Factories and Machinery</i>	J22	31.12.2012

Rajah 1: Pecahan perjawatan JKPP.  
Figure 1: Breakdown of the DOSH staffing.



Rajah 2: Pengisian keseluruhan perjawatan berdasarkan kumpulan perkhidmatan.  
Figure 2: Filling of post based on service group.



## Urusan Pemangkuan dan Kenaikan Pangkat 2012

Seramai 188 orang pegawai Skim Pemeriksa Kilang dan Jentera (PKJ) terlibat dengan urusan pemangkuan dan kenaikan pangkat sepanjang tahun 2012. Butiran lanjut adalah seperti berikut :

## Acting of Post and Promotion Exercise in 2012

A total of 188 officers from the Factories and Machinery Inspector (FMI) Scheme were involved in the acting of post and promotion exercise throughout 2012. The details are as follows :

### Urusan Pemangkuan Acting of Post Exercise

#### 1. Kumpulan Pengurusan dan Profesional.

##### 1. Management and Professional Group

Bil No.	Gred Grade	Tarikh Pemangkuan Date of Posting	Jumlah Pegawai Total Officers
1.	J54 - JUSA C	Tiada / N/A	0
2.	J52 – J54	Kumpulan 1 / Group 1 30.12.2011	1
		Kumpulan 2 / Group 2 01.11.2012	2
3.	J48 - J52	Kumpulan 1 / Group 1 30.12.2011	4
		Kumpulan 2 / Group 2 01.11.2012	2
4.	J44 - J48	30.12.2011	21
5.	J41 - J44	30.12.2011	67
Jumlah   Total			97

#### 2. Kumpulan Sokongan.

##### 2. Support Group

Bil No.	Gred Grade	Tarikh Pemangkuhan Date of Posting		Jumlah Pegawai Total Officers
1.	J36 - J38	Kumpulan 1 / <i>Group 1</i>	27.12.2011	2
		Kumpulan 2 / <i>Group 2</i>	01.11.2012	7
2.	J29 - J36	Kumpulan 1 / <i>Group 1</i>	27.12.2011	8
		Kumpulan 2 / <i>Group 2</i>	01.11.2012	8
3.	J22 – J26	Kumpulan 1 / <i>Group 1</i>	27.12.2011	2
		Kumpulan 2 / <i>Group 2</i>	01.11.2012	0
4.	J17 - J22	Kumpulan 1 / <i>Group 1</i>	04.05.2009	1
		Kumpulan 2 / <i>Group 2</i>	27.12.2011	12
		Kumpulan 3 / <i>Group 3</i>	01.11.2012	8
Jumlah   <i>Total</i>				48



## Urusan Kenaikan Pangkat *Promotion Exercise*

1. Kumpulan Pengurusan dan Profesional.

### *1. Management and Professional Group*

Bil No.	Gred Grade	Tarikh Naik Pangkat Date of Promotion	Jumlah Total
1.	J54 - JUSA C	15.09.2011	1
2.	J52 – J54	Tiada / N/A	0
3.	J48 - J52	Tiada / N/A	0
4.	J44 - J48	16.01.2011	21
5.	J41 - J44	01.04.2011	21
Jumlah   Total			43

2. Kumpulan Sokongan - tidak dilaksanakan pada tahun 2012.

### *2. Support Group - not implemented in 2012.*

## Seksyen Teknologi Maklumat

Dalam era ledakan maklumat serta perkembangan teknologi maklumat dan komunikasi (ICT) yang pesat dan cepat, Jabatan juga tidak ketinggalan untuk menyediakan dan menjadikan sistem dalam talian sebagai satu platform dan medium bagi memudahkan cara dan menambah baik sistem aliran kerja serta sistem penyampaian perkhidmatan Jabatan.

Sepanjang tahun 2012, pelbagai aktiviti berjaya dilaksanakan dalam usaha menambah baik dan meningkatkan tahap penggunaan ICT Jabatan dan seterusnya meningkatkan tahap penyampaian perkhidmatan Jabatan kepada orang ramai. Antara aktiviti yang berjaya dilaksanakan adalah:

- Pembangunan sistem dalam talian Jabatan.
- Perolehan peralatan ICT baharu Jabatan.
- Pelaksanaan konfigurasi server Sistem Maklumat Bersepadu Fasa (SMBF) 2 JKPP negeri.
- Pelaksanaan audit data SMBF 2 dan peralatan ICT JKPP negeri.
- Pelaksanaan sistem tanpa kad dan dashbod JKPP negeri.
- Penyelarasan latihan ICT kepada pegawai IT JKPP Ibu Pejabat dan negeri.
- Pengemaskinian teknologi.
- Pencapaian laman web Jabatan.
- Bengkel Penyelarasan ICT 2012.

## Information Technology Section

*In the era of information explosion and the rapid development of information and communication technologies (ICT), the Department remains up to speed in providing and using the online system as a platform and medium to facilitate and improve the workflow and service delivery system of the Department.*

*Throughout 2012, various activities have been successfully implemented in order to improve and increase the level of ICT usage in the Department and as a result, enhance its level of service delivery to the general public. Among the activities that have been successfully implemented are:*

- *Development of the Department's online system;*
- *Acquisition of new ICT equipment;*
- *Implementation of Phase 2 Integrated Information System (P2IIS) server configuration at the DOSH state offices;*
- *Implementation of data audit on P2IIS and ICT equipment at the DOSH state offices;*
- *Implementation of the cardless and dashboard system at the DOSH state offices;*
- *Co-ordination of ICT training of IT officers at the DOSH state offices and Headquarters;*
- *Technology update;*
- *Achievements of the Department's website; and*
- *ICT Co-ordination Workshop 2012.*

## Pembangunan Sistem Dalam Talian Jabatan 2012

Pada tahun 2012, beberapa sistem dalam talian telah dibangunkan secara dalaman oleh pegawai IT JKKP Ibu Pejabat bagi memudahkan pelanggan Jabatan, iaitu e-Status SHO, e-Semak Peperiksaan, pendaftaran dalam talian Hari KKP Sedunia dan Majlis Anugerah Cemerlang KKP.

Sistem e-Status SHO memberikan kemudahan kepada pelanggan untuk menyemak status permohonan pendaftaran mereka sebagai Pegawai Keselamatan dan Kesihatan (SHO) menerusi laman web Jabatan tanpa perlu datang ke kaunter atau berhubung menerusi telefon.

Begitu juga dengan sistem e-Semak Peperiksaan yang sistem ini memberikan kemudahan kepada pelanggan untuk menyemak sesi tarikh peperiksaan atau temu duga yang perlu dihadiri secara dalam talian.

Sistem pendaftaran dalam talian Hari KKP Sedunia dan Majlis Anugerah Cemerlang KKP pula memberikan kemudahan kepada pelanggan untuk mendaftar dan mengesahkan kehadiran ke majlis tersebut secara dalam talian.

## Development Of The Department's Online System

*In 2012, a number of online systems, such as the e-SHO Status, e-Exam Check, and the OSH World Day and Excellence Award Ceremony Online Registration, were developed in-house by the IT personnel at DOSH Headquarters for the convenience of the Department's customers.*

*The e-SHO Status is a facility that allows customers to check the status of their registration as Safety and Health Officers (SHO) through the Department's website without their having to come to the counter or contact by phone.*

*Similarly, the e-Exam Check system offers convenience for customers to check their examination or interview dates via online.*

*The online registration system for OSH World Day and Excellence Award Ceremony also offers convenience to customers to register their attendance to the event via online.*

## Perolehan Peralatan ICT Baharu Jabatan

Sejajar dengan pertambahan pegawai dan keperluan semasa Jabatan, Seksyen Teknologi Maklumat telah melaksanakan perolehan peralatan ICT 2012 yang merangkumi komputer riba dan komputer peribadi. Pecahan perolehan dan agihan adalah seperti yang berikut:

## Acquisition Of New ICT Equipment

*With the increasing number of officers and in meeting the current needs of the Department, the Information Technology Section procured ICT equipment such as laptops and personal computers in 2012. The procurement and distribution breakdown is as follows:*

Bil. No.	Pejabat JKKP DOSH Office	Komputer Peribadi PC	Komputer Riba Laptop
1.	Johor   <a href="#">Johore</a>	9	1
2.	Melaka   <a href="#">Malacca</a>	7	0
3.	Negeri Sembilan   <a href="#">Negeri Sembilan</a>	6	0
4.	Selangor   <a href="#">Selangor</a>	6	1
5.	W.P. Kuala Lumpur   <a href="#">F.T. of Kuala Lumpur</a>	6	1
6.	Perak   <a href="#">Perak</a>	6	1
7.	Pulau Pinang   <a href="#">Penang</a>	6	1
8.	Kedah   <a href="#">Kedah</a>	5	0
9.	Perlis   <a href="#">Perlis</a>	5	0
10.	Kelantan   <a href="#">Kelantan</a>	7	0

Bil. No.	Pejabat JKPP DOSH Office	Komputer Peribadi PC	Komputer Riba Laptop
11.	Terengganu   <i>Terengganu</i>	10	1
12.	Pahang   <i>Pahang</i>	6	0
13.	Sabah   <i>Sabah</i>	5	0
14.	Tawau   <i>Tawau</i>	2	0
15.	Sandakan   <i>Sandakan</i>	2	0
16.	W.P. Labuan   <i>F.T. of Labuan</i>	10	1
17.	Sarawak   <i>Sarawak</i>	6	0
18.	Miri   <i>Miri</i>	2	0
19.	Bintulu   <i>Bintulu</i>	2	0
20.	Sibu   <i>Sibu</i>	2	0
21.	Ibu Pejabat   <i>Headquarters</i>	0	3
Jumlah   <i>Total</i>		110	10

## Pelaksanaan Konfigurasi Server Sistem Maklumat Bersepadu Fasa (SMBF) 2 JKPP Negeri

Pada bulan April sehingga Mei 2012, konfigurasi server SMBF 2 JKPP negeri telah dilaksanakan sendiri secara kerjasama antara pegawai IT Ibu Pejabat dengan JKPP negeri. Sebelum sesi konfigurasi dijalankan, pada bulan Mac 2012, pegawai IT Ibu Pejabat dan JKPP negeri telah menghadiri sesi Pemindahan Teknologi (TOT) yang di bahagikan kepada dua sesi, iaitu di JKPP Melaka dan JKPP negeri Sembilan. Sesi TOT ini memberikan peluang kepada para pegawai untuk terus melaksanakan konfigurasi ke atas server JKPP Melaka dan Negeri Sembilan. Seterusnya, sesi konfigurasi dilaksanakan ke semua JKPP negeri lain mengikut jadual yang ditetapkan.

## Implementation Of Phase 2 Integrated Information System (P2IIS) Server Configuration At The DOSH State Offices

From April till May 2012, the P2IIS server configuration at the DOSH state offices was carried out in collaboration with IT officials from the DOSH Headquarters and the DOSH state offices. Prior to that, in March of 2012, IT officials from the DOSH Headquarters and the DOSH state offices attended the Transfer of Technology (TOT) sessions at the DOSH Melaka and the DOSH Negeri Sembilan. At the same time, the TOT sessions also provided the opportunity for officials to carry out the server configuration at the DOSH Melaka and the DOSH Negeri Sembilan. Subsequently, server configuration at all other DOSH state offices was carried out according to the set schedule.



## Audit Data Sistem Maklumat Bersepadu Fasa 2 (SMBF 2) dan Peralatan ICT JKKP Negeri

Pada bulan Jun sehingga Julai 2012, audit data SMBF 2 dan peralatan ICT JKKP negeri telah dilaksanakan ke seluruh JKKP negeri. Seramai 21 ahli Jawatankuasa Audit Data SMBF 2 dan Peralatan ICT JKKP negeri yang terdiri daripada pegawai IT dan pengguna kuasa yang terpilih telah dilantik.

Audit data SMBF 2 dan peralatan ICT JKKP ini dilaksanakan untuk:

- Mengenal pasti ketepatan dan keandalan data dan maklumat SMBF 2;
- Mengenal pasti tahap penggunaan dan pemahaman pengguna dalam menggunakan SMBF 2 termasuk modul yang telah ditambah baik; dan
- Mendapatkan senarai peralatan ICT JKKP terkini dan mengikut format yang standard.

Sebelum sesi audit data dilaksanakan, Bengkel Penyediaan Kriteria Audit Data SMBF 2 dan Peralatan ICT JKKP telah diadakan dan dihadiri oleh AJK audit yang telah dilantik. Bengkel ini diadakan pada 14 – 17 Mei 2012 bertempat di Puri Pujangga UKM, Bandar Baru Bangi, Selangor. Bengkel ini merupakan satu platform bagi pengguna kuasa dan pegawai IT membincangkan serta menghasilkan senarai kriteria audit data SMBF 2 dan peralatan ICT JKKP yang akan digunakan sepanjang sesi audit dilaksanakan.

Sesi audit telah dilaksanakan ke JKKP negeri mengikut jadual yang ditetapkan. Dua orang pegawai terlibat dalam audit data SMBF 2, manakala seorang pegawai terlibat dalam audit peralatan ICT.

Secara keseluruhannya, penemuan audit mendapati:

- Tahap pengemaskinian data khususnya bagi tempat kerja dan jentera adalah memuaskan tetapi masih boleh dipertingkatkan;
- Tahap kesedaran kepentingan pengurusan kata kunci dalam kalangan pegawai telah meningkat. Walau bagaimanapun, masih terdapat segelintir pegawai yang belum menukar kata kunci; dan
- Tahap kesedaran pegawai tentang kemudahan yang disediakan oleh Jabatan khususnya Sijil Kelayakan dalam talian dan Sijil Kelayakan Lanjutan masih rendah.

## Pelaksanaan Sistem Cardless Dan Dashboard JKKP Negeri

Pada tahun 2011, JKKP Melaka telah mencadangkan sebuah sistem dibangunkan bagi menyokong serta merealisasikan projek tanpa kad untuk projek KIK mereka. Hasil kerjasama JKKP Melaka dan Seksyen Teknologi Maklumat (STM), sebuah sistem yang diberi nama Sistem Cardless telah dibangunkan bagi menjayakan projek berkenaan.

Sistem yang dibangunkan menggunakan perisian Microsoft Access ini berintegrasi sepenuhnya dengan sistem SMBF2

## Implementation of Data Audit on P2IIS and ICT Equipment at DOSH State Offices

*From June till July 2012, the data audit on P2IIS and ICT equipment was carried out at every DOSH state office. A total of 21 IT officials and selected power users were appointed to sit as members of the State DOSH State Office P2IIS and ICT Equipment Data Audit Committee.*

*The data audit on the DOSH P2IIS and the ICT equipment aims to:*

- *Identify the accuracy and reliability of P2IIS data and information;*
- *Determine the extent of usage and understanding of users in using the P2IIS, including the improved modules; and*
- *Obtain the latest list of the DOSH ICT equipment that complies with the standard format.*

*Prior to the audit session, the DOSH P2IIS and ICT Equipment Data Audit Criteria Preparation Workshop, which was attended by the appointed members of the audit committee, was conducted. The workshop was held from 14 – 17 May 2012 at Puri Pujangga in UKM, Bandar Baru Bangi, Selangor. The workshop is a platform for power users and IT officials to discuss and come up with a list of criteria to be used throughout the audit session on the DOSH P2IIS and ICT equipment.*

*The audit sessions were conducted at the DOSH state offices according to the set schedule, whereby two officers were put in charge of the P2IIS data audit and one officer in charge of the ICT equipment audit.*

*Overall, the findings of the audit are as follows:*

- *The level of data updating, especially on workplaces and machinery, is satisfactory but still has room for improvement;*
- *The level of awareness on the importance of password management among the officers has increased but there are still some who have not changed their password; and*
- *The level of awareness among the officers regarding the facilities provided by the Department, particularly the Online CF and Advanced CF, is still low.*

## Implementation Of The Cardless And Dashboard System At The DOSH State Offices

*In 2011, the Melaka DOSH proposed that a cardless system be developed to support and realise their Innovative and Creative Group (ICG) project. Through the cooperation of the Melaka DOSH and the Information Technology Section (ITS), a system called the Cardless System was successfully developed to support the project.*

*The system, which was developed using Microsoft Access software, is fully integrated with the Department's P2IIS system.*

Jabatan. Maklumat yang dijana dari sistem ini diperoleh daripada pangkalan data sistem SMBF2 dan sistem ini boleh dipasang pada mana-mana komputer pegawai. Antara maklumat yang boleh didapati melalui sistem ini adalah maklumat tentang kilang dan jentera, sejarah pemeriksaan yang dijalankan, kejadian kemalangan, aduan, penguatkuasaan, audit, pemeriksaan higien, notis larangan yang dikeluarkan, dan akaun telum Terima (ABT) JKPP negeri. Melalui penggabungan maklumat ini, semua maklumat aktiviti yang dijalankan di tempat kerja dapat diperoleh dan dipantau oleh pegawai, justeru pemeriksaan tidak diperlukan lagi.

Hasil pelaksanaan Sistem *Cardless* di JKPP Melaka, sistem ini didapati banyak membantu pegawai dalam membuat pemeriksaan serta dapat menangani masalah yang dihadapi sebelum ini. Antara kebaikan menggunakan sistem ini adalah:

- i. Pemeriksaan boleh dijalankan segera setelah agihan tugas diterima oleh pegawai tanpa perlu menunggu kad pemeriksaan;
- ii. Masalah kad hilang dan penyimpanan kad dapat diatasi;
- iii. Masa merekod maklumat pemeriksaan oleh pegawai dan kerani kewangan dapat dijimatkan dengan hanya mengemas kini maklumat berkenaan dalam SMBF2 sahaja;
- iv. Maklumat dan sejarah pemeriksaan dapat diperoleh melalui sistem ini.
- v. Masa pengeluaran CF dapat dipercepat; dan
- vi. Keandalan pada data SMBF2 dapat ditingkatkan.

Satu sesi latihan penggunaan Sistem *Cardless* dan *Dashboard* telah diadakan pada 11 hingga 23 Oktober 2012 di JKPP Ibu Pejabat bagi memperluaskan penggunaan sistem ini di JKPP negeri serta memberikan latihan secara amali dan langsung kepada pegawai. Latihan ini melibatkan semua JKPP negeri dan dihadiri oleh pegawai IT dan pengguna kuasa negeri masing-masing.

## Penyelarasan Latihan ICT Kepada Pegawai IT JKPP Ibu Pejabat Dan Negeri

Pada 2012, beberapa siri latihan ICT telah diselenggarakan oleh pihak IT Ibu Pejabat kepada semua pegawai IT Ibu Pejabat dan negeri. Antara siri latihan yang diadakan adalah latihan php, mySQL, Joomla, dan pembangunan multimedia. Latihan php, mySQL, dan Joomla telah diadakan pada 7 – 10 Mei 2012 dan 21 – 24 Mei 2012 bertempat di OSCC, MAMPU, Cyberjaya; manakala latihan pembangunan multimedia pula diadakan pada 9 – 13 Julai 2012 bertempat di JPA, Cyberjaya. Sesi latihan tersebut telah memberikan peluang dan pendedahan kepada para pegawai untuk membangunkan terus aplikasi secara amali dan langsung.

*The information generated from this system is obtained from the P2IIS database and the system can be installed on any officer's computer. Among the information that can be obtained through this system include information on factories and machinery, inspection history, details of accidents, complaints, enforcement, audits, hygiene inspection, prohibition notices that have been issued, and accounts receivable (AR) of the DOSH state offices. Through the consolidation of these data, any information pertaining to activities at the workplace can be obtained and monitored by the officers, and the use of inspection cards are no longer required.*

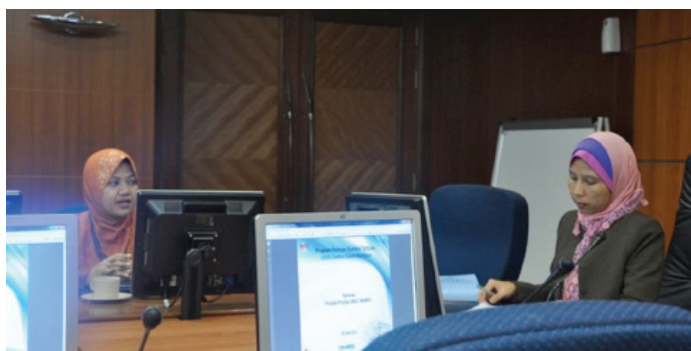
*Following its implementation at the Melaka DOSH, the cardless system is found to facilitate the inspection work by the officers and able to tackle most of the problems encountered in the past. Among the advantages of using this system are:*

- i. Inspections can be carried out as soon as the officer receives the distribution of tasks, without having to wait for the inspection card;*
- ii. The problem of lost cards and storing the cards is addressed;*
- iii. The time to record the details of inspection by the officers and financial clerk is saved by simply updating the information in the P2IIS system;*
- iv. Inspection details and history can be obtained through this system.*
- v. Speedy issuance of CFs; and*
- vi. Reliability of the P2IIS data can be enhanced.*

*A training session on the use of the Cardless and Dashboard System was held from 11 – 23 October 2012 at the DOSH Headquarters to expand the usage of this system at the DOSH state offices as well as to provide a hands-on training to the officers. The training, which involves all DOSH state offices, was attended by IT officials and power users from the respective states.*

## Co-Ordination Of ICT Training Of IT Officers At DOSH State Offices And Headquarters

*In 2012, a series of ICT training was coordinated by the IT Division at Headquarters for all IT officers at headquarters and state offices. Among the series of exercises that were conducted include training on php, mySQL, Joomla, and multimedia development. The training sessions on php, mySQL and Joomla were held on 7 – 10 May 2012 and 21 – 24 May 2012 at OSCC, MAMPU in Cyberjaya, whereas the multimedia development training was held on 9 – 13 July 2012 at the Public Service Department (PSD) in Cyberjaya. The training sessions provided the opportunity and exposure to the officers to further develop the applications hands-on.*



Sesi taklimat oleh pihak OSCC.  
*Briefing session by the OSCC.*

## Pengemaskinian Teknologi

Pada 20 Julai 2012, pihak IT Ibu Pejabat telah menjemput pihak OSCC untuk memberikan taklimat tentang lapan produk OSCC. Taklimat tersebut bertujuan mendapatkan maklumat serta berkongsi pengetahuan tentang produk yang telah dibangunkan oleh OSCC serta untuk mengetahui kaedah kolaborasi dan produk yang bersesuaian untuk diguna pakai dan diaplikasikan di JKKP.

## Technology Update

*On 20 July 2012, the IT Division at the Headquarters invited the OSCC to give a briefing on eight of OSCC products. The briefing was intended to obtain information and share knowledge about the products developed by OSCC, and to learn the methods of collaboration and the appropriate products to be used and applied at the DOSH.*

## Pencapaian Laman Web Jabatan

Laman web JKKP merupakan salah satu platform atau saluran penting untuk menyampaikan maklumat khususnya maklumat yang berkaitan dengan keselamatan dan kesihatan pekerjaan. Selain itu, perkhidmatan utama, termasuk perkhidmatan dalam talian JKKP, turut dapat dicapai oleh orang awam menerusi laman web JKKP.

Laman web Jabatan turut menyediakan kemudahan untuk orang awam berkomunikasi dengan JKKP untuk sebarang aduan, pertanyaan, atau maklum balas.

Pada bulan Oktober 2012, laman web JKKP sekali lagi berjaya mendapat pengiktirafan lima (5) bintang dalam Penilaian Portal dan Laman Web Kerajaan Malaysia (MGPWA) 2012. Dalam penilaian tersebut, laman web JKKP juga terpilih sebagai penerima *Strategic Achievers* yang merupakan satu lagi penilaian tambahan yang dijalankan oleh pihak MDeC dengan kerjasama MAMPU.

## Achievements of The Department's Website

*The DOSH website is an important platform or channel for conveying information, especially information on occupational safety and health. In addition, the website offers online services to the general public.*

*The Department's website also provides a facility for the public to communicate with the DOSH regarding any complaints, questions or feedback.*

*On October 2012, the DOSH website was awarded a 5-star certification by the Malaysian Government Portals and Websites Assessment (MGPWA) 2012. In the assessment, the site was selected as the recipient of Strategic Achievers, which is another assessment conducted by MDeC in collaboration with MAMPU.*



## Bengkel Penyelarasan ICT 2012

Pada 20 – 22 November 2012, Bengkel Penyelarasan ICT 2012 telah diadakan di Felda Residence, Sungkai, Perak. Bengkel ini disertai oleh lapan pegawai IT JKPP Ibu Pejabat dan 26 pegawai JKPP negeri.

Bengkel tersebut bertujuan:

- Mendapatkan persefahaman dari segi kerja berkaitan dengan sasaran kerja tahunan (SKT 2013) masing-masing;
- Membuat pembentangan SKT mengikut format yang disediakan berdasarkan rujukan SKT Seksyen ICT Ibu Pejabat;
- Memupuk semangat berpasukan antara semua peserta; dan
- Membuat perbincangan masalah berkaitan dengan dengan aplikasi ICT Ibu Pejabat dan negeri.

Secara keseluruhannya bengkel ini telah berjaya dilaksanakan dengan baik. Aktiviti ini dicadangkan agar dijadikan aktiviti tahunan ICT JKPP Ibu Pejabat dan negeri. Penyelarasan kerja ICT ini adalah amat penting bagi memastikan keselarasan kerja ini dapat mencapai kesefahaman pegawai ICT Ibu Pejabat dan negeri.

## ICT Co-Ordination Workshop 2012

*On 20 – 22 November 2012, the ICT Co-ordination Workshop 2012 was held at Felda Residence in Sungkai, Perak. The workshop was attended by eight IT officers from the DOSH Headquarters and 26 officers from the DOSH state offices.*

*The workshop aimed to:*

- *Gain understanding in terms of work associated with the respective annual work targets (AWT 2013);*
- *Make a AWT presentation according to the format provided based on the AWT reference of ICT Section at the Headquarters;*
- *Foster teamwork among the participants; and*
- *Conduct discussions about problems associated with ICT applications at the Headquarters and state offices.*

*Overall, the workshop was a great success. A proposal was made that the event be conducted annually at state and Headquarters levels. The co-ordination of ICT work is very important to ensure consistency and understanding among ICT officers at both Headquarters and state offices.*

Para peserta Bengkel Penyelarasan ICT 2012.


*Participants of ICT Co-ordination Workshop 2012.*









The background of the page is a large photograph showing the silhouette of an industrial facility, likely a refinery or chemical plant, against a bright orange and yellow sky at sunset. The sun is low on the horizon, creating a strong backlight effect and casting long shadows. The industrial structures include tall distillation columns, a complex network of pipes and walkways, and large storage tanks. The overall mood is industrial and dramatic.

# Bahagian Dasar dan Penyelidikan

## *Policy and Research Division*



## Bahagian Dasar dan Penyelidikan *Policy and Research Division*

JKKP beroperasi dengan tiga teras utama iaitu:  
*The DOSH has three core functions:*



Bahagian Dasar dan Penyelidikan (BDP) menjalankan teras pertama Jabatan, iaitu penyediaan standard. Pada dasarnya, BDP terbentuk hasil penstrukturan semula Jabatan yang dibuat pada tahun 2005. Dengan pembentukan BDP ini, perkara berkaitan dasar, penggubalan peraturan, dan undang-undang dapat diselaraskan untuk dipertimbangkan oleh Jawatankuasa Semakan Dasar JKKP. Seterusnya, perkara tersebut akan diputuskan dan diterima sebelum dibentangkan pula dalam Mesyuarat Jawatankuasa Semakan Dasar peringkat kementerian. Begitu juga tatacaranya bagi penggubalan tataamalan dan garis panduan, serta cadangan bagi hasil penyelidikan dan pembangunan ke atas keselamatan, kesihatan, dan kebajikan pekerjaan.

*The Policy and Research Division (PRD) carries out the first core function of the Department, that is, standard preparation. The PRD was formed as a result of restructuring of the Department in 2005. With the establishment of the PRD, matters relating to policies, regulations, and laws are streamlined for the consideration of the DOSH's Policy Review Committee. Next, the matter will be decided upon and accepted before presenting it at the Policy Review Committee Meeting at the ministerial level. The same process is also adopted in establishing codes of practice and guidelines as well as with any proposed outcome of research and development on occupational safety, health, and welfare.*

### Peranan

Bagi memastikan kewujudan BDP ini mempunyai impak kepada visi dan misi Jabatan, BDP memainkan peranan dalam:

- Mencadangkan dasar melalui kajian, penyelidikan, dan pembangunan KKP;
- Menggubal dan menyemak perundangan; dan
- Memantau pelaksanaan dasar Jabatan.

### Role

*In ensuring that it has an impact on the vision and mission of the Department, the PRD undertakes the following roles:*

- Proposing policies through the study, research, and development of OSH;*
- Formulating and revising legislations; and*
- Monitoring the implementation of the Department policies.*

## Fungsi

Fungsi BDP adalah seperti yang berikut:

1. Mengkaji, membangunkan dan menggubal dasar baharu yang akan dilaksanakan oleh JKPP serta menyemak dasar sedia ada untuk melihat kesesuaian dengan kehendak semasa;
2. Melakukan analisis ke atas data dan maklumat tentang kemalangan/penyakit perusahaan dan maklumat sesuatu kajian atau penyelidikan yang dijalankan oleh JKPP;
3. Merancang dan menjalankan program penyelidikan dan pembangunan bagi tujuan peningkatan kualiti produk seperti keberkesanan penguatkuasaan, status pematuhan, pembangunan standard dan perundangan, polisi, kawalan kemalangan, prosedur kerja, dan penyakit pekerjaan;
4. Pemudah cara kepada ILO berkenaan KKP di Malaysia dan melihat kemungkinan penerimaan Konvensyen ILO bagi KKP di Malaysia;
5. Menyemak akta, peraturan, kod amalan atau garis panduan yang sedia ada;
6. Menggubal dan menyediakan akta, peraturan, kod amalan atau garis panduan baharu; dan
7. Menjalinkan hubungan dengan agensi lain yang bersangkutan.

Bagi melaksanakan objektif dan fungsi BDP, dua seksyen diwujudkan di bawah BDP, iaitu:

- i. Seksyen Kajian Dasar dan Penyelidikan; dan
- ii. Seksyen Penggubalan dan Urus Setia SWO (Standard Writing Organisation).

## Functions

*The functions of the PRD are as follows:*

- 1. To study, develop, and formulate new policies to be implemented by the DOSH and review existing policies to determine its suitability to current needs;*
- 2. To perform an analysis of the data and information pertaining to industrial accidents/diseases as well as information from any study or research conducted by the DOSH;*
- 3. To plan and carry out research and development programmes aimed at enhancing the quality of products, such as the effectiveness of enforcement, compliance status, development of standards and legislations, policies, accident control, and work procedures, and occupational diseases;*
- 4. To facilitate OSH-related ILO in Malaysia and to see the possibility of acceptance of the ILO Conventions for OSH in Malaysia;*
- 5. To review existing acts, regulations, codes of practice, or guidelines;*
- 6. To draft and prepare new acts, regulations, codes of practice, or guidelines; and*
- 7. To establish links with other relevant agencies.*

*In order to implement the objectives and functions of the PRD, two sections under the Division were formed, namely:*

- i. Policy Analysis and Research Section, and*
- ii. Standard Writing Organisation (SWO) Drafting and Secretariat.*

Jadual 1: Aktiviti Seksyen Kajian Dasar dan Penyelidikan.  
Table 1: Activities of the Policy Analysis and Research Section.

Bil. No.	Perkara Item	Aktiviti Activity
1.	Menjalankan kajian dan penyelidikan <i>Conducting studies and research</i>	<ul style="list-style-type: none"> <li>Kajian tahap pendedahan bunyi bising disebabkan oleh siren dalam kalangan pemandu ambulans.</li> <li>Kalkulator OSH.</li> <li>Kad skor.</li> <li>Penambahbaikan OSH dalam perkhidmatan kurier.</li> <li>Penambahbaikan OSH dalam ketenteraan (melampaui Akta).</li> <li><i>Review of noise exposure levels caused by siren among ambulance drivers.</i></li> <li><i>OSH calculator.</i></li> <li><i>Score card.</i></li> <li><i>OSH improvement in courier services.</i></li> <li><i>OSH improvement in army (go beyond the Act).</i></li> </ul>
2.	Urus setia mesyuarat dan jawatankuasa <i>Secretariat for meetings and committees</i>	<p>Menjadi urus setia bagi mesyuarat dan jawatankuasa:</p> <ul style="list-style-type: none"> <li>Mesyuarat Jawatankuasa Semakan Dasar Jabatan.</li> <li>Mesyuarat Pasca Kabinet.</li> <li>Parlimen.</li> <li>Jawatankuasa Kerjasama PERKESO, JKKP, NIOSH.</li> <li>Polisi Pemeriksaan dan Penguatkuasaan.</li> <li>Program Kerjasama Teknikal Malaysia (MTCP).</li> <li>Program Teknikal Negara Ketiga (TCTP).</li> </ul> <p><i>Serving as a secretariat for meetings and committees:</i></p> <ul style="list-style-type: none"> <li><i>Department Policy Review Committee Meeting.</i></li> <li><i>Post-Cabinet Meeting.</i></li> <li><i>Parliament.</i></li> <li><i>SOCOS, DOSH, NIOSH Co-operation Committee.</i></li> <li><i>Inspection and Enforcement Policy.</i></li> <li><i>Malaysian Technical Co-operation Programme (MTCP).</i></li> <li><i>Third Country Technical Programme (TCTP).</i></li> </ul>
3.	Pemantauan <i>Monitoring</i>	<p>Memantau:</p> <ul style="list-style-type: none"> <li>OSHMP-15.</li> <li>Aktiviti rutin Bahagian/pejabat negeri.</li> <li>Makmal lapangan Pemeriksa Kilang dan Jentera J48, J44, J41.</li> <li>Pendakwaan.</li> <li>DS 037.</li> <li>DS 038.</li> </ul> <p><i>Monitoring:</i></p> <ul style="list-style-type: none"> <li><i>OSHMP-15.</i></li> <li><i>Routine activities of division/state offices.</i></li> <li><i>Field laboratory of the inspector of Factories and Machinery J48, J44, J41.</i></li> <li><i>Prosecution.</i></li> <li><i>DS 037.</i></li> <li><i>DS 038.</i></li> </ul>



Bil. No.	Perkara Item	Aktiviti Activity
4.	Analisis data <i>Data analysis</i>	<p>Menganalisis data bagi:</p> <ul style="list-style-type: none"> <li>• Statistik kemalangan Perkeso dan JTK.</li> <li>• JKPP 8: Laporan Kemalangan Tahunan.</li> <li>• Kes mahkamah.</li> </ul> <p><i>Analysing data on:</i></p> <ul style="list-style-type: none"> <li>• <i>Accident statistics from SOCSO and the Department of Labour.</i></li> <li>• <i>JKPP 8: Annual Accident Report.</i></li> <li>• <i>Court cases.</i></li> </ul>
5.	Aktiviti lain <i>Other activities</i>	<ul style="list-style-type: none"> <li>• Khidmat nasihat.</li> <li>• Ulasan/maklum balas.</li> <li>• Kertas kerja.</li> <li>• Penyediaan Cadangan Bajet.</li> <li>• Penyediaan Cadangan KPI KSM (YB Menteri).</li> <li>• Buku Data dan Maklumat Ringkas.</li> <li>• Penyediaan Jurnal Pendakwaan.</li> <li>• FGBPR.</li> <li>• <i>Advisory Services.</i></li> <li>• <i>Reviews/feedback.</i></li> <li>• <i>Working paper.</i></li> <li>• <i>Preparation of Budget Proposal.</i></li> <li>• <i>Preparation of Proposed KPIs for the Ministry of Human Resources (Minister).</i></li> <li>• <i>Maklumat dan Data Ringkas (Quick Info and Data booklet).</i></li> <li>• <i>Preparation of the Jurnal Pendakwaan (Prosecution Journal).</i></li> <li>• <i>Focus Group Business Process Re-Engineering (FGBPR).</i></li> </ul>

BDP bersama-sama jawatankuasa akan menilai hasil kajian tersebut dan merumuskan sama ada ia boleh diterjemahkan kepada dasar.  
*As a result of these studies, the PRD and its committee will evaluate and conclude on whether it can be translated into policy.*

Jadual 2: Aktiviti Seksyen Penggubalan dan Urus Setia SWO.

Table 2: Activities of the SWO Drafting and Secretariat Section.

Bil. No.	Perkara Item	Aktiviti Activity
1.	Menggubal Akta, Peraturan, Tataamalan Industri, Garis Panduan dan Pekeliling Ketua Pengarah baharu <i>Enacting new Acts, Regulations, Industry Codes of Practice, Guidelines and Director-General Circulars</i>	Peraturan baharu yang sedang digubal di bawah AKJ (Akta 139) dan AKKP (Akta 514): i. Peraturan Jentera Berbahaya; ii. Peraturan Prosedur Siasatan; iii. SPKKP; iv. Peraturan CLASS. v. Peraturan Pemeriksaan Skim Khas (Pemeriksaan Berasaskan Risiko)  Garis Panduan dan Tataamalan baharu di bawah Akta 139 dan Akta 514: i. Tataamalan Pendedahan Bunyi Bising <i>The new regulations being promulgated under the FMA (Act 139) and OSHA (Act 514):</i> <i>i. Dangerous Machinery Regulation;</i> <i>ii. Rules on Investigation Procedures;</i> <i>iii. Occupational Safety and Health Management System (OSHMS);</i> <i>iv. CLASS Regulation; and</i> <i>v. Special Scheme Inspection (Risk-Based Inspection) Regulation.</i>  <i>New Guidelines and Codes of Practice under Act 139 and Act 514:</i> <i>i. Code of Practice on Noise Exposure.</i>
2.	Menyemak Akta, Peraturan, Tataamalan Industri, Garis Panduan dan Pekeliling Ketua Pengarah sedia ada <i>Reviewing existing Acts, Regulations, Industry Codes of Practice, Guidelines and Director-General Circulars</i>	Akta 514 (Akta Ibu). Lima peraturan: i. Peraturan BOWEC; ii. Peraturan Orang Menjaga; iii. Peraturan USECHH; iv. Peraturan SHO; dan v. Perintah SHO <i>Act 514 (Main Act).</i> <i>Five Regulations:</i> <i>i. BOWEC Regulation;</i> <i>ii. Person-in-Charge Regulation;</i> <i>iii. USECHH Regulation;</i> <i>iv. SHO Regulation; and</i> <i>v. SHO Order.</i>
3.	Bertindak sebagai urus setia kepada SWO <i>Serving as the secretariat to SWO</i>	Dalam proses menggubal empat standard: i. MS Safety Signage used in workplaces; ii. MS 866:1983 – Code of Practice for method of defining, recording and assessing work injuries. <i>In the process of drafting four standards:</i> <i>i. MS Safety Signage used in workplaces;</i> <i>ii. MS 866:1983 – Code of Practice for method of defining, recording and assessing work injuries.</i>

Polisi semakan JKKP menetapkan bahawa setiap tataamalan industri, Garis panduan dan pekeling Ketua Pengarah hendaklah disemak setiap lima tahun. Oleh itu, Seksyen Penggubalan berusaha untuk melaksanakan polisi tersebut dan melihat kesesuaian dengan kehendak dan keperluan JKKP dari semasa ke semasa.

*The DOSH-revised policy stipulates that each industry codes of practice, guidelines, and Director-General Circulars shall be reviewed every five years. Therefore, this Section seeks to implement the policy and to determine its suitability from time to time according to the needs and requirements of the DOSH.*

## Aktiviti Pemantauan Bahagian Dasar Dan Penyelidikan

Salah satu fungsi BDP adalah menjalankan pemantauan ke atas laporan kemalangan yang disiasat oleh Jabatan melalui pejabat negeri. Pada tahun 2012, jumlah kes kemalangan yang disiasat adalah 2429 berbanding 2534 kes pada tahun 2011. Bilangan kes kemalangan yang disiasat pada tahun ini menurun sebanyak 4.1 peratus berbanding tahun 2011. Pecahan kes kemalangan mengikut sektor adalah seperti di bawah:

## Monitoring Activities Of Policy Analysis And Research Division

One of the functions of this Division is to carry out monitoring of accident reports investigated by the Department through the state offices. In 2012, the number of accidents investigated is 2429 compared to 2534 cases in 2011. The number of accidents under investigation for this year decreased by 4.1 percent compared to 2011. The breakdown of accidents by sector is as follows:

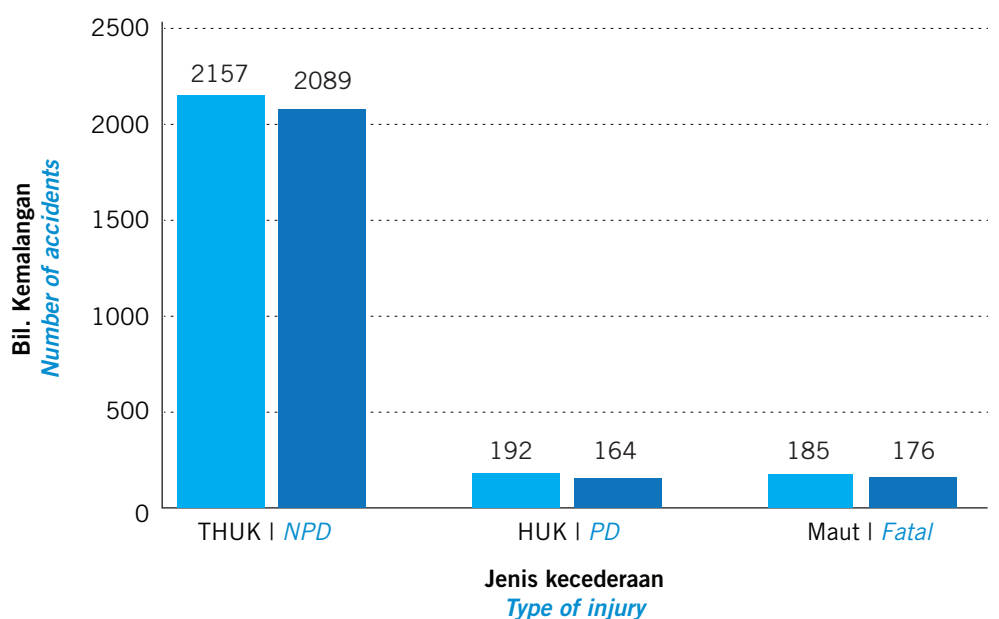
Jadual 3: Bilangan kemalangan mengikut jenis kenderaan.

Table 3: Number of accidents by type of injury.

Jenis Kecederaan Type of Injury	2011	2012	Peratusan Peningkatan(+) / Penurunan(-) Percentage of Increase(+) / Decrease(-)
Kemalangan tanpa hilang upaya kekal (THUK) <i>Non-permanent disability accidents (NPDA)</i>	2157	2089	- 2.7%
Kemalangan hilang upaya kekal (HUK) <i>Permanent disability accidents (PDA)</i>	192	164	-1.1%
Kemalangan maut <i>Fatal accidents</i>	185	176	-0.4%
Jumlah keseluruhan Total	2534	2429	-4.1%

Graf 1: Jumlah kemalangan yang dilaporkan mengikut jenis kenderaan.

Graph 1: Total reported accidents by type of injury.



■ 2010 ■ 2011

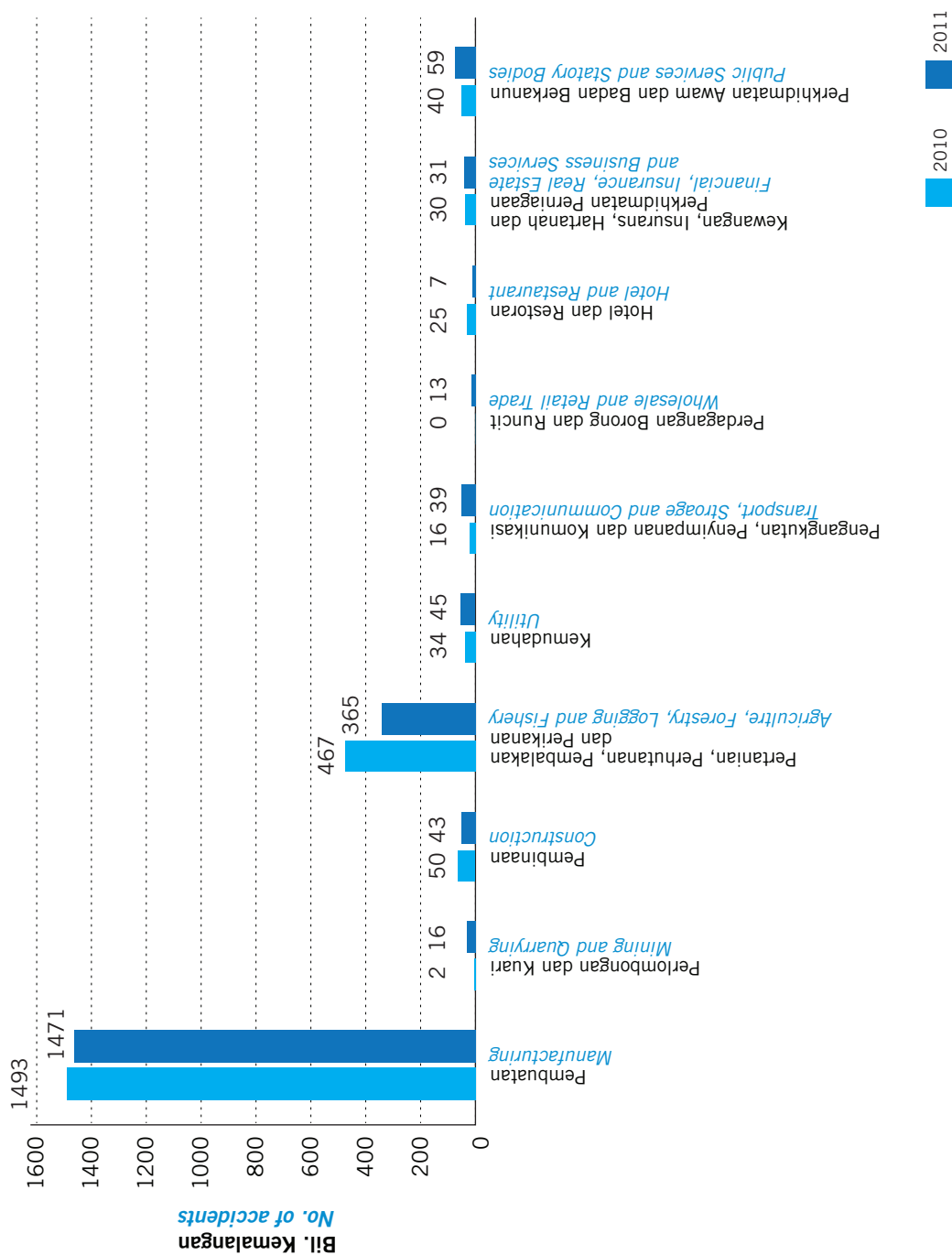


Jadual 4: Kemalangan THUK mengikut sektor.

Table 4: NPD accidents by sector.

Sektor Sector	2011	2012	Peratusan Peningkatan(+) / Penurunan(-) Percentage of Increase(+) / Decrease(-)
Pembuatan <i>Manufacturing</i>	1493	1471	-1.0%
Perlombongan dan kuari <i>Mining and quarrying</i>	2	16	0.6%
Pembinaan <i>Construction</i>	50	43	-0.3%
Pertanian, perhutanan, pembalakan, dan perikanan <i>Agriculture, forestry, logging and fishery</i>	467	365	-4.7%
Kemudahan <i>Utility</i>	34	45	0.5%
Pengangkutan, penyimpanan, dan komunikasi <i>Transport, storage, and communication</i>	16	39	1.1%
Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	0	13	0.6%
Hotel dan restoran <i>Hotel and restaurant</i>	25	7	-0.8%
Kewangan, insurans, hartanah, dan perkhidmatan perniagaan <i>Finance, insurance, real estate and business services</i>	30	31	0.0%
Perkhidmatan awam dan Badan Berkanun <i>Public services and statutory bodies</i>	40	59	0.9%

Graf 2: Kemalangan THUK mengikut sektor.  
Graph 2: NPD accidents by sector.



Jadual 5: Kemalangan HUK mengikut sektor.

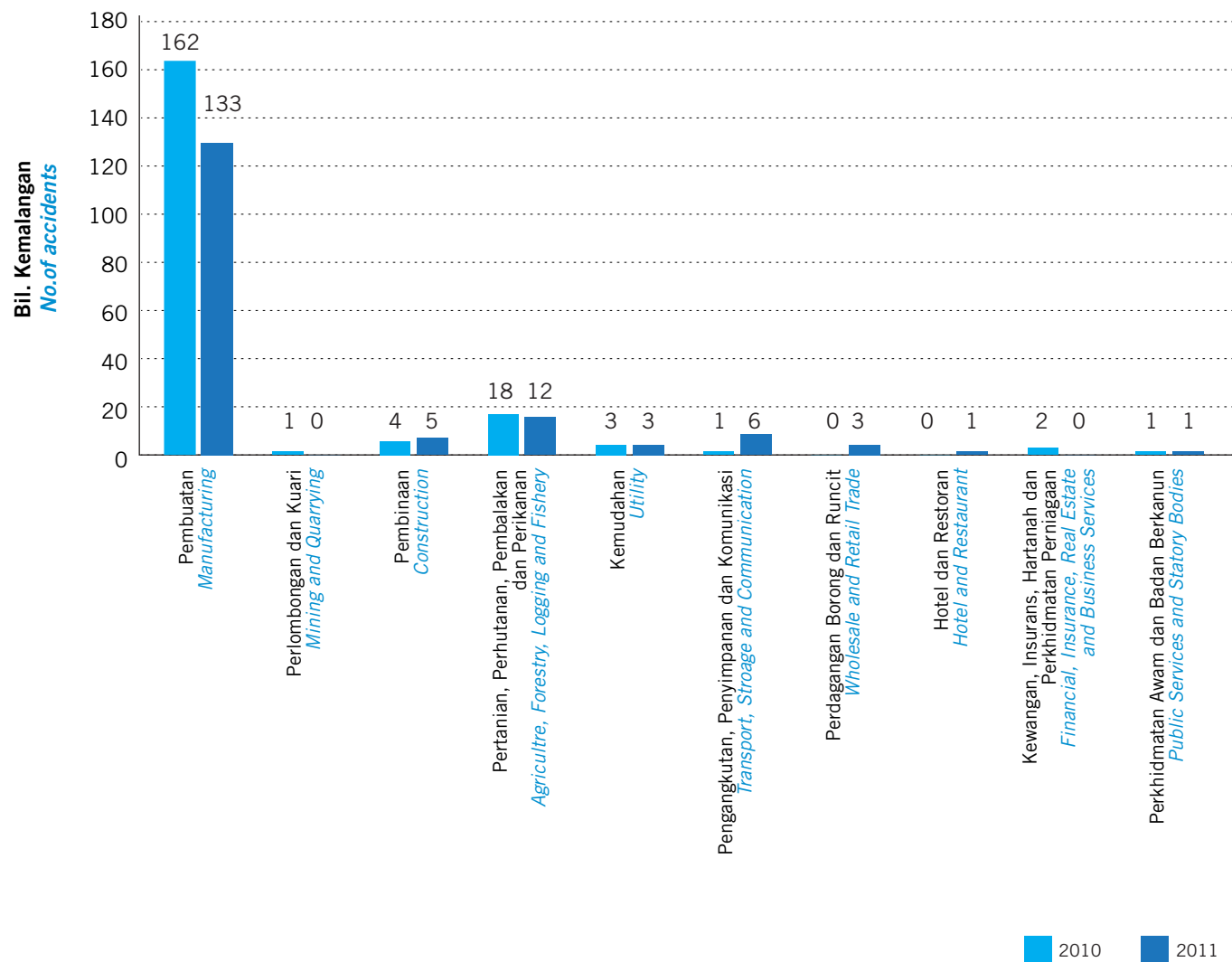
Table 5: PD accidents by sector.

Sektor Sector	2011	2012	Peratusan Peningkatan(+) / Penurunan(-) Percentage of Increase(+) / Decrease(-)
Pembuatan <i>Manufacturing</i>	162	133	-15.1%
Perlombongan dan kuari <i>Mining and quarrying</i>	1	0	-0.5%
Pembinaan <i>Construction</i>	4	5	0.5%
Pertanian, perhutanan, pembalakan, dan perikanan <i>Agriculture, forestry, logging and fishery</i>	18	12	-3.1%
Kemudahan <i>Utility</i>	3	3	0.0%
Pengangkutan, penyimpanan, dan komunikasi <i>Transport, storage, and communication</i>	1	6	2.6%
Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	0	3	1.6%
Hotel dan restoran <i>Hotel and restaurant</i>	0	1	0.5%
Kewangan, insurans, hartanah, dan perkhidmatan perniagaan <i>Finance, insurance, real estate and business services</i>	2	0	-1.0%
Perkhidmatan awam dan Badan Berkanun <i>Public services and statutory bodies</i>	1	1	0.0%



Graf 3: Kemalangan HUK mengikut sektor.

Graph 3: PD accidents by sector.



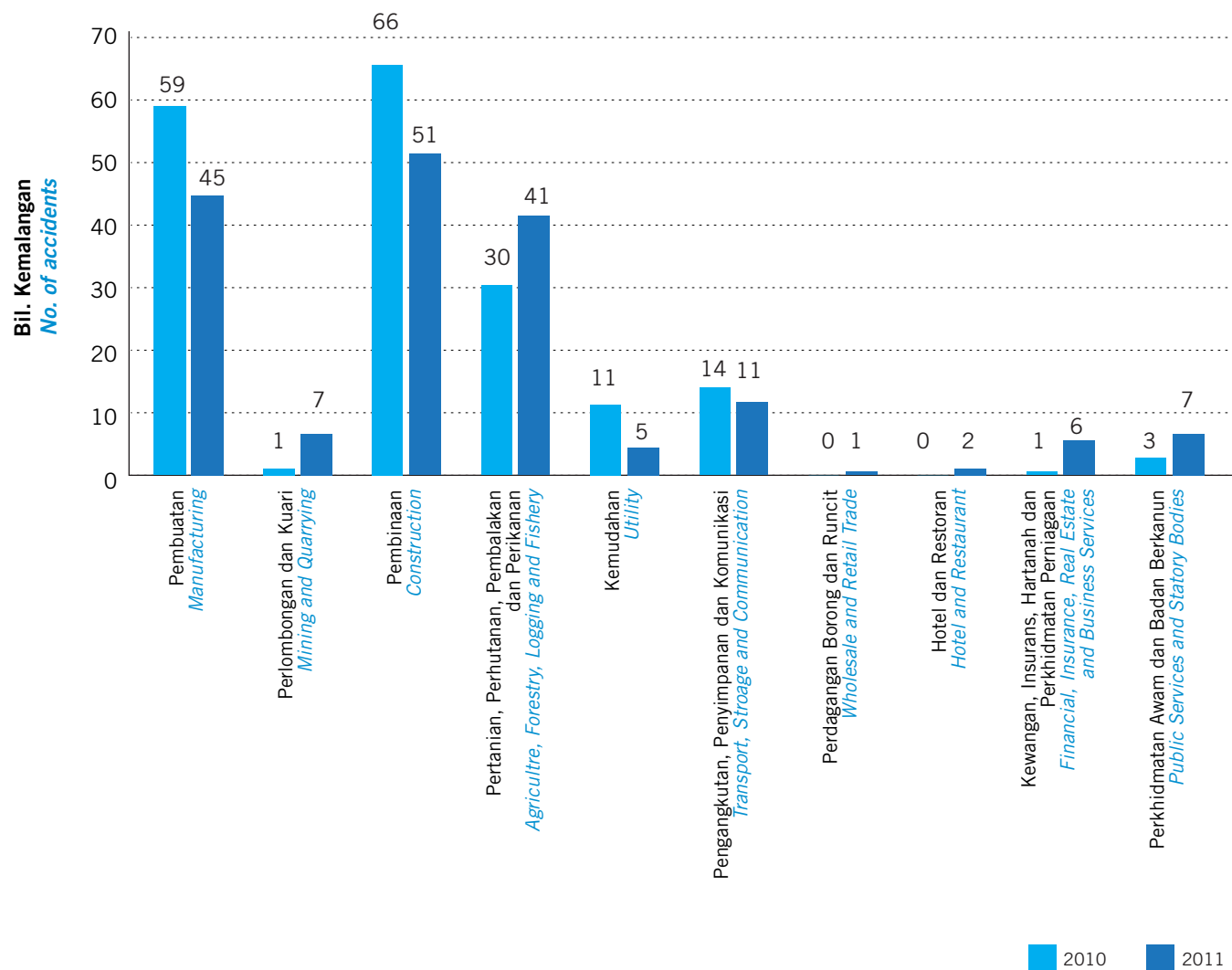
Jadual 6: Kemalangan Maut mengikut sektor

Table 6: Fatal accidents by sector.

Sektor Sector	2011	2012	Peratusan Peningkatan(+) / Penurunan(-) Percentage of Increase(+) / Decrease(-)
Pembuatan <i>Manufacturing</i>	59	45	-7.6%
Perlombongan dan kuari <i>Mining and quarrying</i>	1	7	3.2%
Pembinaan <i>Construction</i>	66	51	-8.1%
Pertanian, perhutanan, pembalakan, dan perikanan <i>Agriculture, forestry, logging and fishery</i>	30	41	5.9%
Kemudahan <i>Utility</i>	11	5	-3.2%
Pengangkutan, penyimpanan, dan komunikasi <i>Transport, storage, and communication</i>	14	11	-1.6%
Perdagangan borong dan runcit <i>Wholesale and retail trade</i>	0	1	0.5%
Hotel dan restoran <i>Hotel and restaurant</i>	0	2	1.1%
Kewangan, insurans, hartanah, dan perkhidmatan perniagaan <i>Finance, insurance, real estate and business services</i>	1	6	2.7%
Perkhidmatan awam dan Badan Berkanun <i>Public services and statutory bodies</i>	3	7	2.2%

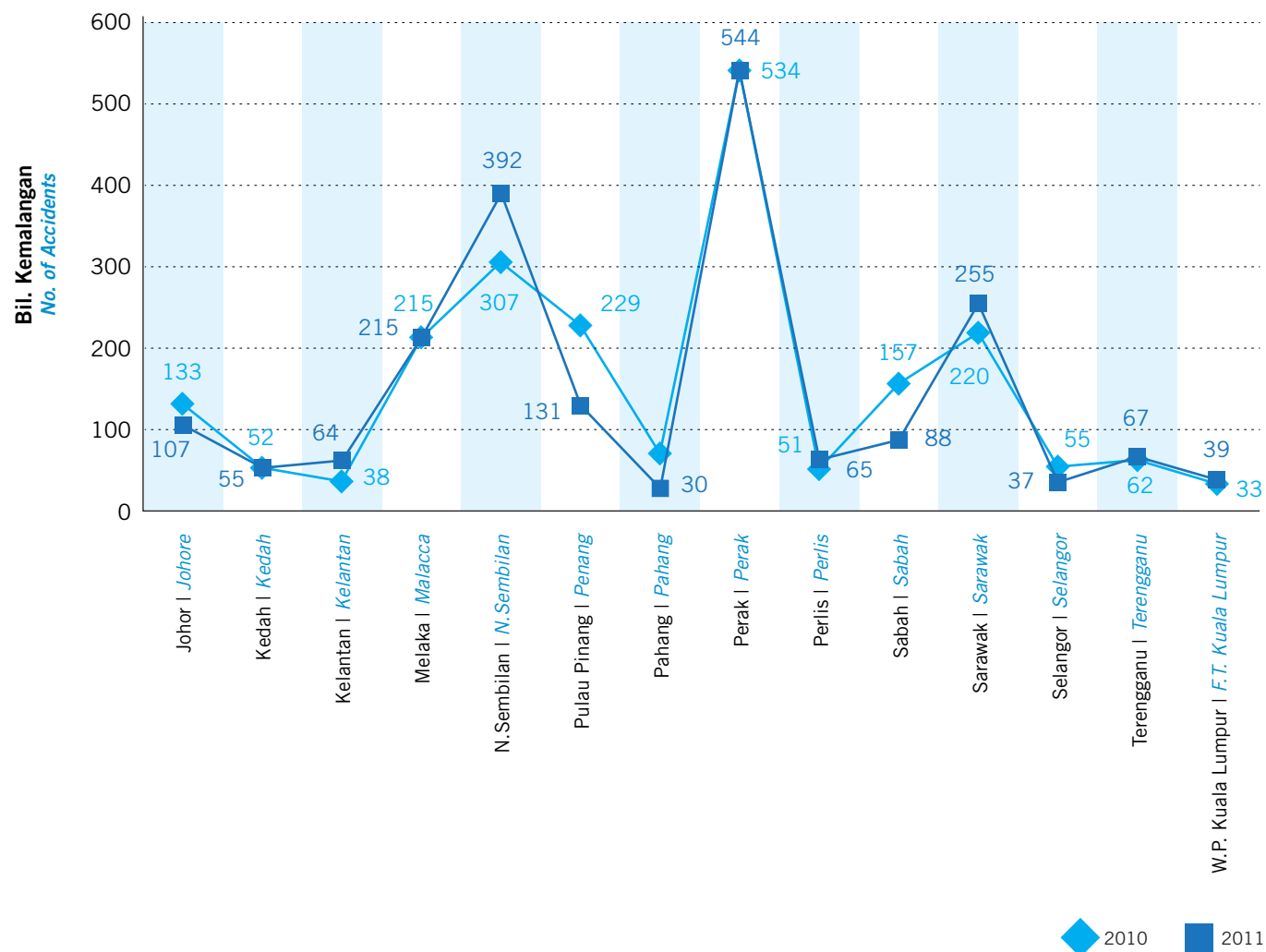
Graf 4: Kemalangan maut mengikut sektor.

Graph 4: Fatal accidents by sector.

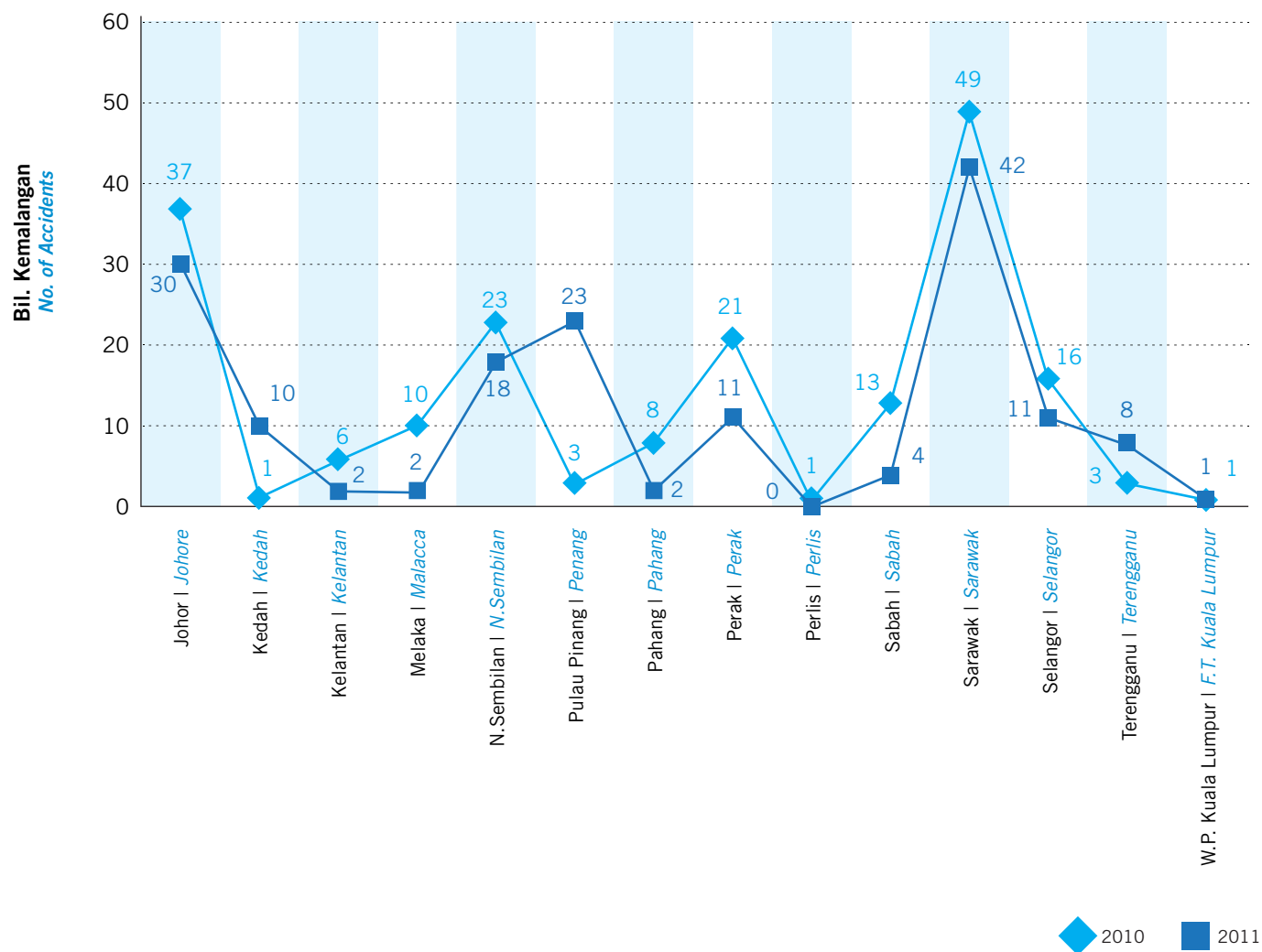




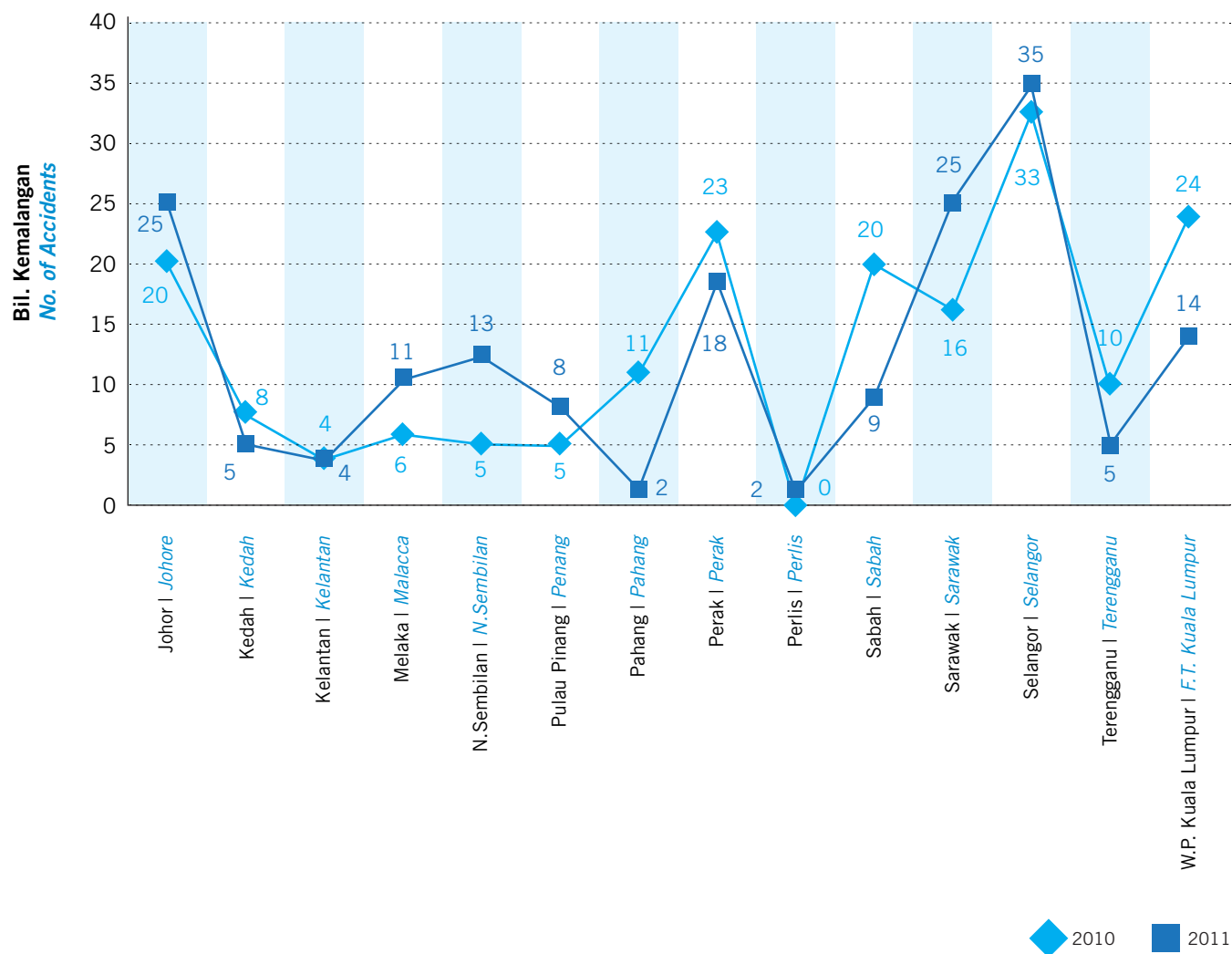
Graf 5: Kemalangan THUK mengikut negeri.  
 Graph 5: NPD accidents by state.



Graf 6: Kemalangan HUK mengikut negeri.  
 Graph 6: HUK accidents by state.

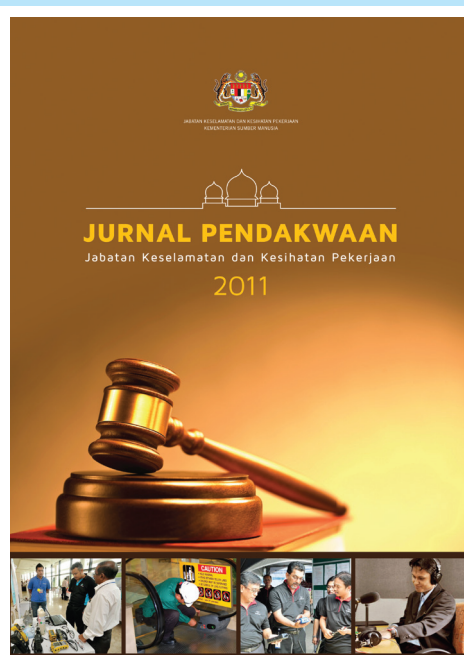


Graf 7: Kemalangan maut mengikut negeri.  
 Graph 7: Fatal accidents by state.





## Penerbitan Jurnal Pendakwaan Jabatan Keselamatan dan Kesihatan Pekerjaan 2011 *Publication of DOSH Prosecution Jurnal 2011*



Jurnal Pendakwaan Jabatan Keselamatan dan Kesihatan Pekerjaan 2011 (Jurnal) ini disusun oleh Bahagian Dasar dan Penyelidikan (BDP) dengan kerjasama penasihat undang-undang Jabatan dan dengan kes yang dilaporkan oleh pejabat JKKP negeri dengan komitmen yang tinggi daripada Pegawai Penyiasat dan Pegawai Pendakwa. Jurnal ini bertujuan membantu Pegawai Penyiasat dan Pegawai Pendakwa membuat persediaan yang teliti dalam menjalankan kerja pendakwaan. Dengan adanya Jurnal ini, Jabatan komited untuk membantu pegawai yang terlibat dalam aktiviti penyiasatan dan pendakwaan dengan menyediakan rujukan kes bagi tujuan pendakwaan.

*The Jurnal Pendakwaan Jabatan Keselamatan dan Kesihatan Pekerjaan 2011 (Prosecution Journal 2011) was compiled by the Policy and Research Division (PRD) in collaboration with the Department's Legal Advisors, and reported by state DOSH offices with a strong commitment from the Investigating Officer and Public Prosecutor. This journal is intended to assist the Investigating Officer and Public Prosecutor in making a thorough preparation for prosecution. With the Prosecution Journal, the Department shows its commitment in helping the officers involved in the investigation and prosecution by providing case references to facilitate prosecution.*

Gambar 1: Jurnal Pendakwaan Jabatan Keselamatan dan Kesihatan Pekerjaan 2011.  
*Photo 1: Jurnal Pendakwaan Jabatan Keselamatan dan Kesihatan Pekerjaan 2011.*

## Penerbitan Buku Maklumat dan Data Ringkas *Publication of Maklumat dan Data Ringkas (Quick Info and Data)*

Buku Maklumat dan Data Ringkas ini diterbitkan untuk membantu kakitangan Jabatan dalam menjalankan tugas harian, di samping untuk menjawab pelbagai soalan yang sering diajukan oleh orang awam kepada Jabatan. Di samping itu, buku ini dapat menyeragamkan maklumat yang akan disalurkan kepada orang awam berkenaan statistik Jabatan.

*The Maklumat dan Data Ringkas (Quick Info and Data booklet) published by the DOSH serves to assist the Department employees in carrying out their daily tasks as well as in answering frequently asked questions from the general public. In addition, this book also provides standardised statistical information of the Department for public consumption.*



Gambar 2: Buku Maklumat dan Data Ringkas.  
*Photo 2: Maklumat dan Data Ringkas.*

## Penerbitan Garis Panduan Pendaftaran Penyelia Keselamatan Tapak Bina dan pamflet Panduan Pendaftaran Penyelia Keselamatan Tapak Bina “*Site Safety Supervisor*”

*Publication of Garis Panduan Pendaftaran Penyelia Keselamatan Tapak Bina (Site Safety Supervisor Registration Guidelines) and pamphlet*



Gambar 3: Garis Panduan Pendaftaran Penyelia Keselamatan Tapak Bina dan pamflet Panduan Pendaftaran Penyelia Keselamatan Tapak Bina “*Site Safety Supervisor*”.

*Photo 3: Garis Panduan Pendaftaran Penyelia Keselamatan Tapak Bina, the guidelines and pamphlet.*

Di bawah Peraturan 25(1), Peraturan-peraturan Kilang dan Jentera (Kendalian Bangunan dan Kerja-kerja Binaan Kejuruteraan) (Keselamatan) 1986 [BOWEC], kontraktor utama hendaklah melantik seorang penyelia keselamatan tapak bina separuh masa yang meluangkan masanya sekurang-kurangnya lima belas jam seminggu khusus bagi pengawasan keselamatan dan menggalakkan tatakerja yang selamat amnya di tapak bina. Antara tugas penyelia keselamatan tapak bina adalah:

- Memeriksa dan memperbaiki mana-mana keadaan tidak selamat di tapak bina;
- Membetulkan mana-mana amalan tidak selamat;
- Memeriksa kerja-kerja sub-kontraktor untuk memastikan Akta dan Peraturan yang tertakluk ke atasnya dipatuhi; dan
- Memaklumi terus penyelia keselamatan kontraktor berkenaan dengan keselamatan bekerja bagi kerja yang dijalankan oleh subkontraktor.

*Under Regulation 25 (1) of the Factories and Machinery (Building Operations and Works of Engineering Construction) (Safety) Regulations 1986 (BOWEC), the main contractor shall appoint a part-time site safety supervisor who should spend at least fifteen hours per week exclusively on safety supervision and on promoting the safe conduct of work generally within the site. Among the duties of the site safety supervisor are:*

- To inspect and repair any unsafe structures at the construction site;*
- To correct any unsafe practices;*
- To examine the work of sub-contractors to ensure that the Act and Regulations made thereunder are complied with; and*
- To communicate directly with the safety supervisor regarding work safety matters of the sub-contractor.*

## Penerbitan Modul Latihan “Pembangunan Standard Kemahiran/Kompetensi Pegawai JKPP bagi Menjalankan Penyiasatan”

### *Publication of Modul Latihan Pembangunan Standard Kemahiran/Kompetensi Pegawai JKPP bagi Menjalankan Penyiasatan (Competency Standards Development of the DOSH Officers in Conducting Investigations Training Module)*

Modul Latihan ini dibangunkan untuk:

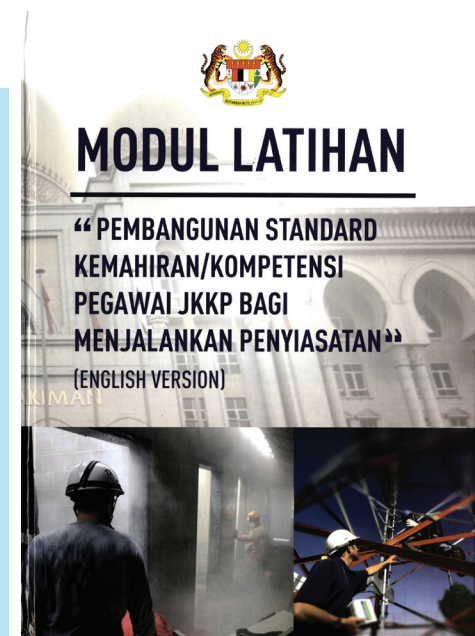
- Merancang dan melaksanakan semua proses pengumpulan maklumat tugas yang lengkap dan terkini;
- Memanfaatkan kumpulan focus yang pakar dan kumpulan yang berpengetahuan tentang pelbagai kerja dan aktiviti JKPP;
- Mengadakan bengkel untuk mendapatkan pandangan dan input daripada pelbagai pihak yang dikenal pasti;
- Mendapatkan maklumat tambahan yang berkaitan dengan pelbagai perkara berkaitan modul latihan yang hendak dibangunkan;
- Memastikan Standard Kemahiran dibangunkan dengan berpanduan format yang ditetapkan dan diluluskan oleh Jabatan Pembangunan Kemahiran; dan
- Mengadakan satu sesi percubaan termasuk penilaian setelah modul yang dibangunkan disemak dan dibaiki dengan lengkap.

*This training module was developed:*

- To plan and implement all processes of information gathering of completed and current tasks;*
- To employ focus groups comprising of experts and individuals who are knowledgeable about the work and activities of the DOSH;*
- To conduct workshops to gather views and input from identified parties;*
- To obtain additional information on matters pertaining to the training modules to be developed;*
- To ensure the development of skill standards should be based on the format specified and approved by the Department of Skills Development; and*
- To conduct a training session (trial-run), including assessments, after the developed module has been completely revised and improved.*

Gambar 4: Modul Latihan “Pembangunan Standard Kemahiran/Kompetensi Pegawai JKPP bagi Menjalankan Penyiasatan”.

*Photo 4: Modul Latihan Pembangunan Standard Kemahiran/Kompetensi Pegawai JKPP bagi Menjalankan Penyiasatan.*





## Pelancaran *Safe Work Practices: Guideline for Media Professionals*

Pada tanggal 2 September 2011, negara dikejutkan dengan berita kematian seorang jurukamera BERNAMA TV, iaitu Noramfaizul Mohd Nor. Mangsa terkorban akibat terkena peluru sesat semasa menyertai misi kemanusiaan di Somalia. Susulan kejadian itu, Kementerian Sumber Manusia melalui Jabatan Keselamatan dan Kesihatan Pekerjaan telah mengadakan satu sesi mesyuarat bersama dengan organisasi media kebangsaan di Ibu Pejabat JKKP bagi mendapatkan maklumat dan cadangan berhubung penghasilan buku garis panduan kerja selamat kepada petugas media.

Buku ini diterbitkan sebagai panduan dan rujukan dari segi prosedur operasi selamat (SOP) semasa menjalankan tugas kepada semua petugas media yang terlibat. Buku ini mengupas secara terperinci tentang kaedah yang difikirkan selamat sebelum sesuatu pekerjaan atau aktiviti dilaksanakan di samping memberikan panduan dalam membuat penilaian terhadap sesuatu risiko, dan seterusnya membantu pihak majikan atau pekerja mengambil langkah yang sewajarnya sekiranya berlaku kejadian yang tidak diingini.

Dalam memastikan manual ini mempunyai isi penyampaian yang mantap dan berguna, proses pengumpulan maklumat dilakukan dengan pelbagai cara dan peringkat bermula dengan melakukan kajian ke atas SOP serta garis panduan yang telah dibangunkan oleh organisasi media antarabangsa, mengadakan sesi mesyuarat dengan wakil media, dan bertemu dengan institusi latihan berkaitan dengan media. Seterusnya, draf manual dikemukakan kepada organisasi media termasuklah pertubuhan bukan kerajaan (NGO) untuk mendapatkan sebarang pendapat dan komen.

Pada 19 Februari 2012, buku ini telah siap dibangunkan dan dilancarkan oleh YB Menteri Sumber Manusia Datuk Seri Dr. S. Subramaniam di Hotel Seri Pacific, Kuala Lumpur.

## Launch of *Safe Work Practices: Guideline for Media Professionals*

*On 2 September 2011, the nation was shaken by news of the death of a BERNAMA TV cameraman, Noramfaizul Mohd Nor. The victim was killed by a stray bullet during a humanitarian mission in Somalia. Following the incident, the Ministry of Human Resources, through the Department of Occupational Safety and Health held a joint session with the national media organisation at the DOSH Headquarters for the purposes of obtaining information and recommendations with respect to the production of safe work guidelines book for media personnel.*

*The book is published as a guide and reference on safe operating procedures (SOP) for all media personnel when they are on the job. The book describes in detail the methods deemed safe before any work or activity is undertaken, provides guidance in making an assessment of a particular risk, and assists the employer or employee in taking the appropriate measures in the event of a mishap.*

*In order to ensure that the content delivery of this manual is robust and useful, the process of gathering data was carried out in different ways and stages, beginning with a research on the SOPs and guidelines which have been developed by international media organisations, a series of meetings with representatives of the media and training institutions related to the media were also carried out, and finally, the draft of the manual was submitted to media organisations, including non-governmental organisations (NGOs), for any suggestions and feedback.*

*On 19 February 2012, the book was launched by the Minister of Human Resources, Datuk Seri Dr. S. Subramaniam, at the Seri Pacific Hotel, Kuala Lumpur.*

Gambar 5: Pelancaran *Safe Work Practices: Guideline for Media Professionals* oleh YB Menteri Sumber Manusia  
Photo 5: The launching of *Safe Work Practices: Guideline for Media Professionals* by the Minister of Human Resources.





## Pelancaran Garis Panduan Pengurusan Merkuri dalam Industri Minyak dan Gas

Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia telah membangunkan satu garis panduan berkaitan dengan pengurusan merkuri dalam industri minyak dan gas. Garis panduan ini dibangunkan sebagai rujukan untuk majikan dan pekerja dalam menguruskan pendedahan kepada bahan kimia berbahaya yang telah disenaraikan dalam Jadual 1, di bawah Peraturan-peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan dan Standard Pendedahan kepada bahan Kimia Berbahaya ) 2000, iaitu merkuri. Objektifnya adalah untuk menetapkan standard amalan kerja selamat yang disyorkan untuk kegunaan dalam industri minyak dan gas.

Pada 14 Mei 2012, Garis Panduan ini dilancarkan oleh Timbalan Menteri Sumber Manusia, YB Senator Dato' Maznah Mazlan di Awana Kijal, Terengganu.

## Launch of the Mercury Management Guidelines in the Oil and Gas Industry

*The Department of Occupational Safety and Health Malaysia (DOSH) has developed a set of guidelines relating to the management of mercury in the oil and gas industry. The guidelines is intended as a reference for employers and employees in managing exposure to mercury, a hazardous chemical as listed in Table 1 of the Occupational Safety and Health (Use and Standards of Exposure of Chemicals Hazardous to Health) Regulations 2000. The objective is to set the standards on safe work practices that are recommended for use in the oil and gas industry.*

*On 14 May 2012, the guidelines were launched by the Deputy Minister of Human Resources, Senator Dato' Maznah Mazlan at Awana Kijal, Terengganu.*

Gambar 6: Pelancaran Garis Panduan Pengurusan Merkuri dalam Industri Minyak dan Gas oleh YB Timbalan Menteri Sumber Manusia.  
Photo 6: The launching of the Mercury Management Guidelines in the Oil and Gas Industry by the Deputy Minister of Human Resources.



## Program Kerjasama Teknikal Malaysia (MTCP) 2012

Pada tahun 11 – 22 Jun 2012, Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia menganjurkan kursus di bawah Program Kerjasama Teknikal Malaysia (MTCP) untuk negara membangun, terutamanya negara ASEAN dan OIC. Program Train the OSH Trainer: Construction Project Planning Management ini adalah usaha sama JKKP dengan Unit MTCP di bawah Kementerian Luar Negara dan KLIA College, Sepang dengan tujuan untuk berkongsi maklumat, pengetahuan serta kepakaran pengalaman amalan baik dalam pengurusan KKP. Para peserta yang menghadiri kursus merupakan wakil negara yang berikut:

## Malaysian Technical Co-operation Programme (MTCP) 2012

On 11 – 22 June 2012, the Department of Occupational Safety and Health Malaysia organised a course under the Malaysian Technical Co-operation Programme (MTCP) for the developing countries, particularly ASEAN and the OIC countries. The Train the OSH Trainer: Construction Project Planning Management course was a joint effort by the DOSH and the MTCP Unit under the Ministry of Foreign Affairs and Sepang KLIA College with the aim of sharing information, knowledge, and experience on good practices in the management of occupational safety and health. The participants who attended the course comprised of representatives from the following countries:

Negara   Country	Bilangan Peserta   No. of Participants
Brunei   <a href="#">Brunei</a>	2
Kemboja   <a href="#">Cambodia</a>	2
Indonesia   <a href="#">Indonesia</a>	2
Laos   <a href="#">Laos</a>	2
Filipina   <a href="#">Philippines</a>	1
Thailand   <a href="#">Thailand</a>	1
Vietnam   <a href="#">Vietnam</a>	1
Sudan   <a href="#">Sudan</a>	1
Uganda   <a href="#">Uganda</a>	1
Malaysia   <a href="#">Malaysia</a>	2
<b>Jumlah   Total</b>	<b>15</b>

Gambar 7: Ucapan Dato' Ketua Pengarah JKKP.  
Photo 7: Speech by the Director-General of the DOSH.







Gambar 8: Dato' Ketua Pengarah JKKP menyampaikan hadiah penghargaan kepada para peserta.  
Photo 8: The Director-General of the DOSH presenting tokens of appreciation to the participants.

Gambar 9: Para peserta program MTCP bersama Ketua Pengarah JKKP.  
Photo 9: Participants of the MTCP programme got to meet the Director-General of the DOSH.





## Laporan Seminar dan Dialog Pengucapan Awam Konvensyen ILO No. 155 (C155)

Seminar dan Dialog Pengucapan Awam bagi Konvensyen ILO (International Labour Organisation) No. 155 telah diadakan dengan jayanya di Pusat Konvensyen Shah Alam, Shah Alam, Selangor pada 9 Oktober 2012. Seminar dan dialog ini bertujuan memberikan penerangan, maklumat, dan pendedahan kepada majikan, pekerja, dan wakil sektor awam di Malaysia berhubung Konvensyen ILO No. 155 (C155).

Seminar dan dialog ini dirasmikan oleh Ketua Pengarah Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia, YBhg. Dato' Dr. Ir. Johari bin Basri. Seramai lebih 300 orang peserta terdiri daripada majikan, pekerja, wakil persatuan dan pertubuhan serta wakil sektor awam menghadiri seminar dan dialog ini.

## Seminar and Public Consultation On ILO Convention No. 155 (C155)

*The Seminar and Public Consultation on International Labour Organisation (ILO) Convention No. 155 was successfully held at the Shah Alam Convention Centre in Shah Alam, Selangor on 9 October 2012. This seminar and dialogue aimed to explain and provide information as well as exposure to employers, employees, and representatives of the public sector in Malaysia on ILO Convention No. 155 (C155).*

*The seminar and dialogue was officiated by the Director-General of the Department of Occupational Safety and Health of Malaysia, Dato' Dr. Ir. Johari bin Basri. More than 300 participants comprised of employers, employees, representatives of associations and organisations, and public sector representatives attended the seminar and dialogue.*

Gambar 10: Perasmian oleh Ketua Pengarah JKKP.  
Photo 10: Launch officiated by the Director-General of the DOSH.

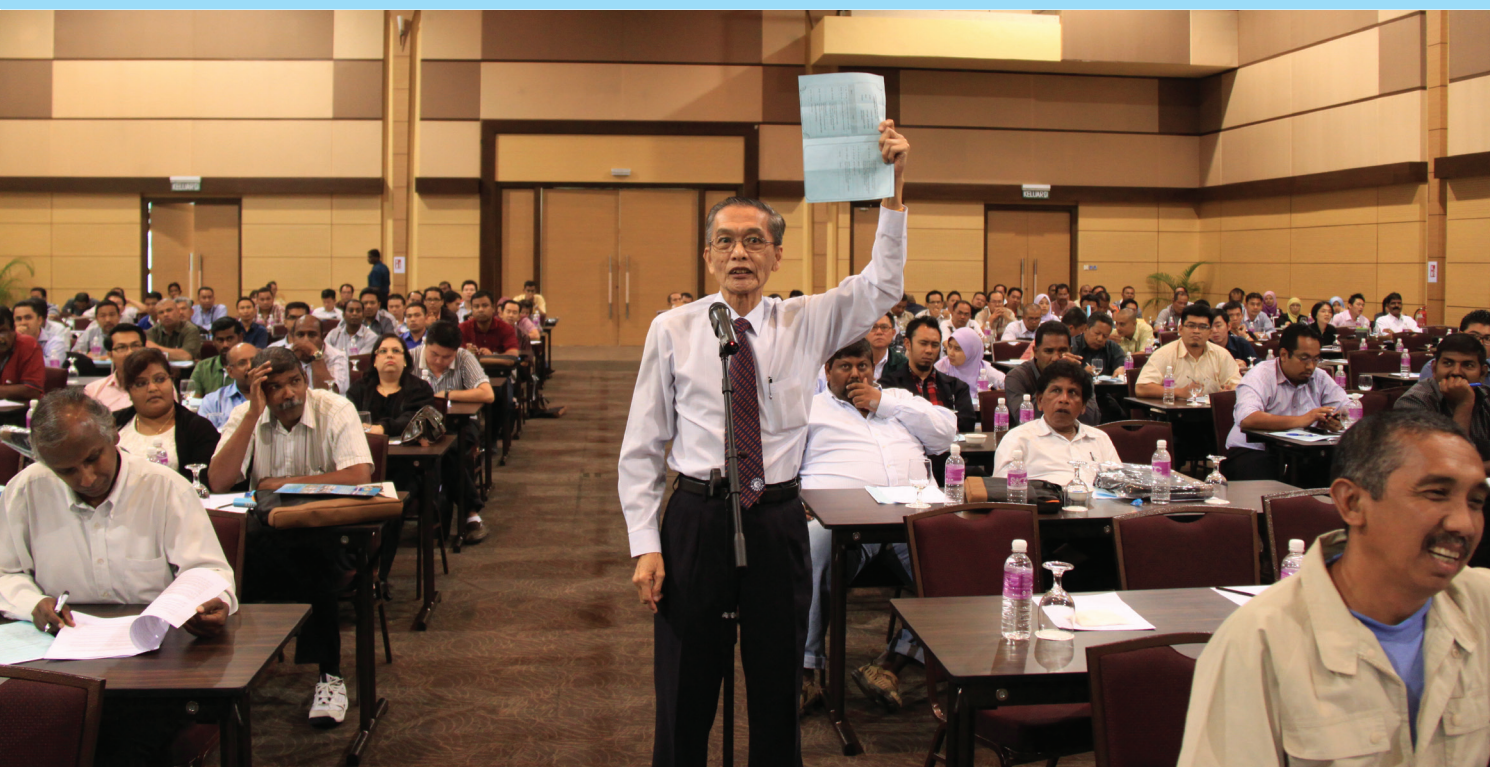






Gambar 11: Sesi dialog bersama peserta seminar.  
*Photo 11: Dialogue with seminar participants.*

Gambar 12: Peserta seminar.  
*Photo 12: Seminar participants.*











# Bahagian Keselamatan Industri

## *Industrial Safety Division*



## Bahagian Keselamatan Industri

### *Industrial Safety Division*

Bahagian Keselamatan Industri terdiri daripada Seksyen Rekabentuk dan Seksyen Peperiksaan, Persijilan, dan Pengiktirafan. Pada tahun 2012, Bahagian Keselamatan Industri di anggotai seramai 41 orang kakitangan. Objektif bahagian ini adalah seperti yang berikut:

- i. Menyemak, memproses, dan meluluskan spesifikasi rekabentuk dandang stim, pengandung tekanan tak berapi, lif, dan mesin angkat.
- ii. Mengawal selia perkhidmatan Firma Yang Kompeten (FYK) dan Orang Yang Kompeten (OYK) supaya mematuhi kehendak undang-undang dan peraturan yang ditetapkan melalui perkhidmatan pendaftaran, pemantauan, dan pembaharuan pendaftaran.

*The Industrial Safety Division comprised of the Design Section and the Examination, Certification and Accreditation Section with a total staff count of 41 people in 2012. Its objectives were to:*

- i. review, process, and approve the design specifications of steam boilers, unfired pressure vessels, lifts, and hoisting machinery.*
- ii. oversee and manage the services of competent firms and persons in compliance with applicable laws and regulations in the registration, monitoring, and renewal of registration services.*

### Seksyen Rekabentuk

Seksyen Rekabentuk terdiri daripada empat unit, iaitu Unit Dandang Stim (DS), Unit Pengandung Tekanan Tak Berapi (PTTB), Unit Lif, dan Unit Mesin Angkat (MA). Kesemua unit tersebut bertanggungjawab dalam memastikan rekabentuk jentera berbahaya seperti dandang stim, pengandung tekanan tak berapi, lif, eskalator, dan mesin angkat direkabentuk menepati piawaian yang diiktiraf oleh Jabatan dan dalam masa yang sama mematuhi kehendak dan keperluan yang ditetapkan dalam Akta Kilang dan Jentera 1967, melalui aktiviti-aktiviti memproses permohonan kelulusan reka bentuk bagi setiap jentera tersebut.

Selain itu, Seksyen ini juga menjalankan aktiviti-aktiviti lain seperti yang dinyatakan di bawah:

- a. Menyemak dan memproses permohonan pengecualian ujian hidrostatik ke atas dandang stim dan pengandung tekanan tak berapi baharu.
- b. Menyemak dan memproses permohonan pengubahsuaian ke atas jentera berperakuan.
- c. Menyemak dan memproses permohonan pengecualian daripada pendaftaran untuk jentera berperakuan.
- d. Menyemak semula dan membuat penambahbaikan ke atas prosedur, piawaian, garis panduan, dan sebagainya yang berkaitan dengan kelulusan reka bentuk.

### Design Section

*The Design Section housed four units, namely, the Steam Boiler Unit, Unfired Pressure Vessels Unit (UPV), Lift Unit, and Hoisting Machinery Unit. These units were collectively responsible for ensuring that the designs of dangerous machinery such as steam boilers, unfired pressure vessels, lifts, escalators, and hoisting machines meet the standards recognised by the Department and at the same time, comply with the requirements stipulated in the Factories and Machinery Act 1967, by processing the approval applications for the design of each machine.*

*In addition, this Section also executed other activities such as:*

- a. Reviewed and processed the applications for the exemption from hydrostatic tests on new steam boilers and unfired pressure vessels.*
- b. Reviewed and processed the applications for the modification of certified machinery.*
- c. Reviewed and processed the applications for the exemption from registration of certified machinery.*
- d. Revised and improved on procedures, standards, guidelines etc. related to design approval.*



Untuk tahun 2012, Seksyen ini telah memproses permohonan kelulusan reka bentuk seperti yang ditunjukkan pada Jadual 1 di bawah.

*Table 1 below shows applications for design approval processed by this Section in 2012.*

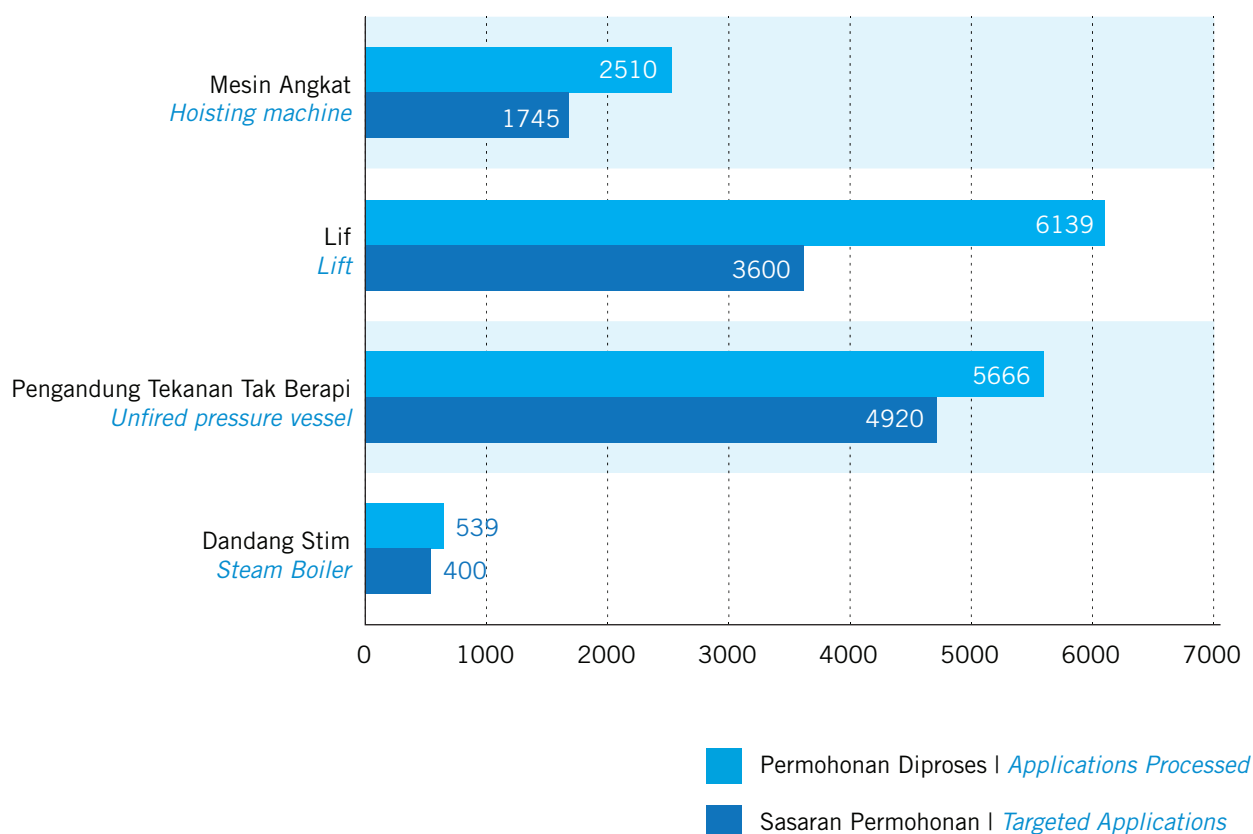
**Jadual 1: Permohonan kelulusan rekabentuk jentera yang diproses pada tahun 2012.**

*Table 1: Applications for machinery design approvals processed in 2012.*

Bil. No.	Jentera Machinery	Sasaran Permohonan Targeted Application	Permohonan Diproses Application Processed	Pencapaian (%) Achievement (%)
1.	Dandang stim <i>Steam boiler</i>	400	539	135
2.	Pengandung tekanan tak berapi <i>Unfired pressure vessel</i>	4920	5666	115
3.	Lif <i>Lift</i>	3600	6139	171
4.	Mesin angkat <i>Hoisting machine</i>	1745	2510	144

**Carta 1: Statistik kelulusan rekabentuk jentera yang diproses pada 2012.**

*Chart 1: Statistics for machinery design approvals processed in 2012.*



Statistik di bawah menunjukkan peningkatan kelulusan reka bentuk jentera yang diproses dari tahun 2008 hingga 2012.

*Statistics below shows an increase in machinery design approvals processed in 2008 till 2012.*

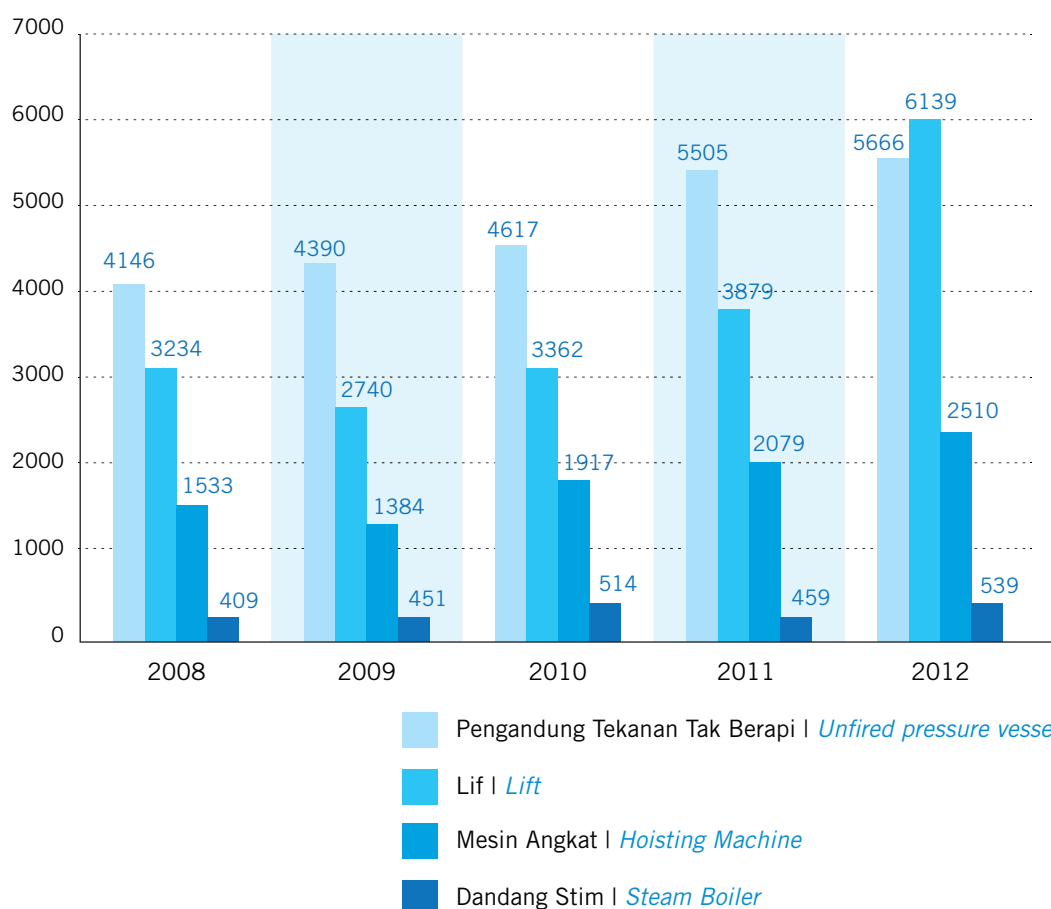
Jadual 2: Permohonan kelulusan rekabentuk jentera yang diproses dari tahun 2008 hingga 2012.

*Table 2: Machinery design approvals processed since 2008 to 2012.*

Bil. No.	Jentera Machinery	2008	2009	2010	2011	2012
1.	Dandang stim <i>Steam boiler</i>	409	451	514	459	539
2.	Pengandung tekanan tak berapi <i>Unfired pressure vessel</i>	4146	4390	4617	5505	5666
3.	Lif <i>Lift</i>	3234	2740	3362	3879	6139
4.	Mesin angkat <i>Hoisting machine</i>	1533	1384	1917	2079	2510

Carta 2: Statistik kelulusan reka bentuk jentera yang diproses dari tahun 2008.

*Chart 2: Statistics for machinery design approvals processed in 2008.*



Bagi permohonan pengecualian ujian hidrostatik, pengecualian pendaftaran jentera, dan pengubahsuaian jentera, jumlah permohonan yang telah diproses oleh seksyen ini adalah seperti di bawah:

*The applications for exemption from hydrostatic test, the applications for exemption from registration of machinery and the applications for modification of machinery processed by this section are as shown below:*

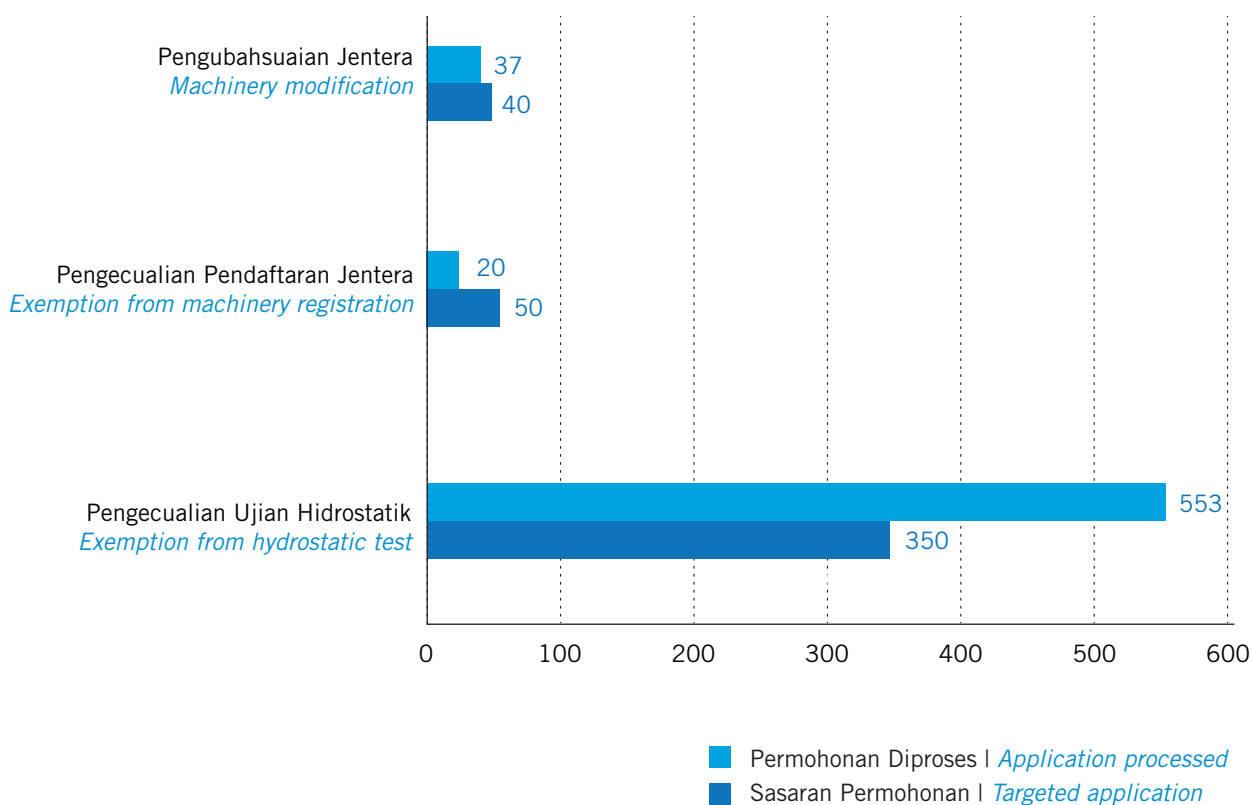
Jadual 3: Permohonan pengecualian ujian hidrostatik, pengecualian pendaftaran, dan pengubahsuaian jentera yang diproses pada tahun 2012.

**Table 3: Applications for the exemption from hydrostatic test and from machinery registration, and applications for machinery modification processed in 2012.**

Bil. No.	Jenis Permohonan <i>Types of Application</i>	Sasaran Permohonan <i>Targeted Applications</i>	Permohonan Diproses <i>Applications Processed</i>	Pencapaian (%) <i>Achievement (%)</i>
1.	Pengecualian ujian hidrostatik <i>Exemption from hydrostatic test</i>	350	553	158
2.	Pengecualian pendaftaran jentera <i>Exemption from machinery registration</i>	50	20	40
3.	Pengubahsuaian jentera <i>Machinery modification</i>	40	37	93

Carta 3: Statistik pengecualian ujian hidrostatik, pengecualian pendaftaran, dan pengubahsuaian jentera yang diproses pada tahun 2012.

**Chart 3: Statistics on applications for exemption from hydrostatic test and from machinery registration, and applications for machinery modification processed in 2012.**





## Seksyen Peperiksaan, Persijilan, dan Pengiktirafan

Seksyen Peperiksaan, Persijilan, dan Pengiktirafan (PPP) mempunyai dua unit, iaitu Unit Pengiktirafan dan Unit Peperiksaan dan Persijilan. Fungsi utama Seksyen ini adalah bagi mengawal selia Orang Yang Kompeten dan Firma Yang Kompeten yang berdaftar dengan Jabatan supaya kehendak perundangan dan peraturan yang ditetapkan sentiasa dipatuhi. Orang Yang Kompeten dan Firma Yang Kompeten perlu didaftarkan dengan Jabatan sebelum boleh melakukan aktiviti yang dikawalselia oleh Jabatan.

Berikut adalah senarai Orang Yang Kompeten (OYK) yang berdaftar dengan Jabatan:

- Pegawai Keselamatan dan Kesihatan.
- Orang Kompeten Lif.
- Orang bertanggungjawab pemasangan-penyelenggara kren menara/mesin angkat penumpang/barang dan gondola.
- Jurutera stim.
- Jurutera enjin pembakaran dalam.

Jadual 4 menunjukkan statistik permohonan OYK yang diproses oleh Seksyen Peperiksaan, Persijilan, dan Pengiktirafan untuk tahun 2012.

**Jadual 4: Statistik pendaftaran Orang Yang Kompeten yang diproses pada 2012.**

**Table 4: Statistics on applications of Competent Persons processed in 2012.**

Bil. No.	Orang Yang Kompeten Competent Person	Sasaran Permohonan Targeted Applications	Permohonan Diproses Applications Processed	Pencapaian (%) Achievement (%)
1.	Pemasang-penyelenggara mesin angkat penumpang/barang dan kren menara <i>Passenger/goods hoisting machine and tower crane installer-maintainer</i>	30	43	143
2.	Pegawai Keselamatan dan Kesihatan <i>Safety and Health Officer</i>	1160	1259	109
3.	Orang Kompeten Lif <i>Lift Competent Person</i>	60	89	148
4.	Jurutera stim - lisan <i>Steam engineer - oral</i>	350	625	179
5.	Jurutera stim - bertulis <i>Steam engineer - written</i>	400	471	118
6.	Jurutera enjin pembakaran dalam - lisan <i>Internal combustion engineer - oral</i>	75	87	116
7.	Jurutera enjin pembakaran dalam - bertulis <i>Internal combustion engineer - written</i>	75	50	67
8.	Penyelia keselamatan tapak bina <i>Site safety supervisor (SSS)</i>	200	201	101

## Examination, Certification and Accreditation Section

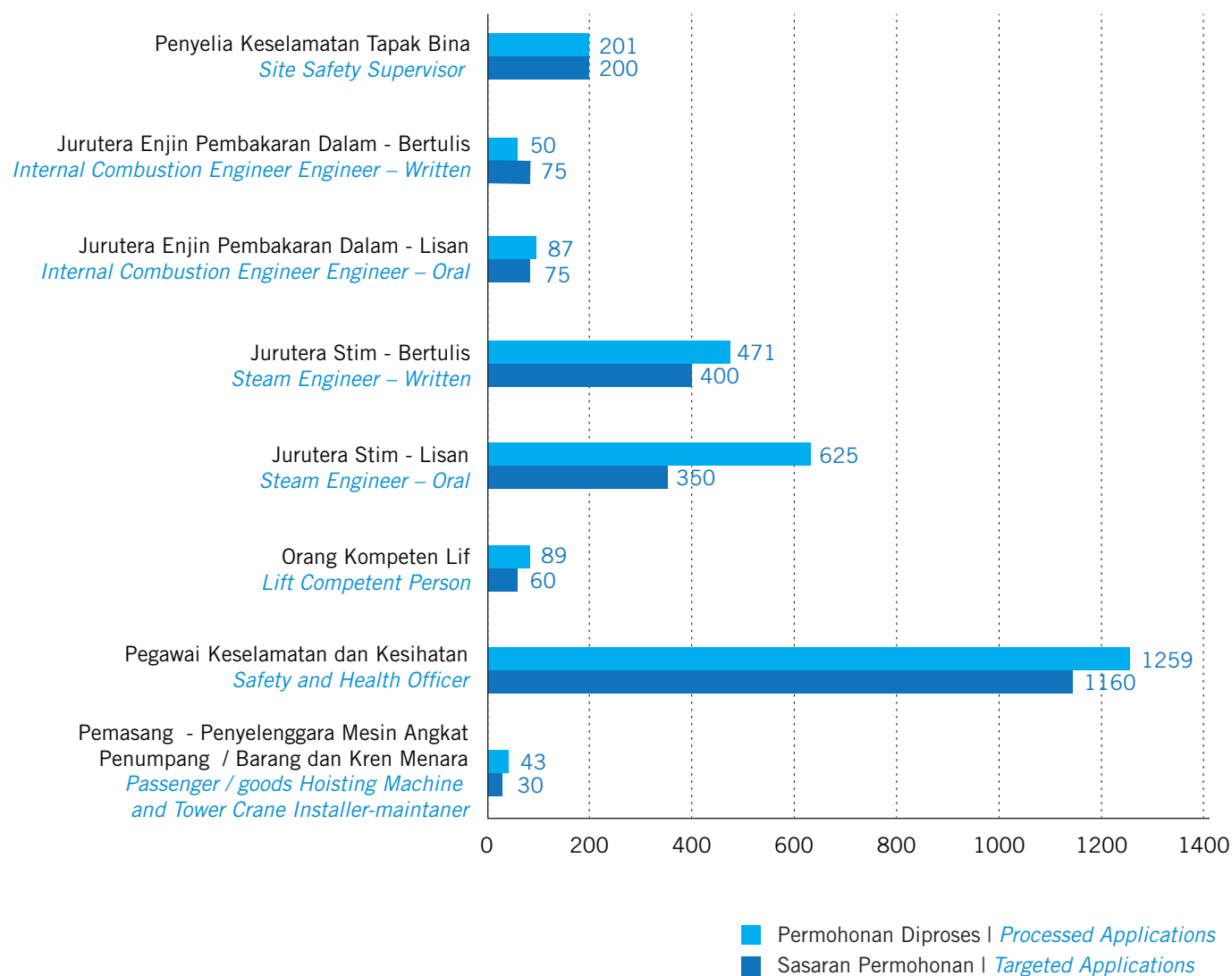
*This section consists of two units, namely, the Accreditation Unit and the Examination and Certification Unit. Its main function is to regulate the compliance with legal requirements and regulations by Competent Persons and Competent Firms registered with the Department. Competent Persons and Competent Firms must be registered with the Department before they can conduct activities under the Department's jurisdiction.*

*Below is a list of Competent Persons registered with the Department:*

- Safety and Health Officer.*
- Lift Competent Person.*
- Person responsible for installing and maintaining tower cranes/hoisting machines for passengers, goods, and gondola.*
- Steam engineer.*
- Internal combustion engine engineer.*

*Table 4 shows the Competent Persons application statistics which were processed by the Examination, Certification and Accreditation Section in 2012.*

**Carta 4: Statistik pendaftaran Orang Yang Kompeten yang diproses pada 2012.**  
**Chart 4: Statistics on applications of Competent Persons processed in 2012.**

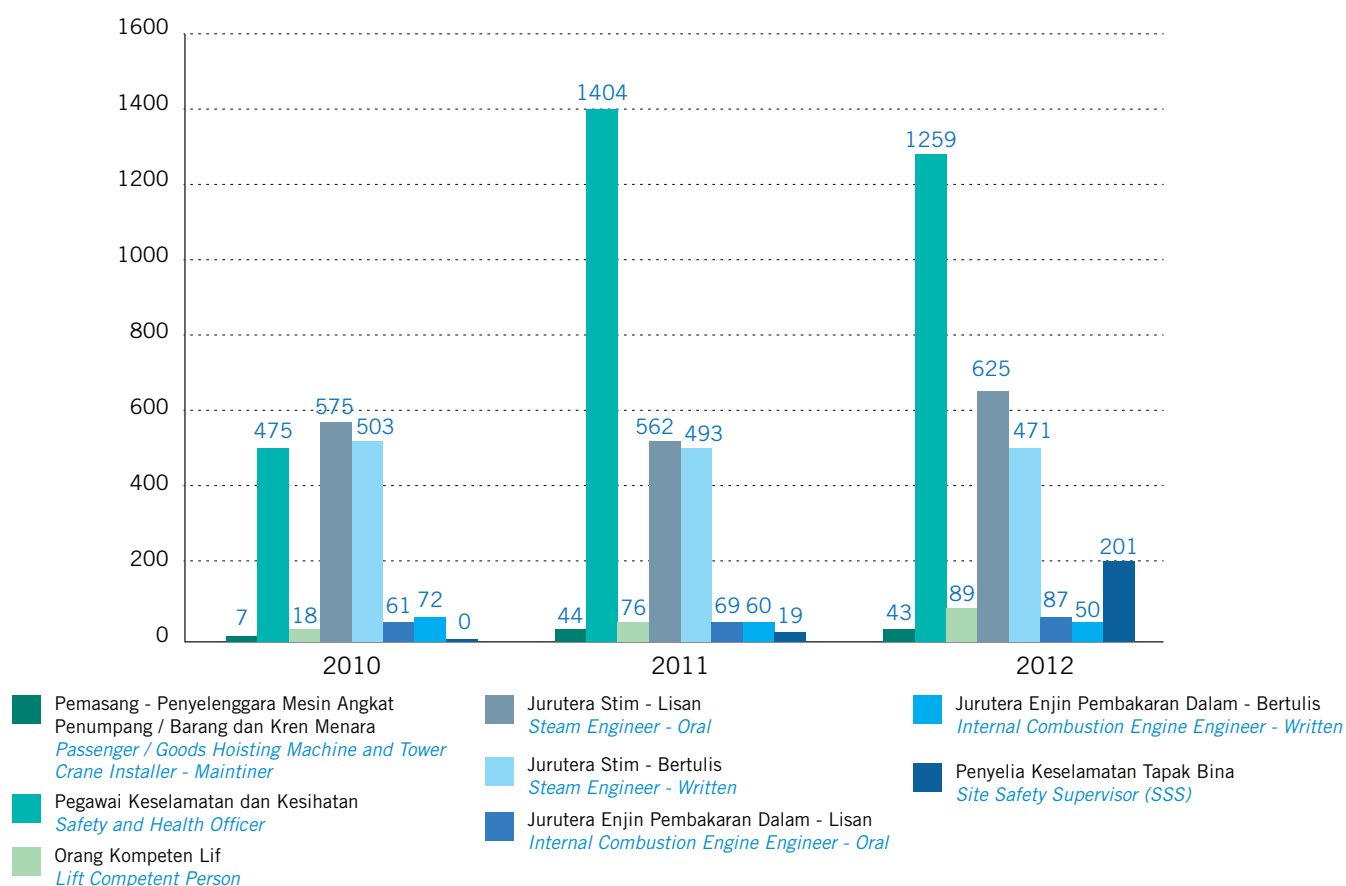


Statistik di bawah menunjukkan peningkatan pendaftaran Orang Yang Kompeten yang diproses dari tahun 2010 hingga 2012.  
*Statistics below shows an increase in the number of registrations of Competent Persons processed from 2010 to 2012.*

**Jadual 5: Statistik Pendaftaran Orang Yang Kompeten yang diproses dari tahun 2010.**  
**Table 5: Statistics on registrations of Competent Persons processed since 2010.**

Bil. No.	Jentera Machinery	2010	2011	2012
1.	Pemasang-penyelenggara mesin angkat penumpang/barang dan kren menara <i>Passenger/goods hoisting machine and tower crane installer-maintaner</i>	7	44	43
2.	Pegawai Keselamatan dan Kesihatan <i>Safety and Health Officer</i>	475	1404	1259
3.	Orang Kompeten Lif <i>Lift Competent Person</i>	18	76	89
4.	Jurutera stim - lisan <i>Steam engineer - oral</i>	575	562	625
5.	Jurutera stim - bertulis <i>Steam engineer - written</i>	503	493	471
6.	Jurutera enjin pembakaran dalam - lisan <i>Internal combustion engine engineer - oral</i>	61	69	87
7.	Jurutera enjin pembakaran dalam - bertulis <i>Internal combustion engine engineer - written</i>	72	60	50
8.	Penyelia keselamatan tapak bina <i>Site safety supervisor (SSS)</i>	0	19	201

**Carta 5: Statistik pendaftaran Orang Yang Kompeten yang diproses dari tahun 2010.**  
**Chart 5: Statistics on registrations of Competent Persons processed since 2010.**





Senarai Firma Yang Kompeten (FYK) yang berdaftar dengan Jabatan pula adalah seperti yang berikut:

*Below is a list of Competent Firms registered with the Department:*

- Pembuat dan pembaik pulih pengandung tekanan tak berapi/dandang stim/silinder LPG.
- Kontraktor talian paip gas.
- Pembuat-penyelenggara lif/kontraktor.
- Pemasang, penyelenggara dan perombak kren menara/mesin angkat penumpang/kren menara.
- Pembuat mesin angkat.
- Badan Kuasa Memeriksa.

- Manufacturer and repairer of unfired pressure vessels/steam boiler/ LPG cylinder.*
- Gas pipeline contractor.*
- Lift manufacturer and maintenance person/contractor.*
- Person responsible for installing, maintaining, and dismantling tower cranes/ passenger hoisting machines.*
- Hoisting machine manufacturer.*
- Inspecting authorities.*

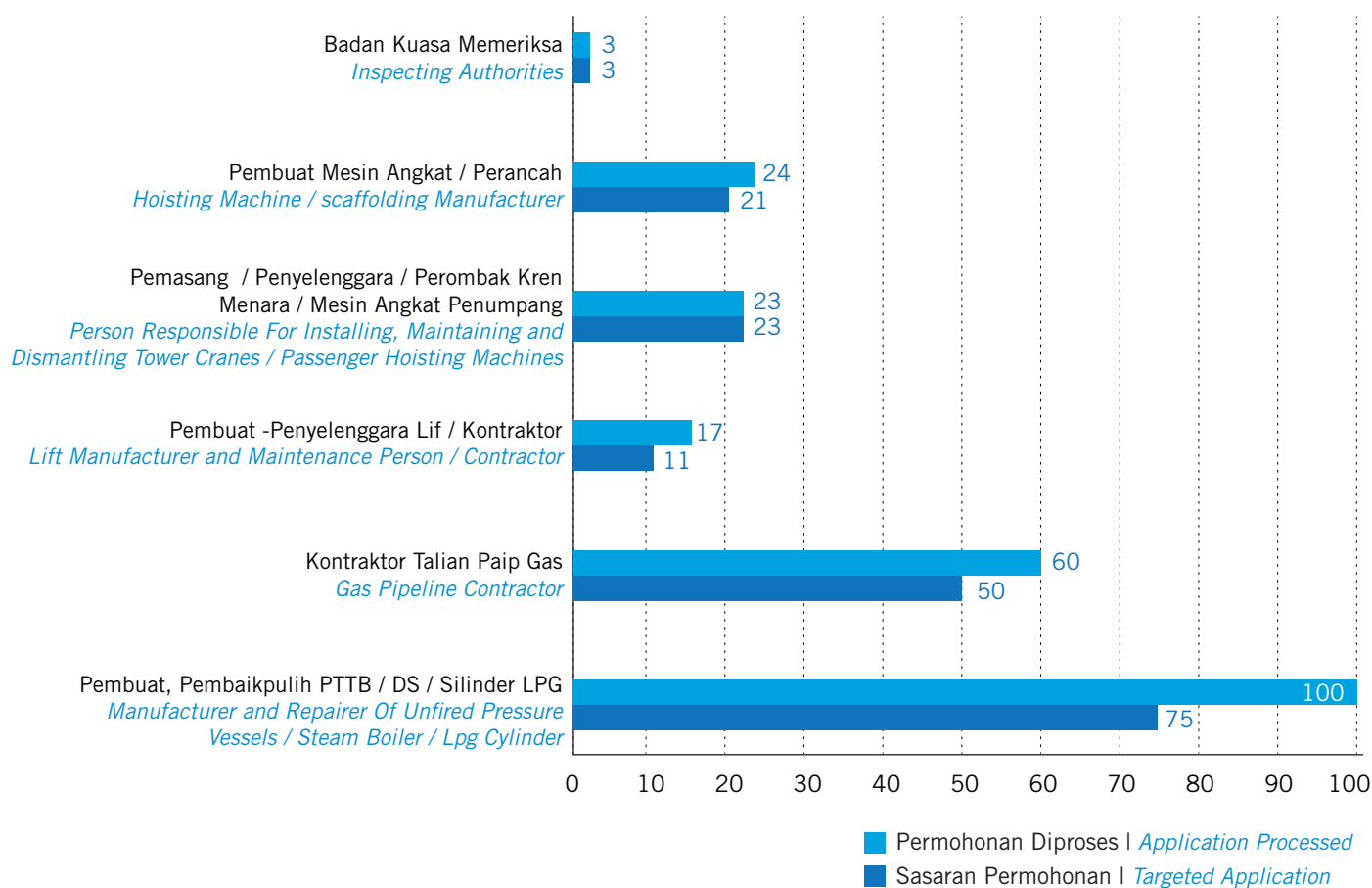
Jadual 6 di bawah menunjukkan statistik pendaftaran Firma Yang Kompeten dengan Jabatan bagi tahun 2012.  
*Table 6 below shows the statistics on registrations of Competent Firms with the Department in 2012.*

**Jadual 6: Statistik pendaftaran Firma Yang Kompeten yang diproses pada 2012.**  
***Table 6: Statistics on registrations of Competent Firms processed in 2012.***

Bil. No.	Pendaftaran Firma Yang Kompeten <i>Registration of Competent Firm</i>	Sasaran Permohonan <i>Targeted Applications</i>	Permohonan Diproses <i>Applications Processed</i>	Pencapaian (%) <i>Achievement (%)</i>
1.	Pembuat dan pembaik pulih PTTB/DS/silinder LPG <i>Manufacturer and repairer of unfired pressure vessels/steam boiler/ LPG cylinder</i>	75	100	133
2.	Kontraktor talian paip gas <i>Gas pipeline contractor</i>	50	60	120
3.	Pembuat-penyelenggara lif/kontraktor <i>Lift manufacturer and maintenance person/contractor</i>	11	17	155
4.	Pemasang/peyelenggara/perombak kren menara/mesin angkat penumpang <i>Person responsible for installing, maintaining, and dismantling tower cranes/passenger hoisting machines</i>	23	23	100
5.	Pembuat mesin angkat <i>Hoisting machine manufacturer</i>	21	24	114
6.	Badan Kuasa Memeriksa <i>Inspecting authorities</i>	3	3	100

Carta 6: Statistik pendaftaran Firma Yang Kompeten yang diproses pada 2012.

Chart 6: Statistics on registrations of Competent Firms processed in 2012.



Statistik di bawah menunjukkan peningkatan pendaftaran Firma Yang Kompeten dari tahun 2010 hingga 2012.

Statistics below shows an increase in the number of registrations of Competent Firms from 2010 to 2012.

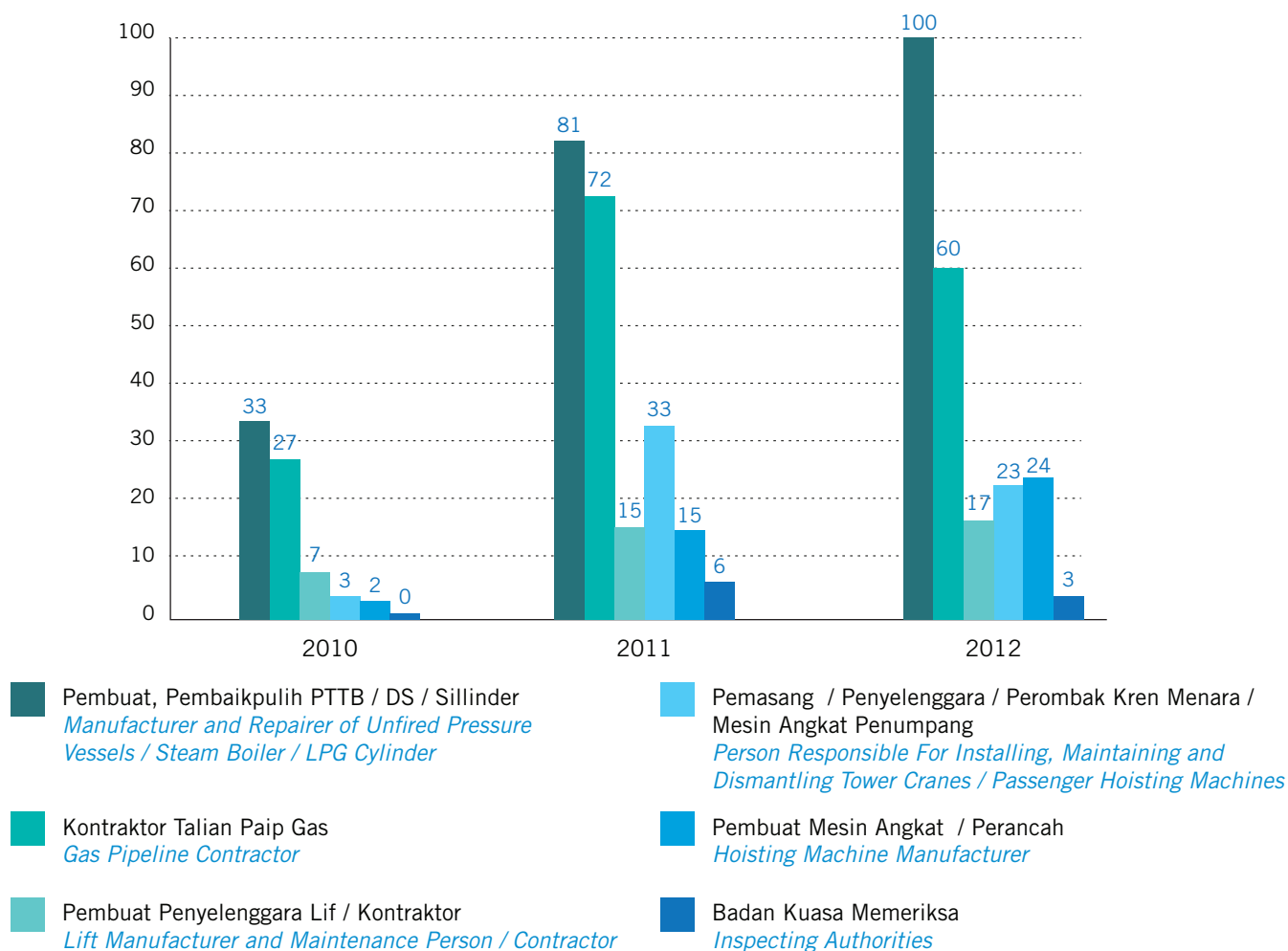
Jadual 7: Statistik pendaftaran Firma Yang Kompeten yang diproses dari tahun 2010.

Table 7: Statistics on registrations of Competent Firms processed since 2010.

Bil. No.	Jentera Machinery	2010	2011	2012
1.	Pembuat dan pembaik pulih PTTB/DS/silinder LPG <i>Manufacturer and repairer of unfired pressure vessels/steam boiler/ LPG cylinder</i>	33	81	100
2.	Kontraktor talian paip gas <i>Gas pipeline contractor</i>	27	72	60
3.	Pembuat-penyelenggara lif/kontraktor <i>Lift manufacturer and maintenance person/contractor</i>	7	15	17
4.	Pemasang/peyelenggara/perombak kren menara/mesin angkat penumpang <i>Person responsible for installing, maintaining, and dismantling tower cranes/ passenger hoisting machines</i>	3	33	23
5.	Pembuat mesin angkat <i>Hoisting machine manufacturer</i>	2	15	24
6.	Badan Kuasa Memeriksa <i>Inspecting authorities</i>	0	6	3

**Carta 7: Statistik pendaftaran Firma Yang Kompeten yang diproses dari tahun 2010 hingga 2012.**

*Chart 7: Statistics on registration of Competent Firms processed since 2010 to 2012.*



Selain itu juga, Seksyen ini turut memproses permohonan untuk kelulusan dan akreditasi pusat pengajar dan juga pendaftaran Kursus Program Pendidikan Berterusan. Statistik permohonan yang diproses sekitar tahun 2012 adalah seperti dalam Jadual 8 di bawah.

*In addition, this Section is also responsible for processing applications for the approval and accreditation of training centres as well as the registration of Continuing Education Programmes. The statistics of applications processed in 2012 are shown in Table 8 below.*

**Jadual 8: Statistik permohonan kelulusan dan akreditasi pusat pengajar / pendaftaran Kursus Program Pendidikan Berterusan yang diproses pada 2012.**

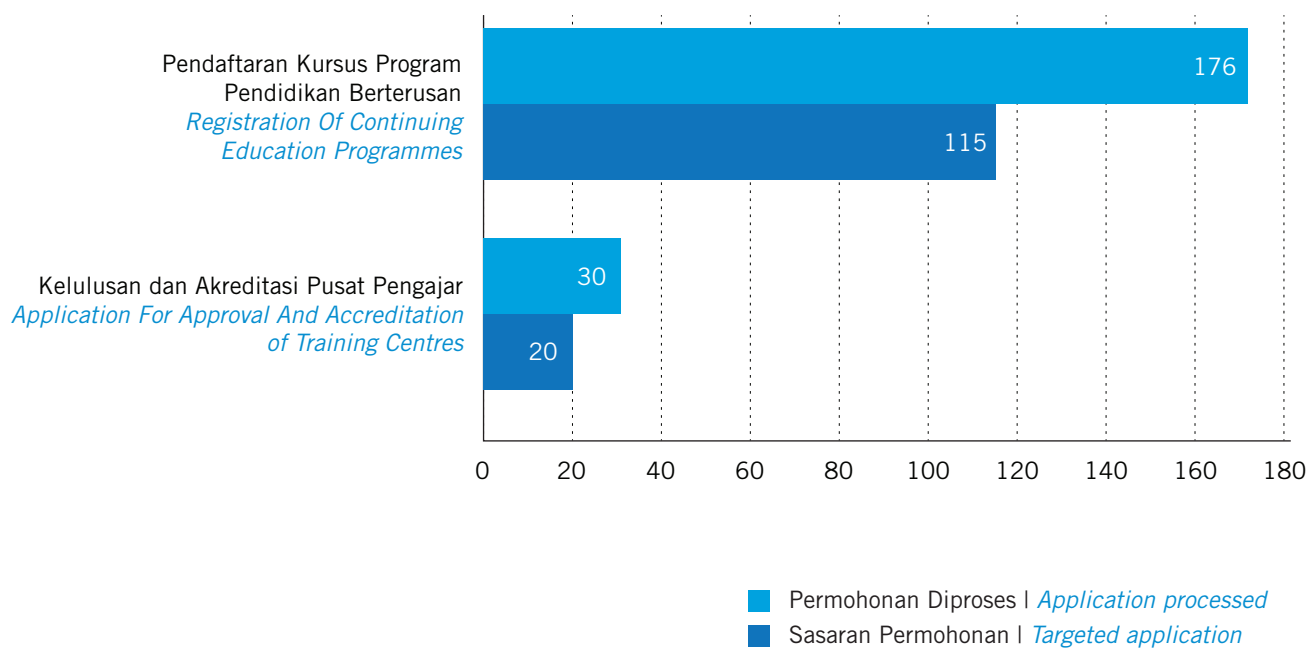
*Table 8: Statistics on applications of approval and accreditation of training centres / registrations of Continuing Education Programmes processed in 2012.*

Bil. No.	Permohonan Application	Sasaran Permohonan Targeted Applications	Permohonan Diproses Processed Applications	Pencapaian (%) Achievement (%)
1.	Kelulusan dan akreditasi pusat pengajar <i>Approval and accreditation of training centres</i>	20	30	150
2.	Pendaftaran Kursus Program Pendidikan Berterusan <i>Course registration for Continuing Education Programmes</i>	115	176	153



**Carta 8: Statistik permohonan kelulusan dan akreditasi pusat pengajar / pendaftaran Kursus Program Pendidikan Berterusan yang diproses pada 2012.**

*Chart 8: Statistics on application for approval and accreditation of training centres / registration of Continuing Education Programmes processed in 2012.*



## Gambar Aktiviti Bahagian Keselamatan Industri *Activities of the Industrial Safety Division*



Gambar 1: Pegawai JKKP yang menghadiri kursus pengenalan pemeriksaan zarah magnetic (MPI).

*Photo 1: DOSH officers attending an Introduction to Magnetic Particles Inspection (MPI) Course.*



Gambar 2: Lawatan teknikal ke kilang kelapa sawit untuk menyaksikan ujian hidrostatik dandang stim.

*Photo 2: A technical visit to a palm oil factory to monitor hydrostatic tests done on steam boilers.*



Gambar 3: Taklimat oleh MLNG berkenaan projek pembinaan dandang stim yang baharu.

*Photo 3: A briefing session by MLNG on a new steam boiler construction project.*



Gambar 4: Taklimat oleh syarikat pembuat berkenaan projek pembinaan dandang superkritikal.

*Photo 4: A briefing session by the manufacturer on the construction of a supercritical boiler project.*





Gambar 5: Audit ke atas salah sebuah Firma Yang Kompeten (syarikat pembuat dandang stim).  
 Photo 5: Audit on a Competent Firm (steam boiler manufacturer).



Gambar 6: Lawatan teknikal mesin angkat jenis gangway tower di Tanjung Bin, Johor.  
 Photo 6: Technical visit on a gangway tower hoisting machine at Tanjung Bin, Johor.



Gambar 7: Pengharmonian pemeriksaan kren menara di Pulau Pinang.  
 Photo 7: Harmonization of tower crane inspection in Pulau Pinang.



Gambar 8: Lawatan tapak untuk segment launcher yang digunakan untuk projek Jambatan Kedua Pulau Pinang.  
 Photo 8: Site visit on the launcher segment used in Pulau Pinang Second Bridge project.



Gambar 9: Pemeriksaan superlifter di Pasir Gudang, Johor.  
 Photo 9: Inspection on a superlifter in Pasir Gudang, Johor.



Gambar 10: Dialog bersama syarikat pembekal, pemasang, penyelenggara dan pemeriksa lif.  
 Photo 10: A dialogue session with lift supplying, installing, maintaining, and inspecting companies.





Gambar 11 : Dialog bersama syarikat pemasang, penyelenggara, dan perombak kren menara.  
*Photo 11: A dialogue session with tower crane installing, maintaining, and dismantling companies.*



Gambar 12: Pemeriksaan UTG ke atas pengandung tekanan tak berapi di salah sebuah syarikat pembekal.  
*Photo 12: UTG inspection on an unfired pressure vessel at a supplying companies.*



Gambar 13: Ujian ke atas bahan pada roller coaster menggunakan kaedah Positive Material Identification (PMI).  
*Photo 13: Applying Positive Material Identification (PMI) method in a material test for roller coaster structures.*



Gambar 14: Lawatan teknikal ke syarikat pembuat struktur kren pelancar.  
*Photo 14: Technical visit to a launcher structure manufacturer company.*



Gambar 15: Lawatan oleh Spanish Manufacturer Association of Construction, Public Work and Mining Equipment.  
*Photo 15: A visit by the Spanish Manufacturer Association of Construction, Public Work and Mining Equipment.*



Gambar 16: Taklimat tentang aplikasi peranti penyahskalaan akaustik dari syarikat pembekal.  
*Photo 16: Briefing session on the application of acoustic descaling device by the supplying company.*







# Bahagian Higien Industri dan Ergonomik

*Industrial Hygiene and  
Ergonomics Division*





## Bahagian Higien Industri dan Ergonomik *Industrial Hygiene and Ergonomics Division*

Aktiviti utama Bahagian Higien Industri dan Ergonomik (HIE) adalah mengiktiraf Orang Yang Kompeten (OYK)/Orang Yang Bertanggungjawab (OYB), memberikan kelulusan peralatan higien industri, pemantauan aktiviti higien industri pejabat negeri, dan penyelenggaraan/audit peralatan higien industri.

Selain aktiviti utama, pada tahun 2012, Bahagian HIE turut memberikan pelbagai bantuan teknikal dan kepakaran kepada pihak yang memerlukan.

*The core activities of the Industrial Hygiene and Ergonomics (IHE) Division are the accreditation of Competent Persons/Responsible Persons, approval of industrial hygiene equipment, monitoring of industrial hygiene activities in state offices and maintenance/audit on industrial hygiene equipment.*

*In 2012, the IHE Division also provided various forms of technical assistance to parties which requested for them, besides the core activities.*

### Pengiktirafan dan Persijilan

Pada tahun 2012, seramai 2624 OYK dan OYB higien industri telah berdaftar dengan Jabatan. Peningkatan bilangan OYK dan OYB yang berdaftar dengan Jabatan menunjukkan semakin ramai yang berminat untuk membantu Jabatan dalam usaha meningkatkan keselamatan dan kesihatan di tempat kerja.

### Accreditation and Certification

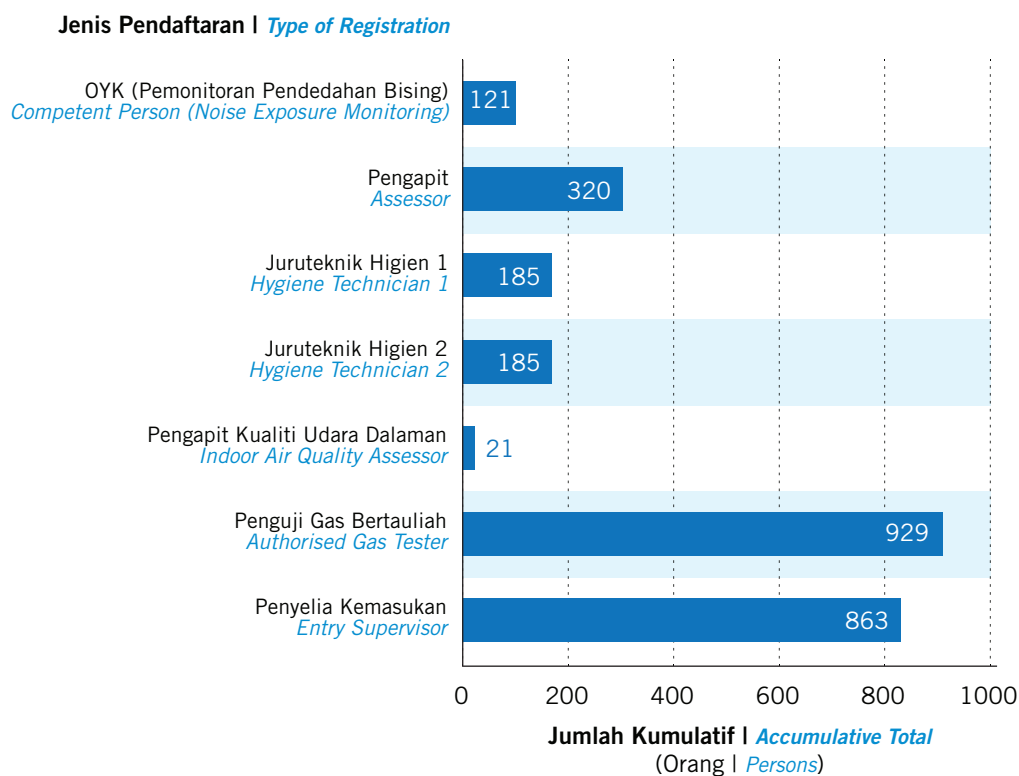
*In 2012, a total of 2624 Industrial Hygiene Competent Persons were registered with the Department. The increase in the number of Competent Persons registered with the Department was a testimony to the fact that more people were interested to lend their hands to the Department in an effort to improve safety and health at the workplace.*

Jadual 1: OYK dan OYB higien industri yang berdaftar.

*Table 1: Registered Industrial Hygiene Competent Persons.*

Jenis Pendaftaran   <i>Types of Registration</i>	Jumlah Kumulatif (Orang)   <i>Accumulative Total (Persons)</i>
	Sehingga 2012   <i>Up to 2012</i>
OYK (Pemonitoran Pendedahan Bising) <i>Competent Person (Noise Exposure Monitoring)</i>	121
Pengapit <i>Assessor</i>	320
Juruteknik Higien 1 <i>Hygiene Technician 1</i>	185
Juruteknik Higien 2 <i>Hygiene Technician 2</i>	185
Pengapit Kualiti Udara Dalamam <i>Indoor Air Quality Assessor</i>	21
Penguji Gas Bertauliah <i>Authorised Gas Tester</i>	929
Penyelia Kemasukan <i>Entry Supervisor</i>	863
<b>Jumlah   <i>Total</i></b>	<b>2624</b>

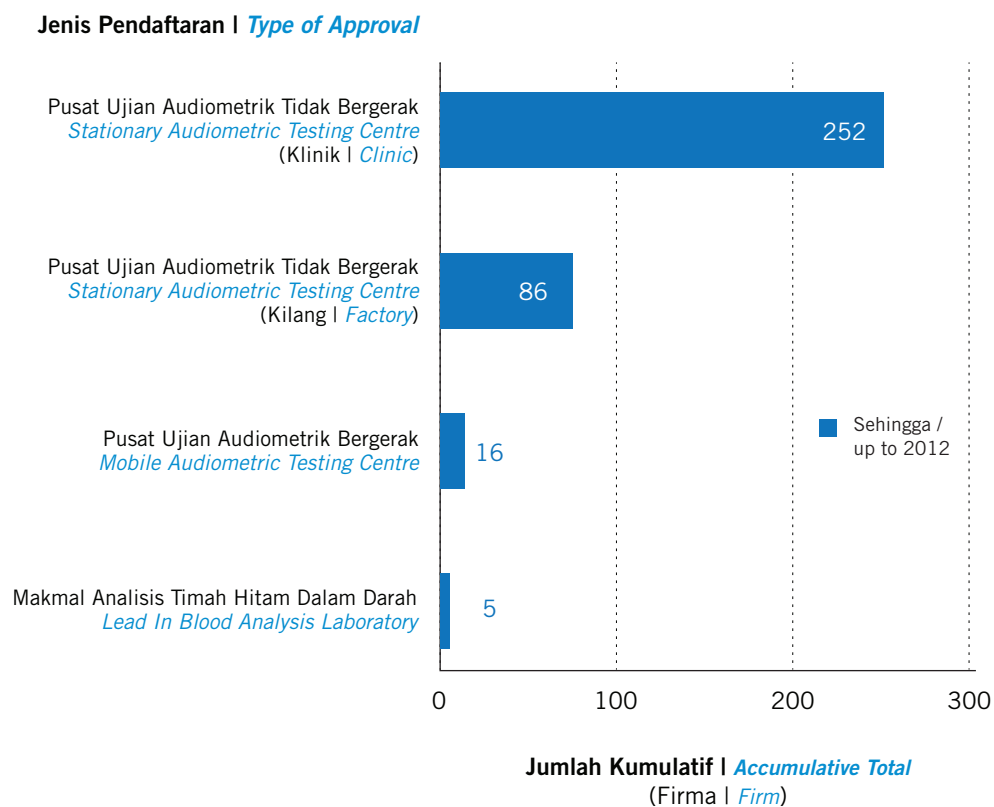
**Graf 1: OYK dan OYB Higien Industri Berdaftar**  
**Graph 1: Registered Industrial Hygiene Competent Persons.**



**Jadual 2: Pendaftaran Firma Yang Kompeten.**  
**Table 2: Registered Competent Firms.**

Jenis Pendaftaran   Types of Registration	Jumlah Kumulatif (Firma)   Accumulative Total (Firm)
	Sehingga 2012   Up to 2012
Pusat Ujian Audiometrik Tidak Bergerak (Klinik) Stationary Audiometric Testing Centre (Clinic)	252
Pusat Ujian Audiometrik Tidak Bergerak (Kilang) Stationary Audiometric Testing Centre (Factory)	86
Pusat Ujian Audiometrik Bergerak Mobile Audiometric Testing Centre	16
Makmal Analisis Timah Hitam Dalam Darah Lead In Blood Analysis Laboratory	5
<b>Jumlah   Total</b>	<b>359</b>

**Graf 2: Pendaftaran Firma Kompeten.**  
**Graph 2: Registered Competent Firms.**





## Kelulusan Peralatan Higien Industri

Bahagian HIE telah memberikan kelulusan kepada beberapa peralatan dan proses seperti yang dinyatakan dalam Jadual 3 dan Graf 3.

## Approval For Industrial Hygiene Equipment

The IHE Division granted approvals for several equipment and processes as shown in Table 3 and Chart 3.

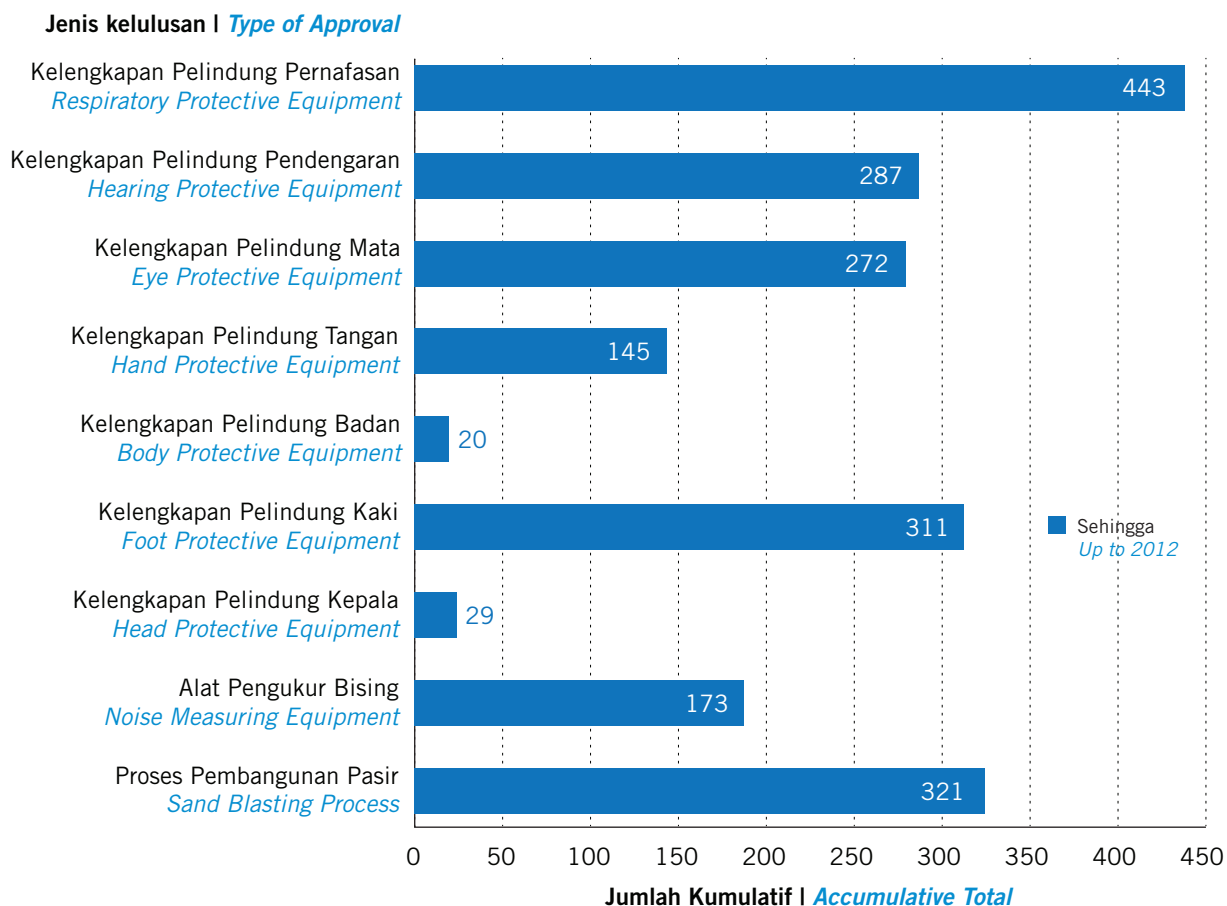
**Jadual 3: Kelulusan peralatan higien industri.**

**Table 3: Approval for industrial hygiene equipment.**

Jenis Kelulusan   <i>Type of equipment approved</i>	Jumlah Kumulatif   <i>Accumulative Total</i>
	Sehingga 2012   <i>Up to 2012</i>
Kelengkapan pelindung pernafasan <i>Respiratory protective equipment</i>	443
Kelengkapan pelindung pendengaran <i>Hearing protective equipment</i>	287
Kelengkapan pelindung mata <i>Eye protective equipment</i>	272
Kelengkapan pelindung tangan <i>Hand protective equipment</i>	145
Kelengkapan pelindung badan <i>Body protective equipment</i>	20
Kelengkapan pelindung kaki <i>Foot protective equipment</i>	311
Kelengkapan pelindung kepala <i>Head protective equipment</i>	29
Alat pengukur bising <i>Noise measuring equipment</i>	173
Proses pembagasan pasir <i>Sand blasting process</i>	321
<b>Jumlah   <i>Total</i></b>	<b>2001</b>

Graf 3: Kelulusan Peralatan Higien Industri.

Graph 3: Approval of Industrial Hygiene Equipments.



## Pemeriksaan Higien Industri

Aktiviti pemeriksaan higien industri dilaksanakan di peringkat pejabat negeri. Antara pemeriksaan yang dijalankan melibatkan isu yang berkaitan dengan kesihatan seperti memastikan penggunaan bahan kimia berbahaya kepada kesihatan adalah terkawal dan tidak mendatangkan bahaya kepada pekerja yang mengendalikan bahan kimia tersebut. Oleh itu, penguatkuasaan yang dijalankan melibatkan peraturan yang berkaitan dengan amalan kesihatan dan higien industri di bawah Akta Kilang dan Jentera (Akta 139) dan Akta Keselamatan dan Kesihatan Pekerjaan (Akta 514). Jadual 4 dan Graf 4 menunjukkan pencapaian penguatkuasaan higien industri bagi tahun 2012.

## Industrial Hygiene Inspections

Industrial hygiene inspections are conducted at the state office level to examine health-related issues, such as to ensure that the usage of chemicals hazardous to health is under control and does not pose a hazard to the workers who are handling them. These inspections, therefore, involve the enforcement of regulations pertaining to health and industrial hygiene practices under the Factories and Machinery Act (Act 139) and the Occupational Safety and Health Act (Act 514). Table 4 and Chart 4 shows the achievement in the industrial hygiene enforcement activated in 2012.

**Jadual 4: Aktiviti Penguatkuasaan Higien Industri Tahun 2012.**
**Table 4: Industrial Hygiene Enforcement Activities for 2012.**

Jenis Aktiviti Penguatkuasaan   <i>Type of Enforcement Activity</i>	Jumlah   <i>Total</i>
	2012
Penguatkuasaan USECHH <i>USECHH Enforcement</i>	1904
Penguatkuasaan Bising <i>Noise Enforcement</i>	1289
Penguatkuasaan CPL <i>CPL Enforcement</i>	216
Pemeriksaan Higien Industri <i>Industrial Hygiene Inspection</i>	1268
Pemantauan Bising <i>Noise Monitoring</i>	113
Pemantauan Bahan Kimia <i>Chemical Monitoring</i>	60
Penaksiran Pencahayaan <i>Light/Illumination Assessment</i>	381
Penaksiran Tegasan Haba <i>Heat Stress Assessment</i>	112
Penaksiran Pengudaraan <i>Ventilation Assessment</i>	111
Penaksiran Risiko Bahan Kimia Berbahaya kepada Kesihatan <i>Chemical Hazardous to Health Risk Assessment</i>	58
Pemeriksaan Ergonomik <i>Ergonomics Inspection</i>	501

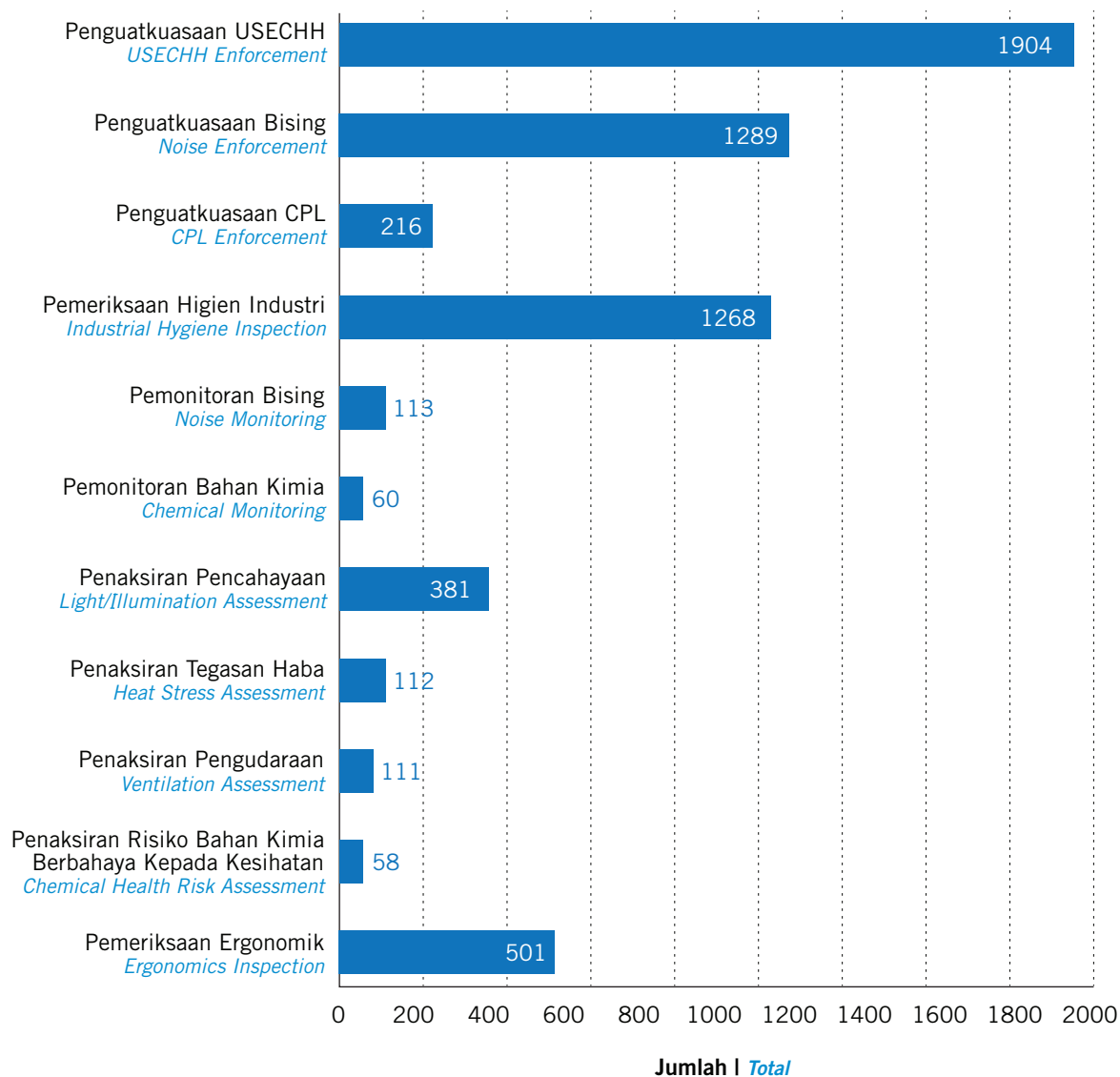
\* USECHH – Use and Standards of Exposure of Chemicals Hazardous to Health

\* CPL – Classification, Packaging and Labelling



Graf 4: Aktiviti Penguatkuasaan Higien Industri 2012.  
 Graph 4: Industrial Hygiene Enforcement Activities 2012.

**Jenis Aktiviti Penguatkuasaan**  
*Types of Enforcement Activities*



## Aktiviti Yang Dijalankan Oleh Bahagian HIE Pada Tahun 2012

### Kursus Bekerja Selamat di dalam Ruang Terkurung

Pada tahun 2012, Bahagian HIE telah menjalankan Kursus Bekerja Selamat di dalam Ruang Terkurung untuk pegawai teknikal JKKP. Kursus tersebut diadakan untuk meningkatkan kemahiran pegawai melalui latihan praktikal dalam penggunaan peralatan bekerja di dalam ruang terkurung, serta melahirkan pegawai yang boleh menjadi pakar rujuk dan memberikan khidmat nasihat kepada majikan dalam menangani masalah bekerja di ruang terkurung.

Kursus perintis telah dijalankan di JKKP Ibu Pejabat pada 26 – 27 September 2011, dan diikuti dengan kursus bagi pegawai JKKP Terengganu, Negeri Sembilan, dan Sarawak pada tahun yang sama. Kursus Bekerja Selamat di dalam Ruang Terkurung yang dijalankan pada tahun 2012 adalah seperti yang berikut:

## Activities Conducted By The IHE Division In 2012

### Course on Safe Working in a Confined Space

*In 2012, the IHE Division conducted a Course on Safe Working in a Confined Space aimed at enhancing the competency of DOSH technical officers through practical trainings on the usage of work equipment in confined spaces, as well as producing officers who can be referred to as experts and advisors by employers in managing work problems in confined spaces.*

*A pilot course was conducted at the DOSH Headquarters on 26 – 27 September 2011, followed by a course for officers of the DOSH Terengganu, DOSH Negeri Sembilan, and DOSH Sarawak in the same year. Meanwhile, Course on Safe Working in a Confined Space conducted in 2012 were as follows:*

Suku Tahun I <i>1<sup>st</sup> Quarter</i>	Februari <i>February</i>	JKKP Pahang   <i>DOSH Pahang</i>
		JKKP Melaka   <i>DOSH Malacca</i>
	April <i>April</i>	JKKP Johor   <i>DOSH Johore</i>
Suku Tahun II <i>2<sup>nd</sup> Quarter</i>	Mei <i>May</i>	JKKP Selangor   <i>DOSH Selangor</i>
		JKKP W.P. Kuala Lumpur dan Putrajaya   <i>DOSH F.T. Kuala Lumpur and Putrajaya</i>
	Jun <i>June</i>	JKKP Kedah   <i>DOSH Kedah</i>
		JKKP Perlis   <i>DOSH Perlis</i>
	Julai <i>July</i>	JKKP Kelantan   <i>DOSH Kelantan</i>
Suku Tahun III <i>3<sup>rd</sup> Quarter</i>	September <i>September</i>	JKKP Pulau Pinang   <i>DOSH Penang</i>
	Oktober <i>October</i>	JKKP Perak   <i>DOSH Perak</i>
	November <i>November</i>	JKKP Ibu Pejabat   <i>DOSH Headquarters</i>
	Disember <i>December</i>	JKKP Ibu Pejabat   <i>DOSH Headquarters</i>



Gambar 1: Alat penguji gas digunakan semasa latihan praktikal.  
*Photo 1: The multi-gas detector being used during practical training.*



Gambar 3: Sesi demonstrasi penggunaan abah-abah keselamatan.  
*Photo 3: A demonstration session on how to use the safety harness.*



Gambar 2: Abah-abah keselamatan digunakan sebagai langkah keselamatan.  
*Photo 2: The safety harness is used as a safety precaution.*



## Lawatan ke One Gasmaster Sdn Bhd

Satu lawatan ke One Gasmaster Sdn Bhd, salah sebuah agensi yang diiktiraf untuk menjalankan penentukuran peralatan, telah diadakan oleh Bahagian Higien Industri dan Ergonomik.

Lawatan tersebut telah diadakan pada 6 September 2012 dan disertai oleh sebelas orang pegawai JKPP. Lawatan tersebut bertujuan melihat bagaimana makmal penentukuran dibangunkan dan melihat demonstrasi kerja penentukuran dilakukan.

## Visit to One Gasmaster Sdn Bhd

*The Industrial Hygiene and Ergonomics Division conducted a visit to One Gasmaster Sdn Bhd, one of the agencies accredited to carry out the calibration of equipment.*

*The visit was made on 6 September 2012, involving eleven DOSH officers. The visit was intended to see how a calibration laboratory is being developed and to watch a demonstration on how calibration work is being done.*



Gambar 4: Pegawai JKPP yang melawat One Gas Master Sdn Bhd.  
Photo 4: The DOSH officers who visited One Gasmaster Sdn Bhd.

## Pengukuran Sinaran Tidak Mengion di Bahagian Teknologi Pendidikan, Kementerian Pelajaran Malaysia, Persiaran Bukit Kiara, Kuala Lumpur

Pengukuran sinaran tidak mengion telah dijalankan oleh pegawai dari Bahagian Higien Industri dan Ergonomik pada 23 Oktober 2012 di Kompleks Bahagian Teknologi Pendidikan (BTP), Persiaran Bukit Kiara, Kuala Lumpur.

Objektif pengukuran ini adalah untuk mengenal pasti tahap pendedahan radiasi medan elektrik dan medan elektromagnet kepada orang awam dan pekerja agar tidak melebihi paras selamat yang ditetapkan oleh Suruhanjaya Komunikasi dan Multimedia Malaysia dan Garis Panduan Suruhanjaya Antarabangsa Terhadap Perlindungan Radiasi Bukan Pengionan (ICNIRP).

Hasil daripada pengukuran yang dibuat, tahap radiasi medan elektrik dan medan elektromagnet yang terdapat di sekitar Kompleks BTP adalah di bawah paras had pendedahan dibenarkan.

## *Non-Ionising Radiation Measurement at the Educational Technology Division of the Ministry of Education of Malaysia, Persiaran Bukit Kiara, Kuala Lumpur*

*The measuring of non-ionising radiation was carried out by officers from the Industrial Hygiene and Ergonomics Division on 23 October 2012 at the Educational Technology Division Complex (ETDC) in Persiaran Bukit Kiara, Kuala Lumpur.*

*The objective of this measurement was to identify the level of electric field (EF) and electromagnetic field (EMF) radiation to workers and members of the public to ensure the level does not exceed the safety limit as recommended by the Malaysian Communications and Multimedia Commission (MCMC) and International Commission on Non-Ionising Radiation Protection (ICNIRP) Guideline.*

*From the measurements conducted, it was found that the level of radiofrequency and microwave radiation at the Astro Complex area is below the permissible exposure limit.*



Gambar 5: Pengukuran sinaran tak mengion dijalankan di Bilik Konti.  
*Photo 5: Non-Ionising radiation is being measured in the Conty Room.*



Gambar 6: Bacaan medan elektromagnet dan medan elektrik sedang diambil pada penerima dan pemancar di atas kenderaan.  
*Photo 6: Electromagnetic field (EMF) and electric field (RF) readings were being taken at the receiver and transmitter (on-board vehicle).*





Gambar 7: Pengukuran medan elektromagnet dan medan elektrik diambil di dalam galeri di atas kenderaan.  
*Photo 7: Electromagnetic field (EMF) and electric field (RF) levels were measured in the On-board Vehicle Gallery.*



Gambar 8: Pengukuran medan elektromagnet dan medan elektrik turut diambil pada penerima (persekitaran luar) menggunakan selective radiation meter dan meter medan jalur lebar.  
*Photo 8: Electromagnetic field (EMF) and electric field (RF) levels were also measured at the receiver (external environment) using the selective radiation meter and the broadband field meter.*

## Pengukuran Getaran di Keretapi Tanah Melayu Berhad (KTMB) Bagi Laluan ke Selatan

Pengukuran getaran telah dijalankan pada 29 – 30 November 2012 bagi laluan Keretapi Tanah Melayu Berhad (KTMB) ke selatan. Laluan tersebut adalah dari Kuala Lumpur Sentral ke Johor Bahru Sentral dan dari Johor Bahru Sentral ke Kuala Lumpur Sentral. Pengukuran ini dijalankan oleh lapan orang pegawai dari Bahagian Higien Industri dan Ergonomik dan turut disertai oleh pegawai KTMB.

Objektif pengukuran ini adalah untuk mendapatkan profil getaran *whole body* dan getaran *hands-arm* bagi pemandu keretapi lokomotif di KTMB. Pengukuran getaran ini akan dilanjutkan pada tahun 2013 bagi laluan Keretapi Tanah Melayu Berhad (KTMB) ke utara. Pengukuran yang dibuat dengan merujuk dokumen ISO 2631-1:1997 dan EU *Physical Agent (Vibration) Directive* 2002/44/EC.

## Vibration Measurement of Keretapi Tanah Melayu Berhad (KTMB) Route to the South

*Vibration measurements were carried out on 29 – 30 November 2012 for the Keretapi Tanah Melayu Berhad (KTMB) route to the south. The route is from Kuala Lumpur Sentral to Johor Bahru Sentral and from Johor Bahru Sentral to Kuala Lumpur Sentral. The measurements were carried out by eight officers from the Industrial Hygiene and Ergonomics Division and attended by KTMB officials.*

*The objective of this measurement is to obtain a profile of whole body and hands arm vibration of KTMB locomotive drivers. The vibration measurements will be extended in 2013 for the Keretapi Tanah Melayu Berhad (KTMB) route to the north. The measurements made were in reference to the ISO 2631-1:1997 and the EU Physical Agent (Vibration) Directive 2002/44/EC documents.*





Gambar 9: Pengukuran getaran *hands-arm* dijalankan dengan menggunakan alat pengukur getaran.  
*Photo 9: The hands arm vibration measurement is carried using the vibration meter.*



Gambar 10: Getaran *whole body* dihantar melalui kerusi atau kaki pekerja yang memandu keretapi lokomotif.  
*Photo 10: The whole body vibration (WBV) is transmitted through the seat or feet of the employees driving the locomotive.*

## Lawatan ke Walk About Malaysia Sdn Bhd

Satu lawatan telah dijalankan oleh Bahagian Higien Industri dan Ergonomik bersama-sama dengan Timbalan Ketua Pengarah (Operasi) JKKP Malaysia, pada 22 Oktober 2012 di Walk About Malaysia Sdn Bhd, Melaka. Lawatan ini turut disertai oleh wakil daripada Sirim (M) Sdn Bhd, iaitu badan kuasa melulus/memeriksa/menguji (kasut keselamatan) yang telah diiktiraf oleh Jabatan.

Objektif lawatan ini adalah untuk memastikan audit dan pengujian yang dilakukan oleh badan kuasa melulus/memeriksa/menguji (kasut keselamatan) ke atas syarikat pembuat/pembekal tersebut adalah berdasarkan piawaian dan kelulusan yang diberikan oleh JKKP, iaitu MS ISO 20345: 2008 dan MS 1599: 1998 bagi kasut keselamatan.

## Visit to Walk About Malaysia Sdn Bhd

*A visit to Walk About Malaysia Sdn Bhd in Malacca was conducted by the Industrial Hygiene and Ergonomics Division, attended by the Deputy Director-General (Operations) of DOSH Malaysia, on 22 October 2012. The visit was also attended by representatives from SIRIM (M) Sdn Bhd, the accredited approving/inspecting/testing body on safety shoes.*

*The objective of this visit is to ensure that the auditing and testing conducted by the approving/inspecting/testing (safety shoes) body on the manufacturer/supplier is based on the standards and approvals by the DOSH, namely the MS ISO 20345: 2008 and MS 1599: 1998 on safety shoes.*

Gambar 11: Pegawai yang hadir semasa sesi lawatan iaitu Timbalan Ketua Pengarah (Operasi) JKKP Malaysia, Pengarah Bahagian Higien Industri, pegawai Bahagian Higien Industri dan wakil SIRIM (M) Sdn Bhd.  
*Photo 11: The visiting officials include the Deputy Director-General (Operations) of the DOSH Malaysia, Director of Industrial Hygiene Division, officers from the Industrial Hygiene Division, and representatives of SIRIM (M) Sdn Bhd.*





## Pemantauan Merkuri dalam Sektor Minyak dan Gas

Beberapa siri pemantauan telah dijalankan pada tahun 2012 dan melibatkan pegawai daripada Bahagian Higien Industri dan Ergonomik dan pejabat JKKP negeri. Berikut adalah loji yang terlibat dengan pemantauan merkuri bagi tahun 2012:

- i. Petronas Penapisan Melaka Sdn Bhd, Melaka.
- ii. Terengganu Crude Oil Terminal (TCOT), Terengganu.
- iii. Petronas Penapisan Terengganu Sdn Bhd, Terengganu.
- iv. Petronas Gas Berhad (PGB A - PLANT 2), Terengganu.
- v. Petronas Gas Berhad (PGB A - PLANT 4), Terengganu.
- vi. Malaysia LNG (PLANT 7), Bintulu, Sarawak.
- vii. Murphy Oil Corporation, Bintulu, Sarawak.
- viii. Bintulu Integrated Fertilizer, Bintulu, Sarawak.

Objektif pemantauan ini adalah untuk mengenal pasti tahap pendedahan merkuri dalam sektor minyak dan gas dan membandingkan bacaan tersebut dengan nilai had pendedahan dibenarkan yang terkandung dalam Peraturan USECHH, 2000.

## Monitoring of Mercury in the Oil and Gas Sector

A series of monitoring exercise was conducted in 2012 involving officers from the Industrial Hygiene and Ergonomics Division and state DOSH offices. The following plants were involved in the monitoring of mercury in 2012:

- i. Petronas Penapisan Melaka Sdn Bhd, Melaka.
- ii. Terengganu Crude Oil Terminal (TCOT), Terengganu.
- iii. Petronas Penapisan Terengganu Sdn Bhd, Terengganu.
- iv. Petronas Gas Berhad (PGB A - PLANT 2), Terengganu.
- v. Petronas Gas Berhad (PGB A - PLANT 4), Terengganu.
- vi. Malaysia LNG (PLANT 7), Bintulu, Sarawak.
- vii. Murphy Oil Corporation, Bintulu, Sarawak.
- viii. Bintulu Integrated Fertiliser, Bintulu, Sarawak.

The objective of monitoring is to determine the levels of mercury exposure in the Oil and Gas Sector and to compare the readings with the permissible exposure limits under the USECHH Regulations 2000.



Gambar 12: Pemantauan merkuri sedang dijalankan oleh pegawai JKKP.  
Photo 12: Monitoring of mercury being conducted by the DOSH officers.

Gambar 13 dan 14: Alat penganalisis merkuri digunakan semasa pemantauan merkuri dijalankan.  
Photos 13 & 14: The mercury analyser is used to monitor mercury.



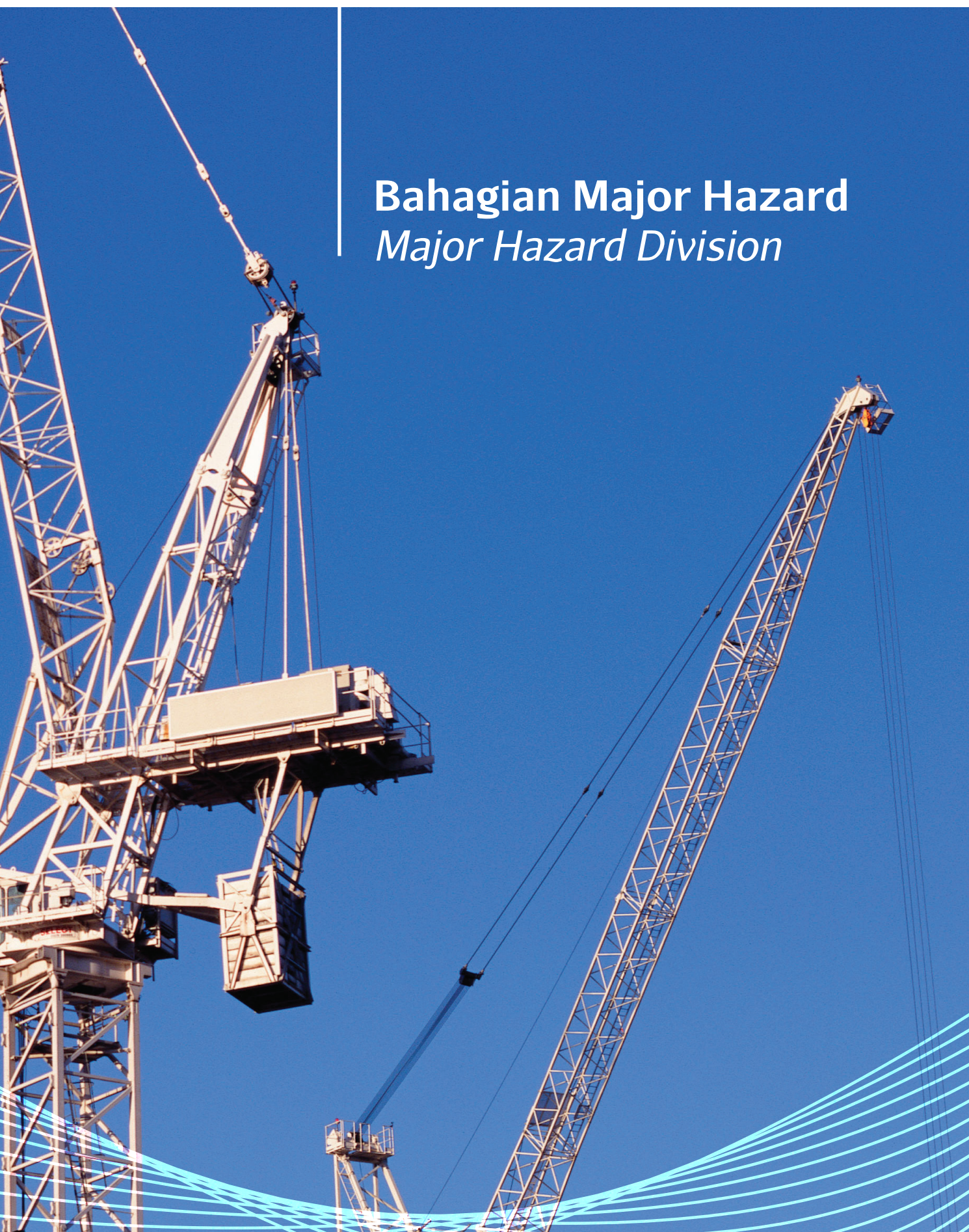






## Bahagian Major Hazard

### *Major Hazard Division*





## Bahagian Major Hazard

### *Major Hazard Division*

Bahagian Major Hazard terdiri daripada dua seksyen, iaitu Seksyen Kawalan Bencana Industri dan Seksyen Petroleum. Seksyen Kawalan Bencana Industri bertanggungjawab untuk menguatkuasakan Peraturan-Peraturan Keselamatan dan Kesihatan Pekerjaan (Kawalan Terhadap Bahaya Kemalangan Besar dalam Perindustrian) 1996 atau lebih dikenal sebagai Peraturan CIMAH 1996.

*The Major Hazard Division comprises of two sections, namely, the Industrial Disaster Control Section and the Petroleum Section. The Industrial Disaster Control Section is responsible for enforcing the Occupational Safety and Health (Control of Industrial Major Accident Hazards) Regulations 1996, commonly known as the CIMAH Regulation 1996.*

### Objektif Bahagian Major Hazard

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- 1) Untuk melindungi orang yang sedang bekerja, orang lain yang berada di tempat kerja, orang awam, harta benda dan persekitaran daripada bahaya kemalangan besar dengan mengurangkan risiko dan impaknya melalui satu sistem perundangan kawalan bahaya kemalangan besar yang terancang, cekap, dan berkesan.
- 2) Untuk memastikan reka bentuk, pemasangan, dan pengendalian talian paip petroleum mematuhi tahap dan spesifikasi minimum keselamatan yang telah ditetapkan bagi mengelak berlakunya kemalangan/kebocoran yang boleh menjejaskan industri petroleum dan alam sekitar dengan menguatkuasakan Peraturan-Peraturan Petroleum (Pengangkutan Melalui Talian Paip) 1985.

### *Objectives of the Major Hazard Division*

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- 1) To protect people at work, non-personnel individuals at the workplace, the general public, property, and the environment from major accident hazards by reducing the risk and impact through an organised, efficient, and effective major accident hazard control legislations.*
- 2) To ensure that the design, installation, and operation of petroleum pipelines comply with the minimum safety standards and specifications in order to avoid accidents/leakages that can affect the petroleum industry and the environment by enforcing the Petroleum (Transportation of Petroleum by Pipelines) Regulations 1985.*

## Fungsi Bahagian Major Hazard

### *Functions of the Major Hazard Division*

Seksyen Kawalan Bencana Industri <i>Industrial Disaster Control Section</i>	
Unit Penguatkuasaan <i>Enforcement Unit</i>	Unit Pemeriksaan Dan Analisa Risiko <i>Inspection and Risk Analysis Unit</i>
<ul style="list-style-type: none"> <li>Menguatkuasakan Peraturan-peraturan Keselamatan dan Kesihatan Pekerjaan (Kawalan Terhadap Bahaya Kemalangan Besar Dalam Perindustrian) 1996 atau Peraturan CIMAHA. <i>To enforce the Occupational Safety and Health (Control of Industrial Major Accident Hazards) Regulations 1996 or the CIMAHA Regulations.</i></li> <li>Menerima dan memproses Borang Pemberitahuan Mengenai Aktiviti Industri (Borang JKPP-5) dan mengenal pasti pemasangan bahaya besar dan bukan bahaya besar yang terdapat di dalam negara dan menyediakan satu inventori bagi pemasangan tersebut. <i>To receive and process the Industrial Activity Notification Form (JKPP-5 Form), and to identify major hazard and non-major hazard installations in the country and provide an inventory for the installations.</i></li> <li>Membuat penilaian ke atas laporan tentang aktiviti industri atau Laporan Keselamatan atau pelan kecemasan tapak yang disediakan dan dikemukakan oleh pengilang pemasangan bahaya besar kepada Jabatan dalam mematuhi kehendak Peraturan CIMAHA. <i>To evaluate the industry activity reports or Safety Reports or on-site emergency plans prepared and submitted to the Department by major hazard installation companies in compliance with the requirements of the CIMAHA Regulations.</i></li> <li>Membuat penilaian ke atas laporan demonstrasi operasi selamat yang disediakan dan dikemukakan oleh pengilang pemasangan bahaya bukan besar dalam mematuhi kehendak Peraturan CIMAHA. <i>To evaluate the safe operation demonstration reports prepared and submitted to the Department by non-major hazard installation companies in compliance with the requirements of the CIMAHA Regulations.</i></li> <li>Menyemak dokumen dan memantau status penyampaian maklumat kepada umum oleh pengilang pemasangan bahaya besar. <i>To check documents and monitor the status of Information To Public (ITP) by major hazard installation companies.</i></li> <li>Menjalankan aktiviti promosi dan publisiti untuk memastikan pengilang mendapat maklumat terkini berkaitan pengawalan bahaya kemalangan besar. <i>To carry out promotion and publicity activities to ensure that manufacturers obtain the latest information on control of major accident hazards.</i></li> <li>Merancang dan mengkaji strategi baru bagi mengurangkan bahaya kemalangan besar. <i>To plan and review new strategies to reduce major accident hazards.</i></li> </ul>	<ul style="list-style-type: none"> <li>Memastikan aktiviti pemeriksaan berasaskan risiko dilaksanakan dengan selamat. <i>To ensure that risk-based inspection activities are carried out safely.</i></li> <li>Menilai dan meluluskan metodologi yang akan diguna pakai oleh organisasi yang memohon untuk mengimplementasi SSI. <i>To review and approve the methodology to be adopted by organisations seeking to implement the Special Scheme Inspection (SSI).</i></li> <li>Menilai keupayaan organisasi dari segi pengetahuan, serta pengurusan keselamatan dan kesihatan yang diamalkan sebelum boleh melaksanakan SSI. <i>To evaluate the capability of the organisation in terms of knowledge and safety and health management before they can implement the SSI.</i></li> <li>Menjalankan pemeriksaan dan audit SSI sebelum memperbaharui sijil perakuan kelayakan mengikut tempoh tertentu. <i>To carry out the SSI and audit before renewing the certificate of eligibility for a certain timeframe.</i></li> <li>Menjalankan urusan melantik orang kompeten untuk tugas SSI. <i>To appoint competent persons for the SSI tasks.</i></li> </ul>



**Seksyen Petroleum**  
**Petroleum Section**

**Unit Talian Paip Dan Simpanan Pukal**  
**Pipelines And Bulk Storage Unit**

- Menguatkuasakan Peraturan-Peraturan (Langkah-Langkah Keselamatan) (Pengangkutan Petroleum Melalui Talian Paip) 1985, MS 830, MS 930 dan MS 1204.  
*To enforce the Petroleum (Safety Measures) (Transportation of Petroleum by Pipelines) Regulations 1985, MS 830, MS 930, and MS 1204.*
- Menyemak dan memproses kelulusan reka bentuk bagi sistem retikulasi dan simpanan pukal dan talian paip mengikut koda dan standard yang diiktiraf oleh Jabatan.  
*To review and process design approval for reticulation systems and bulk storage and pipelines in accordance with codes and standards recognised by the Department.*
- Menjalankan pemeriksaan dan pengesahan ke atas ujian (hidrostatik/pneumatik) ke atas sistem retikulasi dan simpanan pukal dan talian paip sebelum kebenaran mengendali dikeluarkan.  
*To carry out the inspection and verification of tests (hydrostatic/pneumatic) of the reticulation system and bulk storage and pipelines before permission-to-operate is issued.*
- Menjalankan siasatan terhadap aduan atau apa-apa kejadian berbahaya termasuk kemalangan yang melibatkan pemasangan petroleum (simpanan pukal dan talian paip).  
*To conduct an investigation on complaints or any hazardous incidents, including accidents involving petroleum installations (bulk storage and pipelines).*
- Menyemak dan memproses kelulusan peralatan petroleum yang dipasang pada sistem paip retikulasi dan talian paip.  
*To review and process the approval for petroleum equipment installed in the reticulation system and pipelines.*
- Membuat semakan ke atas perundangan sedia ada bagi memenuhi permintaan atau perubahan iklim perindustrian minyak dan gas atau arahan pengurusan atasan.  
*To undertake a review of existing legislations to meet the demand or climate change of the oil and gas industry, or at the direction of the top management.*
- Menyediakan garis panduan atau tataamalan berkaitan penggunaan, pengendalian, dan penyenggaraan pemasangan sistem retikulasi dan simpanan pukal.  
*To provide guidelines or codes of practice relating to the use, operation, and maintenance of the reticulation system and bulk storage installation.*
- Bertanggungjawab mengumpulkan dan menganalisis data serta pemantauan pelaksanaan program Compliance Support dalam IKS negeri.  
*To be responsible for gathering and analysing data as well as monitoring the implementation of the Compliance Support Programme of state SMIs.*

**Unit Kawalan**  
**Control Unit**

- Menguatkuasakan Peraturan-Peraturan (Langkah-Langkah Keselamatan) (Pengangkutan Petroleum Melalui Talian Paip) 1985.  
*To enforce the Petroleum (Safety Measures) (Transportation of Petroleum by Pipelines) Regulations 1985.*
- Membuat perancangan dan menjalankan penguatkuasaan aktiviti integriti ke atas talian paip petroleum.  
*To plan and carry out the enforcement of integrity activities on petroleum pipelines.*
- Menjalankan audit ke atas pemunya/pengendali sistem retikulasi (simpanan pukal) dan talian paip petroleum.  
*To carry out an audit of the owner/operator of reticulation systems (bulk storage) and petroleum pipelines.*
- Merancang dan melaksanakan kajian dan penyelidikan berkaitan kawalan (penyenggaraan) talian paip, sistem retikulasi, GPC, gas asli, NGV dan produk petroleum lain.  
*To plan and carry out research and studies on pipeline controls (maintenance), reticulation systems, LPG, natural gas, NGVs, and other petroleum products.*
- Menjalankan aktiviti promosi dan publisiti berkaitan pematuhan perundangan dan isu keselamatan berkaitan simpanan pukal dan talian paip petroleum.  
*To carry out promotion and publicity activities on compliance and security issues related to bulk storage and petroleum pipelines.*
- Menjalankan siasatan terhadap aduan atau apa-apa kemalangan yang melibatkan talian paip petroleum.  
*To conduct an investigation on complaints or any accident involving petroleum pipelines.*

**Jadual 1: Aktiviti utama Seksyen Kawalan Bencana Industri bagi tahun 2012.**
**Table 1: Main Activities of the Industrial Disaster Control Section in 2012.**

Bil. No.	Jenis Aktiviti   Types of Activity	Bil. Pencapaian Achievement
1.	Memproses Borang Pemberitahuan Aktiviti Industri <i>Processing Industrial Activity Notification Forms</i>	138
2.	Menilai dokumen DOS <i>Evaluation of DOS documents</i>	63
3.	Menilai Laporan Aktiviti Industri <i>Evaluation of Reports on Industrial Activity</i>	81
4.	Menilai Pelan Kecemasan Tapak (ERP) <i>Evaluation of Emergency Response Plans (ERP)</i>	45
5.	Menilai Risalah Maklumat Kepada Umum (ITP) <i>Evaluating the Leaflets of Information to Public (ITP)</i>	9
6.	Audit pemasangan MHI / NMHI <i>MHI / NMHI Installation Audits</i>	82
7.	Memproses Permohonan Lanjutan CF / Pengecualian Pemeriksaan Dalaman <i>Processing CF Extension / Exemption from Internal Inspection</i>	65
8.	Pemeriksaan Pemasangan LPG dalam Selinder <i>Inspection of LPG Cylinder Storage Installations</i>	26
9.	Siasatan Kemalangan dan Aduan <i>Accidents and Complaints Investigation</i>	5

**Jadual 2: Pendaftaran Orang Yang Kompeten (Major Hazard) bagi tahun 2012.**
**Table 2: Registration of Competent Persons (Major Hazard) in 2012.**

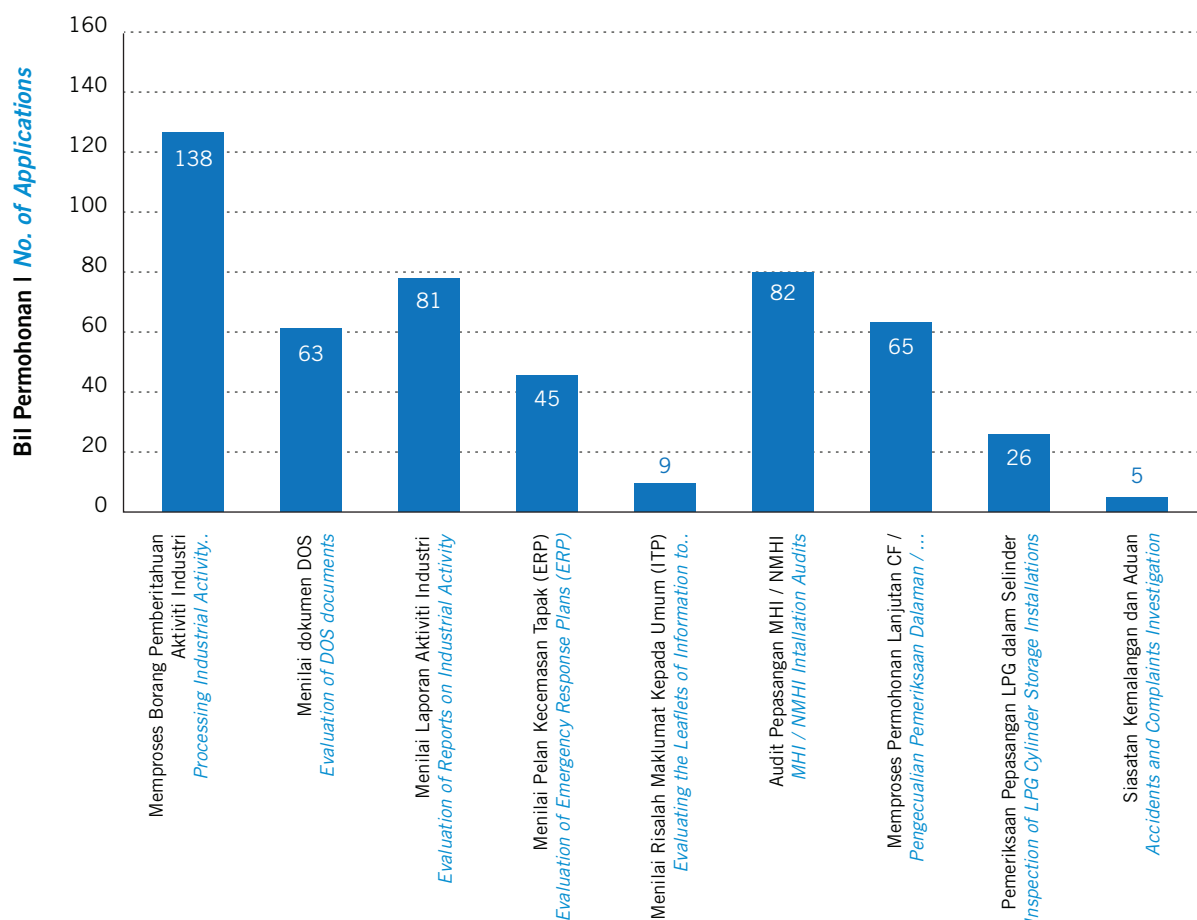
Jenis Aktiviti   Types of Activity	Bilangan   Number
Jumlah permohonan baharu   <i>Total new applications</i>	12
Jumlah permohonan pembaharuan   <i>Total applications for renewal</i>	13
Permohonan baharu lulus   <i>Approved new applications</i>	3
Permohonan pembaharuan lulus   <i>Approved renewal applications</i>	11

**Jadual 3: Aktiviti utama Seksyen Petroleum bagi tahun 2012.**
**Table 3: Main Activities of the Petroleum Section in 2012.**

Jenis Aktiviti   Types of Activity	Pencapaian   Achievement
PTI / PTO talian paip   <i>PTI / PTO for pipelines</i>	142
PTI / PTO simpanan pukal   <i>PTI / PTO for bulk storage</i>	369
Baik pulih talian paip   <i>Pipeline repair / bulk storage</i>	4
Kelulusan peralatan petroleum   <i>Approval for petroleum equipment</i>	7
Pemeriksaan / ujian hidrostatik   <i>Hydrostatic inspection / testing</i>	37

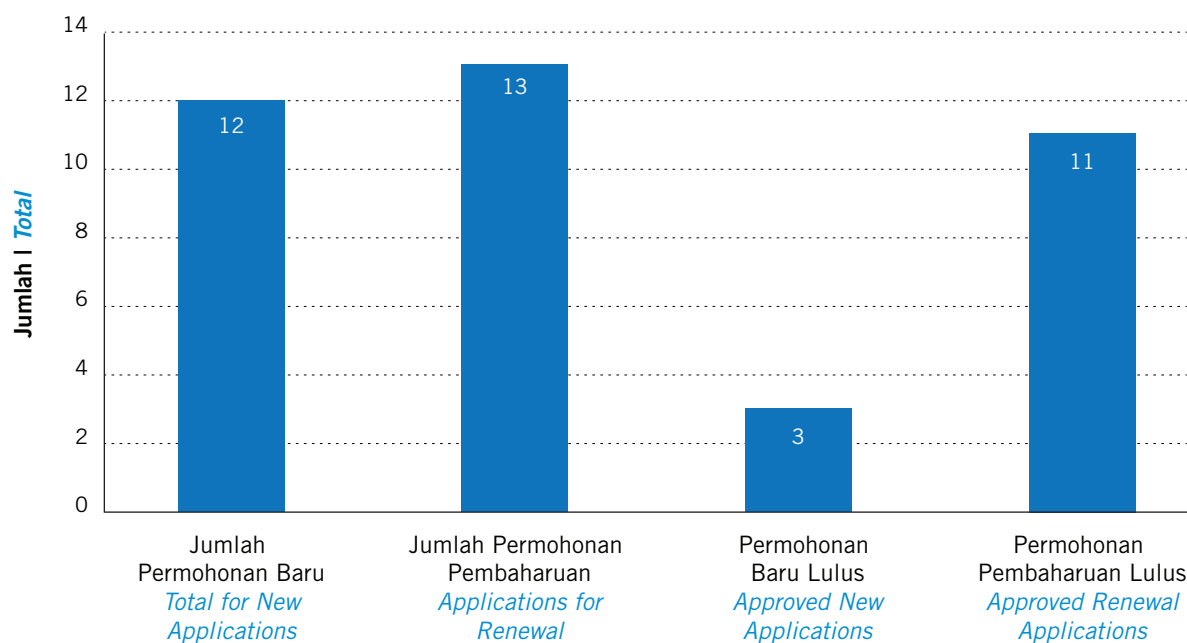
Graf 1: Pencapaian Seksyen Kawalan Bencana Industri.

Graph 1: Achievements of the Industrial Disaster Control Section.



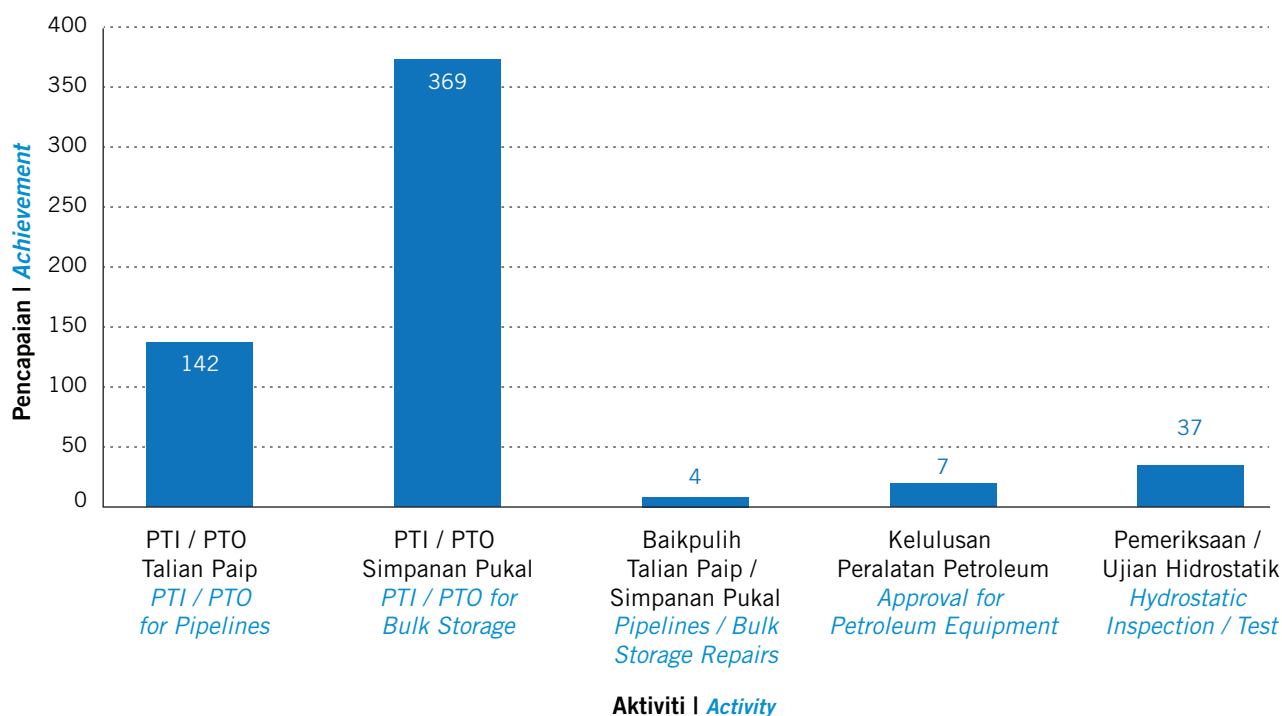
Graf 2: Pendaftaran Orang Kompeten Major Hazard.

Graph 2: Registration of Major Hazard Competent Persons.





Graf 3: Pencapaian Seksyen Petroleum.

*Graph 3: Achievements of the Petroleum Section.*

## Penguatkuasaan Peraturan CIMAH

Peraturan CIMAH telah diwartakan pada 1 Februari 1996. Bagi menilai tahap kesedaran, pemahaman, dan pematuhan pengilang terhadap peraturan ini, Seksyen Kawalan Bencana Industri bersama-sama dengan Seksyen Risiko Khas JKKP negeri menjalankan Penguatkuasaan Peraturan CIMAH mengikut negeri yang telah ditetapkan. Sepanjang tahun 2012, kesemua negeri telah dijalankan penguatkuasaan ini dan hasilnya hanya lapan notis pembaikan (NOI) dikeluarkan.

## Enforcement of the CIMAH Regulations

*CIMAH Regulations were gazetted on 1 February 1996. In order to assess the levels of awareness, understanding, and compliance with the regulations, the Industrial Disaster Control Section collaborated with the Special Risk Section of the DOSH state offices to conduct enforcement of the CIMAH Regulations by the States. In 2012, this operation was successfully conducted in all the States and as a result, eight Notices of Improvement (NOIs) were issued.*

## Lanjutan Tempoh Sah Laku Sijil Perakuan Kelayakan dan Pengecualian Pemeriksaan Dalam

Permohonan penangguhan pemeriksaan ulangan dan pengecualian pemeriksaan dalaman bagi dandang stim dan pengandung tekanan tak berapi diterima daripada pengilang melalui sokongan Pengarah JKKP negeri. Seksyen Kawalan Bencana Industri dipertanggungjawabkan memproses permohonan ini sebelum kelulusan dikeluarkan oleh Ketua Pengarah atau Menteri Sumber Manusia. Permohonan ini dibahagikan kepada dua jenis, iaitu penangguhan pemeriksaan dalaman (kuasa kelulusan oleh Ketua Pengarah) dan pengecualian pemeriksaan dalaman (kuasa kelulusan oleh Menteri).

## Extension of Certificate of Fitness and Exemption from Internal Inspection

*Applications for the extension of annual inspection and exemption from internal inspection for steam boilers and unfired pressure vessels were received from manufacturers and supported by the DOSH State Director. The Industrial Disaster Control Section was responsible for processing these applications before they were approved by the Director-General or Minister of Human Resources. The applications were divided into two types, namely extension of internal inspection (approval by the Director-General) and exemption of internal inspection (approval by the Minister).*

Sepanjang tahun 2012, sebanyak 91 permohonan berjaya diproses. Permohonan pengecualian pemeriksaan dalaman memerlukan kuasa Menteri untuk kelulusan warta dan Perintah Kilang dan Jentera (Pengecualian) akan digazetkan untuk memaklumkan bahawa jentera berkenaan adalah dikecualikan daripada persediaan untuk pemeriksaan ulangan sebagaimana yang dikehendaki oleh peraturan 17 dalam Peraturan-Peraturan (Pemberitahuan, Perakuan Kelayakan dan Pemeriksaan) Kilang dan Jentera 1970.

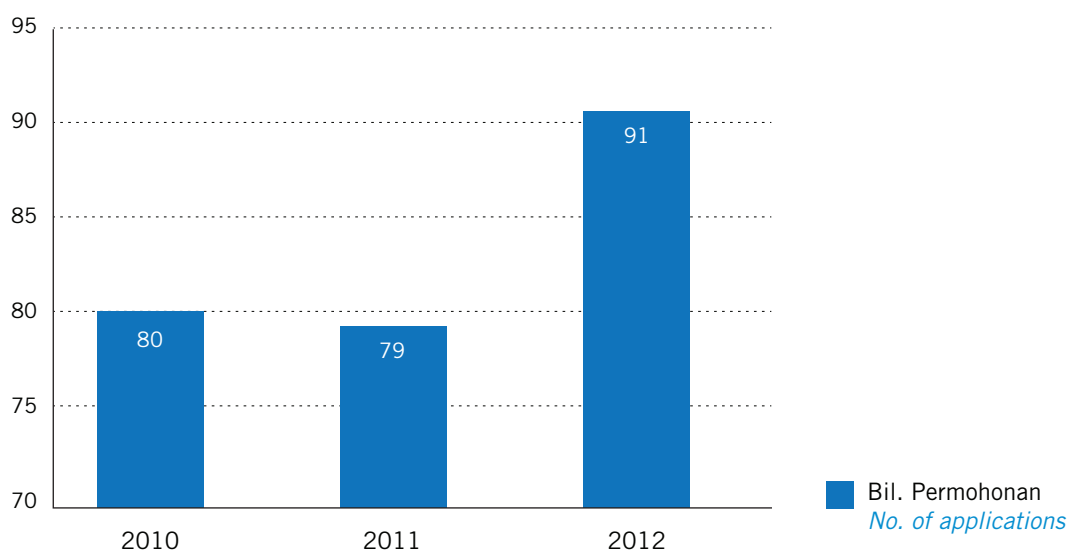
*In 2012, a total of 91 applications were successfully processed. Applications for exemption from internal inspection required the power of the Minister for gazette approval. The Factories and Machinery Order (Exemption) would be gazetted to declare that the machinery concerned were exempted from preparation for annual inspection as required by Regulation 17 of the Factories and Machinery Act (Notification, Certificate of Fitness and Inspection) 1970.*

Graf 4 dan Carta 5 menunjukkan jumlah permohonan penangguhan pemeriksaan ulangan dan pengecualian pemeriksaan dalaman yang berjaya diproses serta kos penjimatan yang diperoleh sepanjang tahun 2010 – 2012.

*Graph 4 and Graph 5 show the number of successfully processed applications for the extension of annual inspection and for exemption from internal inspection in the period of 2010 – 2012.*

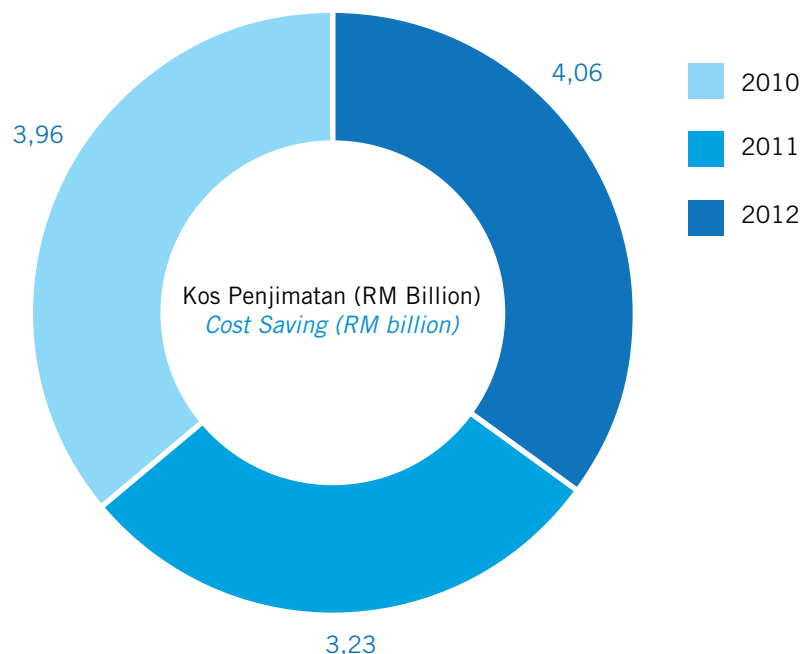
**Graf 4: Jumlah Permohonan Lanjutan Tempoh Sah Laku Sijil Kelayakan/Pengecualian Pemeriksaan Dalaman yang diproses sepanjang Tahun 2010 – 2012.**

*Graph 4: Total number of processed applications for CF Extension/Internal Inspection Exemption for the period of 2010 – 2012.*



**Carta 5: Jumlah kos penjimatan yang diperoleh menerusi kelulusan Permohonan Lanjutan Tempoh Sah Laku Sijil Kelayakan/ Pengecualian Pemeriksaan Dalaman yang diproses sepanjang tahun 2010 – 2012.**

**Chart 5: Total cost savings through the approval of processed applications for CF Extension/Internal Inspection Exemption for the period of 2010 – 2012.**



## Kemalangan Melibatkan Pepasangan Bahaya Besar (MHI) dan Pepasangan Bukan Bahaya Besar (NMHI)

Menurut Peraturan 23 (Kawalan Terhadap Bahaya Kemalangan Besar Dalam Perindustrian) 1996), pengilang yang diklasifikasikan sebagai MHI dan NMHI hendaklah memaklumkan kepada pejabat JKPP yang terdekat tentang kemalangan besar yang berlaku di tapak dengan cara yang paling cepat.

Dari tahun 2005 hingga 2012, sebanyak 6888 kes kemalangan industri di seluruh negara dilaporkan kepada JKPP. Daripada jumlah tersebut, sebanyak 71 kes atau 1% membabitkan bantuan siasatan daripada Bahagian Major Hazard. Antaranya adalah kemalangan kejadian letupan dan kebakaran di Loji Penapisan Gas Petronas, Kerteh Terengganu dan kejadian pelepasan gas toksik ammonia di Linde Gas Products Sdn Bhd, Kerteh Terengganu.

## Accidents Involving Major Hazard Installations (MHI) and Non-Major Hazard Installations (NMHI)

According to the Regulation 23 of the OSH (Control of Industrial Major Accident Hazards) Regulations 1996, a manufacturer classified under MHI and NMHI must notify the nearest DOSH office of any major accident that occurs on site by the quickest means possible.

From 2005 till 2012, a total of 6888 cases of industrial accidents across the country have been reported to the DOSH. Of this figure, 71 cases or 1% involved the assistance of the Major Hazard Division in conducting an investigation. Among these include the explosion and fire incident at Petronas Gas Refinery Plant in Kerteh, Terengganu and the release of toxic ammonia gas at Linde Gas Products Sdn Bhd, also in Kerteh, Terengganu.





Lokasi kejadian letupan dan kebakaran yang berlaku.  
*The location of the explosion and fire incident.*



Antara kesan kejadian letupan dan kebakaran tersebut.  
*After-effects of the explosion and fire.*



Kesan kebocoran gas toksik ammonia yang berlaku pada salah satu peralatan talian paip operasi penyimpanan gas toksik ammonia.  
*Effects of toxic ammonia gas leakage on one of the pipeline equipment for storing toxic ammonia gas.*

## Pematuhan Penyediaan Laporan Aktiviti Industri, Pelan Kecemasan Tapak dan Maklumat kepada Umum

Menurut Peraturan 14, 15, dan 16 (Kawalan Terhadap Bahaya Kemalangan Besar dalam Perindustrian) 1996, pihak pengilang tidak boleh menjalankan aktiviti industri melainkan setelah berunding dengan Orang Yang Kompeten (OYK) untuk menyediakan laporan bertulis yang mengandungi maklumat sepertimana dalam Jadual 6, dan perlu dikemukakan kepada Ketua Pengarah. Jika berlaku pengubahsuaian ketara kepada aktiviti industri, Laporan Aktiviti Industri (LAI) perlu diubah suai dan LAI ini juga perlu dikemas kini setiap tiga tahun.

Manakala Peraturan 18, 19, dan 20 (Kawalan Terhadap Bahaya Kemalangan Besar Dalam Perindustrian) 1996 pula menghendaki pihak pengilang untuk menyediakan dan menyimpan suatu Pelan Kecemasan Tapak (ERP) selepas berunding dengan OYK. ERP yang dikemas kini perlu diperincikan dengan cara menangani kemalangan besar di tapak, nama individu yang bertanggungjawab bagi keselamatan di tapak serta nama individu yang diberi kuasa untuk mengambil tindakan dinyatakan dalam pelan tersebut. Pihak pengilang juga perlu memberitahu pihak berkuasa tempatan atau pihak berkuasa pelabuhan tentang kawasan aktiviti industrinya yang boleh mengakibatkan suatu bahaya kemalangan besar. ERP ini perlu dikemas kini dan dikaji semula mengikut tempoh yang ditetapkan.

Menurut Peraturan 22 pula pihak pengilang perlu menyampaikan Maklumat kepada Umum (ITP) sebagaimana dalam Jadual 3 kepada orang di luar tapak yang mungkin terjejas akibat suatu kemalangan besar yang berlaku di tapak tanpa perlu diminta oleh mereka.

Rasional keperluan pematuhan kepada LAI, ERP, dan ITP adalah supaya pengilang boleh mengenal pasti hazard bahan berbahaya di tapak, mengenal pasti kaedah pencegahan dan kawalan yang sesuai di tapak, mengenal pasti senario yang mungkin mengakibatkan kemalangan besar dan mengetahui cara menangani kecemasan di tapak.

## *Compliance with the Requirement to Prepare the Industrial Activity Report (IAR), Emergency Response Plan (ERP), and Information to the Public (ITP)*

*According to Regulations 14, 15, and 16 of the OSH (Control of Industrial Major Accident Hazards) Regulations 1996, the manufacturer shall not undertake an industrial activity unless he has consulted a Competent Person to prepare a written report containing the information as specified in Schedule 6, and has sent a copy of the report to the Director-General. In the event of any significant modification to the industrial activity, the Industrial Activity Report (IAR) must also be amended to reflect the changes and needs to be updated once every three years.*

*Regulations 18, 19, and 20 of the OSH (Control of Industrial Major Accident Hazards) Regulations 1996, on the other hand, require the manufacturer to prepare and keep an on-site Emergency Response Plan (ERP) after consulting a Competent Person. The updated ERP must contain the details on how major accidents are to be dealt with on the site, the name of the person responsible for safety on the site, and the names of those who are authorised to take action pursuant to the plan. The manufacturer must also notify the local authority or port authority regarding any industrial activity which may result in a major accident hazard. The ERP must be updated and reviewed at regular intervals.*

*According to Regulation 22, the manufacturer shall disseminate Information-To-Public (ITP) as specified in Schedule 3 to persons outside the site who are likely to be affected by a major accident occurring at the site without their having to request for it.*

*The rationale behind the compliance requirements of the IAE, ERP, and ITP is to enable the manufacturer identify the hazards of hazardous materials at the site, identify the appropriate preventive and control methods at the site, identify the scenarios that might lead to a major accident, and to possess the know-how to deal with on-site emergencies.*



Statistik pematuhan LAI, ERP, dan ITP mengikut negeri adalah seperti yang berikut:

*Statistics on the compliance requirements of the LAI, ERP and ITP by state are as follows:*

Negeri   State	MHI	ITP	LAI	ERP
Johor   <i>Johore</i>	50	40	40	40
Kedah   <i>Kedah</i>	11	10	10	10
Kelantan   <i>Kelantan</i>	2	2	2	2
Melaka   <i>Malacca</i>	9	12	12	12
N. Sembilan   <i>N. Sembilan</i>	14	10	10	10
Pahang   <i>Pahang</i>	18	18	18	18
Perak   <i>Perak</i>	21	18	18	18
Perlis   <i>Perlis</i>	1	1	1	1
Pulau Pinang   <i>Penang</i>	23	18	18	18
Sabah   <i>Sabah</i>	12	13	13	13
Sarawak   <i>Sarawak</i>	22	22	22	22
Selangor   <i>Selangor</i>	57	53	53	53
Terengganu   <i>Terengganu</i>	25	22	22	22
W.P. Kuala Lumpur   <i>F.T. Kuala Lumpur</i>	6	6	6	6
W.P. Labuan   <i>F.T. Labuan</i>	2	2	2	2
W.P. Putrajaya   <i>F.T. Putrajaya</i>	1	1	1	1
Jumlah   <i>Total</i>	274	248	248	248

## Aktiviti Bahagian Major Hazard

### *Activities Of Major Hazard Division*



Lawatan teknikal projek SSGP di Kimanis, Sabah, bersama-sama Timbalan Ketua Pengarah (Operasi) JKKP.  
*SSGP Project technical visit to Kimanis in Sabah with the DOSH Deputy Director-General (Operations).*



Lawatan teknikal projek KLIA 2 di Sepang bersama-sama Pengarah Bahagian Major Hazard.  
*KLIA 2 Project technical visit in Sepang with the Director of Major Hazard Division.*





Pemeriksaan penjongkongan pintar dalam operasi terminal eksport di Kemaman.  
*Intelligent pigging inspection at the Export Terminal Operation in Kemaman.*



Pemeriksaan pengukuran ketebalan ultrasonik (UTM) untuk talian paip di Kemaman Port Konsertium, Kemaman.  
*Ultrasonic thickness measurement (UTM) inspection of pipelines at the Kemaman Port Consortium, Kemaman.*



Sesi taklimat dan perbincangan Permohonan Lanjutan Tempoh Sah Laku Sijil Kelayakan (CF) di Malaysia LNG Sdn Bhd, Bintulu Sarawak.  
*Briefing and discussion on applications to obtain CF extension at Malaysia LNG Sdn Bhd in Bintulu, Sarawak.*



Sesi pemeriksaan dan verifikasi data pengukuran ketebalan ultrasonik (UTM) ke atas dinding jentera yang berperakuan di Malaysia LNG Sdn Bhd, Bintulu Sarawak.  
*Inspection and verification of ultrasonic thickness measurement (UTM) data of the walls of certified machinery at Malaysia LNG Sdn Bhd in Bintulu, Sarawak.*



Sesi penerangan oleh operator di bilik kawalan operasi semasa pemeriksaan tapak bagi permohonan Pengecualian Pemeriksaan Dalam-dan di TNB Janamanjung Sdn Bhd, Manjung Perak.  
*Briefing session by operators in the operations control room during a site check for internal inspection exemption applications at TNB Janamanjung Sdn Bhd In Manjung, Perak.*



Sesi pemeriksaan loji untuk melakukan verifikasi data pengukuran ketebalan ultrasonik (UTM) di TNB Janamanjung Sdn Bhd, Manjung Perak.  
*Plant inspection session to verify the ultrasonic thickness measurement (UTM) data at TNB Janamanjung Sdn Bhd in Manjung, Perak.*







# Bahagian Luar Pantai

## *Offshore Division*

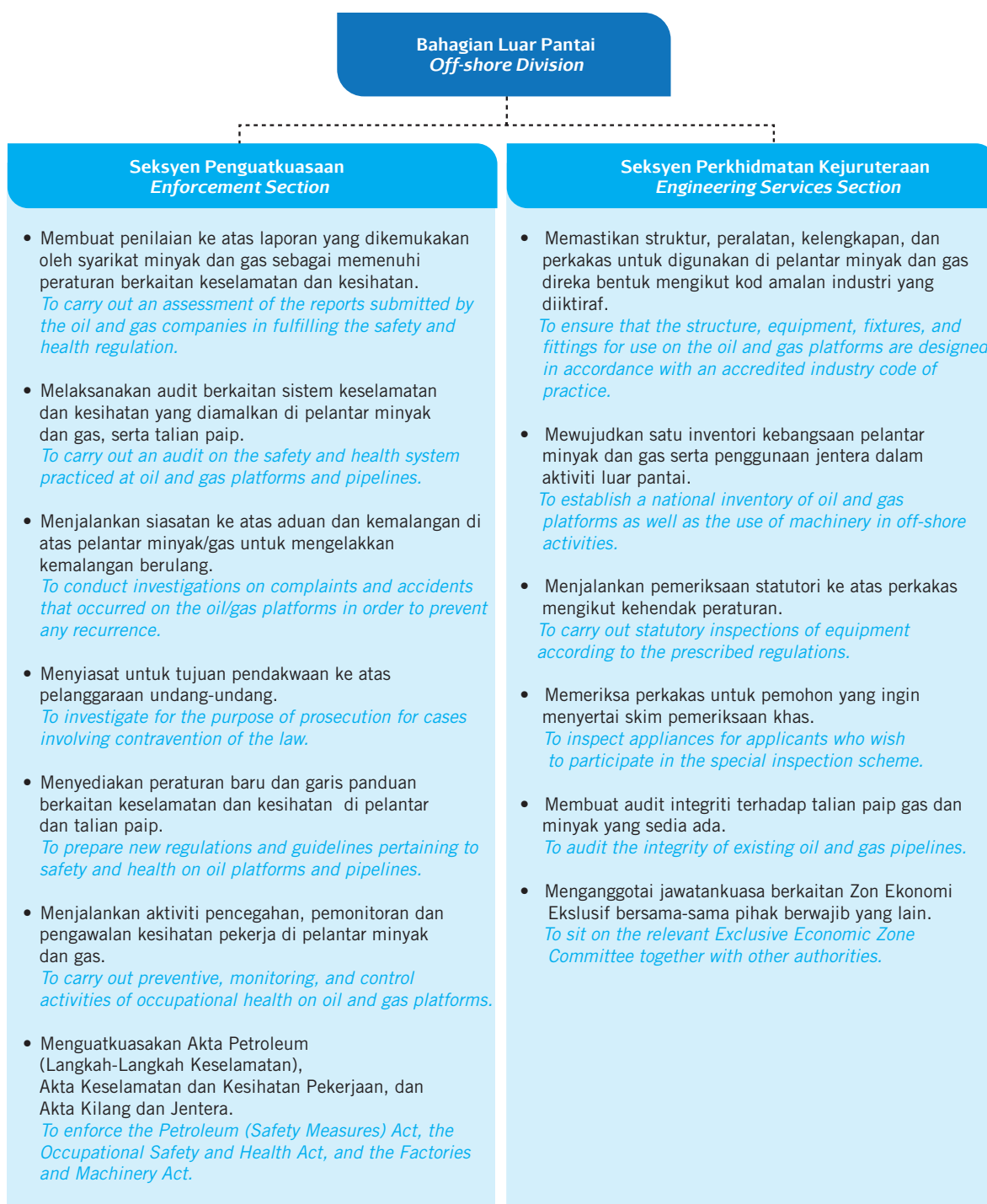




## Bahagian Luar Pantai Offshore Division

Di bawah carta organisasi utama JKKP Malaysia, Bahagian Luar Pantai terletak di bawah seliaan Timbalan Ketua Pengarah Operasi. Ia mengandungi dua seksyen, iaitu Seksyen Perkhidmatan Kejuruteraan dan Seksyen Penguatkuasaan. Kedua-dua seksyen ini ditubuhkan bagi membantu Jabatan menguatkuasakan undang-undang yang melibatkan aktiviti luar pantai. Fungsi kedua-dua seksyen ini adalah seperti dalam rajah di bawah.

*Under the DOSH main organisational chart, the Offshore Division is placed under the supervision of the Deputy Director-General of Operations. It consists of two sections, namely, the Engineering Services Section and the Enforcement Section. Both these sections were set up to assist the department in enforcing the laws pertaining to offshore activities. These sections have the following functions:*



## Laporan Aktiviti dan Pencapaian Bahagian Luar Pantai Tahun 2012

Sepanjang tahun 2012, Bahagian Luar Pantai menjalankan beberapa aktiviti seperti yang tertakluk kepada peruntukan perundangan (rujuk Jadual 1).

## Offshore Division Activities and Achievement Report for 2012

Throughout the year of 2012, the Offshore Division has conducted a number of activities, subject to the provisions of the legislation (see Table 1).

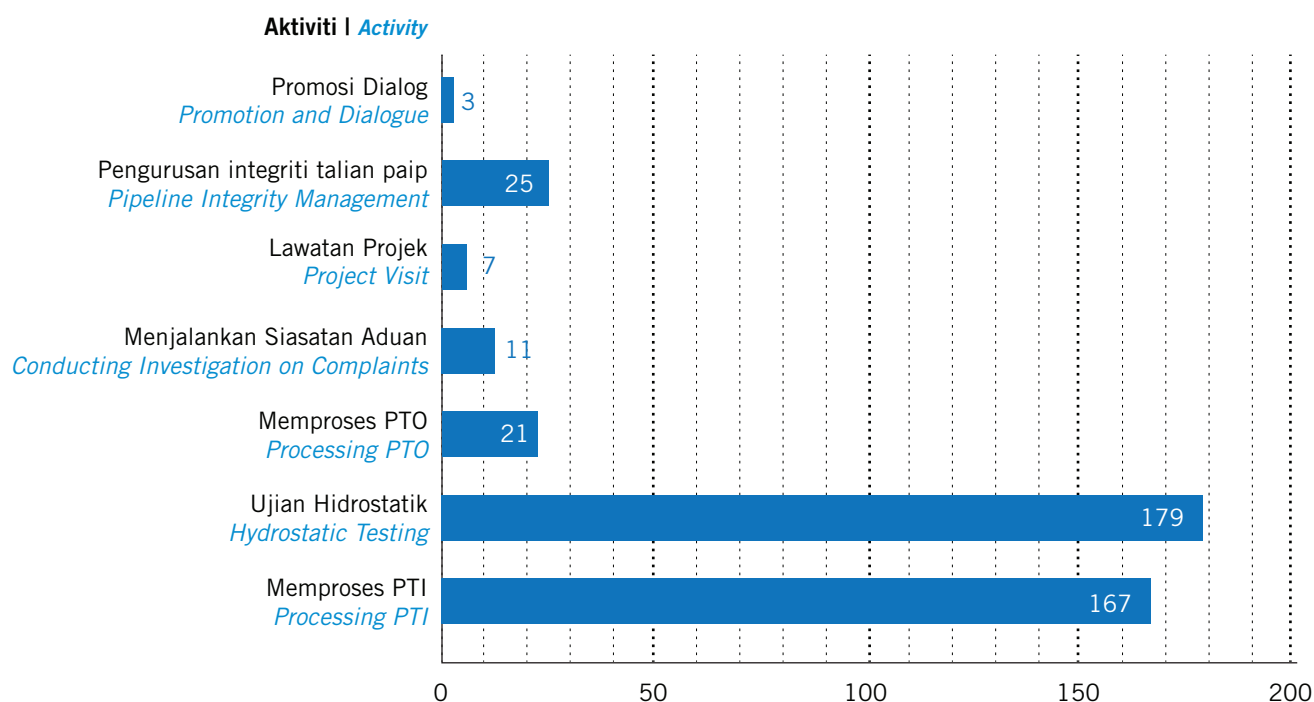
Jadual 1: Laporan aktiviti dan pencapaian Bahagian Luar Pantai bagi tahun 2012.

Table 1: The Offshore Division activities and Achievement Report for 2012.

Bil. No.	Aktiviti   Activity	Pencapaian 2012 Achievement in 2012
1.	Memproses kebenaran memasang talian paip (PTI) <i>Processing permission-to-install (PTI) pipelines</i>	167
2.	Pemeriksaan dan ujian hidrostatik ke atas talian paip <i>Inspection and hydrostatic testing of pipelines</i>	179
3.	Memproses kebenaran pengendalian talian paip (PTO) <i>Processing permission-to-operate (PTO) pipelines</i>	21
4.	Menjalankan siasatan aduan <i>Conducting investigation on complaints</i>	11
5.	Lawatan projek <i>Project visit</i>	7
6.	Pengurusan integriti talian paip <i>Pipeline integrity management</i>	25
7.	Promosi dan dialog <i>Promotion and dialogue</i>	3

Graf 1: Pencapaian Bahagian Luar Pantai bagi tahun 2012.

Graph 1: The Offshore Division achievements in 2012.



Graf 1 menunjukkan permohonan kebenaran memasang talian paip (PTI) adalah sebanyak 167 permohonan pada tahun 2012. Manakala untuk ujian hidrostatik, sebanyak 179 ujian telah dijalankan dan 21 permohonan kebenaran pengendalian talian paip (PTO) telah dikeluarkan sepanjang tahun tersebut.

Pada tahun 2012, sebanyak tujuh lawatan projek telah diadakan di premis kontraktor gas talian paip untuk mendapatkan gambaran berkenaan projek yang dikendalikan. Ini termasuk audit penafsiran situasi untuk program pelaksanaan Peraturan Kendiri Luar Pantai yang akan dilaksanakan kelak. Semasa lawatan ini, promosi dan dialog tentang Jabatan dan Bahagian Luar Pantai turut diadakan. Antara premis yang dilawati adalah seperti yang berikut:

*Graph 1 indicates that the number of application to obtain permission-to-install (PTI) pipelines in 2012 is 167. For hydrostatic testing, a total of 179 tests were carried out and 21 permission-to-operate (PTO) pipelines were issued during the year.*

*In 2012, a total of seven project visits were conducted at the premises of gas pipeline contractors to obtain an overview of the projects undertaken. This includes a situational assessment audit for an offshore self-regulation programme to be implemented soon. During the visits, promotions, and dialogues about the Department and the Offshore Division were also held. Among the premises visited are as follows:*

**Jadual 2: Lawatan projek tahun 2012.**

**Table 2: Project visits in 2012.**

Bil. No.	Premis   Premises	Tarikh   Date	Tujuan   Purpose
1.	CRC-Evans Pipeline International Sdn Bhd, Kaw. Pelabuhan Johor, Pasir Gudang, Johor. <i>CRC-Evans Pipeline International Sdn Bhd, Johor Port Area, Pasir Gudang, Johor.</i>	Jan. 2012 <i>Jan. 2012</i>	Melihat proses cara kerja kimpalan automatik ke atas talian paip. <i>To see the work processes of automatic welding on pipelines.</i>
2.	Petronas Gas Bhd, Sungai Udang, Melaka. (Projek LEKAS Melaka). <i>Petronas Gas Bhd, Sungai Udang, Melaka. (LEKAS Project in Melaka).</i>	April 2012 <i>April 2012</i>	Projek pembinaan terminal regasification gas asli (LNG). <i>Construction project of natural gas (LNG) regasification terminal.</i>
3.	TMM Engineering Services Sdn Bhd, Kawasan Perindustrian Cacar, Paka, Terengganu. <i>TMM Engineering Services Sdn Bhd, Cacar Industrial Area, Paka, Terengganu.</i>	April 2012 <i>April 2012</i>	Menyaksikan proses kimpalan contoh untuk kerja penyadapan panas pada talian paip minyak dari lapangan luar pantai. <i>To witness the mock-up welding process in hot-tapping work on oil pipelines from the offshore fields.</i>
4.	Petronas Carigali Sdn Bhd, Terminal Minyak Mentah Terengganu, Paka, Terengganu. <i>Petronas Carigali Sdn Bhd, Terengganu Crude Oil Terminal, Paka, Terengganu.</i>	Jun 2012 <i>June 2012</i>	Menyaksikan ujian kebocoran untuk kerja penyadapan panas pada talian paip minyak dari lapangan luar pantai. <i>To witness the leak test for hot-tapping work on oil pipelines from the offshore fields.</i>
5.	Sarawak Shell Co. Ltd, Miri, Sarawak. <i>Sarawak Shell Co. Ltd., Miri, Sarawak.</i>	Julai 2012 <i>July 2012</i>	Menjalankan audit penafsiran situasi untuk program pelaksanaan Peraturan Kendiri Luar Pantai. <i>To conduct a situational assessment audit for the offshore self-regulation programme.</i>
6.	Petronas Carigali Sdn Bhd, Sabah Operation (SBO), W. P. Labuan. <i>Petronas Carigali Sdn Bhd, Sabah Operation (SBO), W.P. Labuan.</i>	Julai 2012 <i>July 2012</i>	Menjalankan audit penafsiran situasi untuk program pelaksanaan Peraturan Kendiri Luar Pantai. <i>To conduct a situational assessment audit for the offshore self-regulation programme.</i>
7.	FMC Technologies Sdn Bhd, Gelang Patah, Johor. <i>FMC Technologies Sdn Bhd, Gelang Patah, Johor.</i>	Sept. 2012 <i>Sept. 2012</i>	Lawatan kerja pembuatan paip <i>goose-neck</i> bagi projek pembangunan minyak dan gas medan Gumusut-Kakap, luar perairan Sabah. <i>Work visit on goose-neck pipe manufacturing for oil and gas development project in the Gumusut-Kakap field, off Sabah waters.</i>



Sebagai persiapan untuk menjalankan pemeriksaan di pelantar minyak dan gas, pegawai Jabatan diwajibkan menghadiri kursus Latihan Asas Kecemasan Keselamatan Luar Pantai (BOSET), Sistem Pernafasan Kecemasan (EBS), dan Keselamatan Hidrogen Sulfat (H<sub>2</sub>S) serta menjalani pemeriksaan kesihatan. Hanya pegawai yang cukup cergas dan mempunyai tahap kesihatan sempurna dibenarkan menjalankan kerja di pelantar. Antara kandungan latihan BOSET yang dijalankan adalah Latihan Menyelamatkan Diri di bawah Air untuk Helikopter (HUET), Sokongan Hayat Asas Industri Keselamatan Luar Pantai, latihan memadamkan kebakaran dan kemandirian laut. Latihan BOSET ini bertujuan memberikan pendedahan kepada keperluan keselamatan di luar pantai untuk mengawal dan mengurangkan bahaya di tempat kerja serta sewaktu berlaku kecemasan. Pegawai perlu lulus dalam semua latihan tersebut dan setelah itu diberikan pasport keselamatan sebelum dibenarkan pergi ke pelantar untuk membuat pemeriksaan. Latihan dan pemeriksaan kesihatan ini turut melibatkan Bahagian Kejuruteraan Forensik dan Bahagian Kesihatan Pekerjaan sebagai persediaan sekiranya berlaku insiden yang tidak diingini.

Di samping itu, Bahagian Luar Pantai menerima banyak ucapan penghargaan dan terima kasih daripada beberapa pihak atas segala bantuan yang diberikan. Antaranya adalah:

- i) Petronas Carigali Sdn Bhd (PCSB).
- ii) Sapura Crest Sdn Bhd.
- iii) Petroliam Nasional Berhad.
- iv) TL Offshore Sdn Bhd.

Penghargaan ini diberi hasil usaha keras Bahagian Luar Pantai dalam membantu memproses kelulusan memasang talian paip (PTI) dan memulakan beroperasi (PTO) yang dimohon oleh pihak terbabit.

*In the course of inspecting the oil and gas platforms, officers from the Department are required to attend the basic offshore safety emergency training (BOSET), emergency breathing system (EBS), and hydrogen sulphate safety (H<sub>2</sub>S) courses as well as undergo a medical examination. Only officers who are fit enough and with perfect health will be allowed to carry out work on the platforms. Among the contents of the BOSET training include helicopter underwater escape training (HUET), offshore safety industry basic life support, fire-fighting, and sea survival. The BOSET training aims to give exposure to offshore safety requirements in controlling and mitigating hazards at the workplace and during an emergency. The officers are required to pass the exercises after which, they are given a safety passport before being allowed to go on the platforms to conduct inspections. The training and health screening will also include the Forensic Engineering Division and the Occupational Health Division in preparation for any untoward incidents.*

*In addition, the Offshore Division has also received appreciation and acknowledgements from various quarters on the assistance provided. Among them are:*

- i) Petronas Carigali Sdn Bhd (PCSB).*
- ii) Sapura Crest Sdn Bhd.*
- iii) Petroliam Nasional Berhad.*
- iv) TL Offshore Sdn Bhd.*

*The acknowledgement was in recognition for the hard work of the Offshore Division in helping to process the applications for obtaining permission-to-install and permission-to-operate pipelines requested by the parties.*

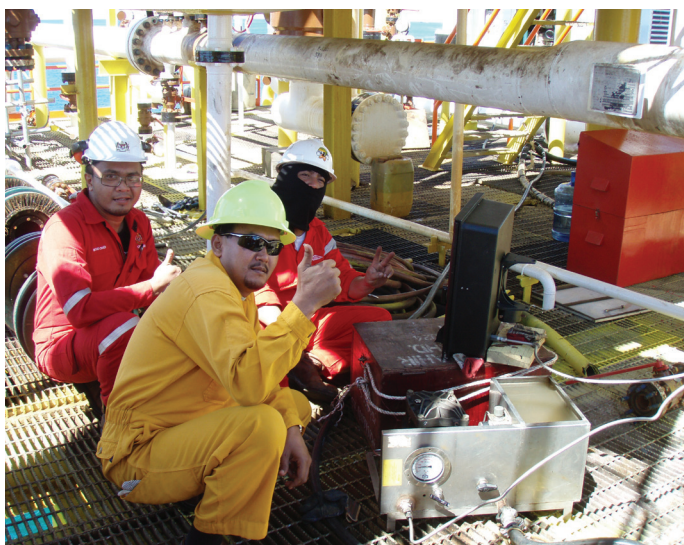
## Gambar aktiviti Bahagian Luar Pantai bagi tahun 2012 *Photographs of the Offshore Division activities in 2012*



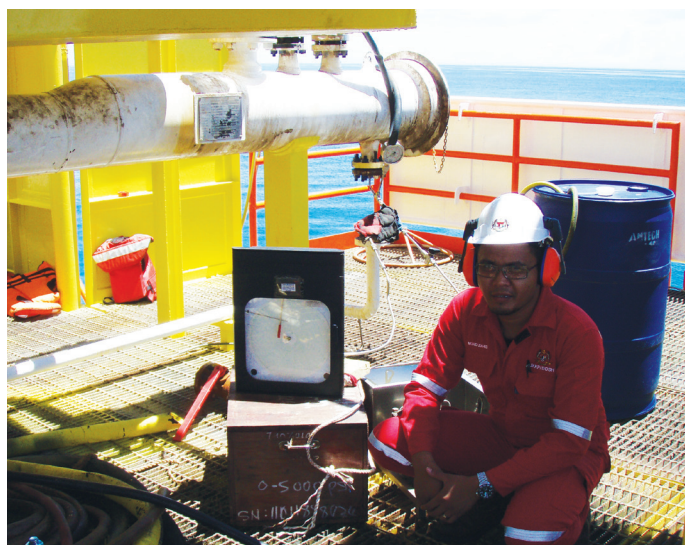
Menyaksikan ujian hidrostatik pada talian paip penaik di atas pelantar minyak dan gas Angsi milik Petronas Carigali Sdn Bhd di luar perairan Terengganu.  
*Observing hydrostatic testing on the riser pipeline at Angsi oil and gas platforms owned by Petronas Carigali Sdn Bhd off the coast of Terengganu.*



Fasa penahan tekanan ujian hidrostatik pada talian paip dasar laut di atas kapal pemasangan paip milik TL Offshore Sdn Bhd, di luar perairan Terengganu.  
*Holding pressure phase of hydrostatic testing of a sub-sea pipeline on a pipe-laying barge owned by TL Offshore Sdn Bhd, off the coast of Terengganu.*



Fasa akhir ujian hidrostatik pada talian paip di atas pelantar minyak dan gas Semarang milik Petronas Carigali Sdn Bhd, di luar perairan Labuan.  
*Final phase of hydrostatic testing on a riser pipeline on Semarang oil and gas platform owned by Petronas Carigali Sdn Bhd, off the coast of Labuan.*







Retreat Bahagian Luar Pantai di Hotel Seri Malaysia Bagan Lalang, Selangor.  
*The Offshore Division retreat at Seri Malaysia Hotel, Bagan Lalang, Selangor.*



Kerja pemasangan bebibir untuk penyediaan ujian hidrostatik di Pelantar Minyak dan Gas Bekok C, milik Petronas Carigali Sdn Bhd di luar perairan Terengganu.  
*Blind flange work for hydrostatic test preparation in Bekok C oil and gas platform owned by Petronas Carigali Sdn Bhd, off the coast of Terengganu.*



Menyaksikan ujian hidrostatik pada talian paip penaik atas di atas Pelantar Minyak dan Gas Kebabangan di loji Kencana HL Sdn Bhd, Lumut, Perak.  
*Observing a hydrostatic testing of a top riser pipeline on Kebabangan oil and gas platform at Kencana HL Sdn Bhd yard, Lumut, Perak.*



Sesi perbincangan ketika audit penafsiran situasi untuk program pelaksanaan Peraturan Kendiri Luar Pantai di Sarawak Shell Co. Ltd., Miri, Sarawak.  
*Discussion during the situational assessment audit for the offshore self-regulation programme at Sarawak Shell Co. Ltd., Miri, Sarawak.*

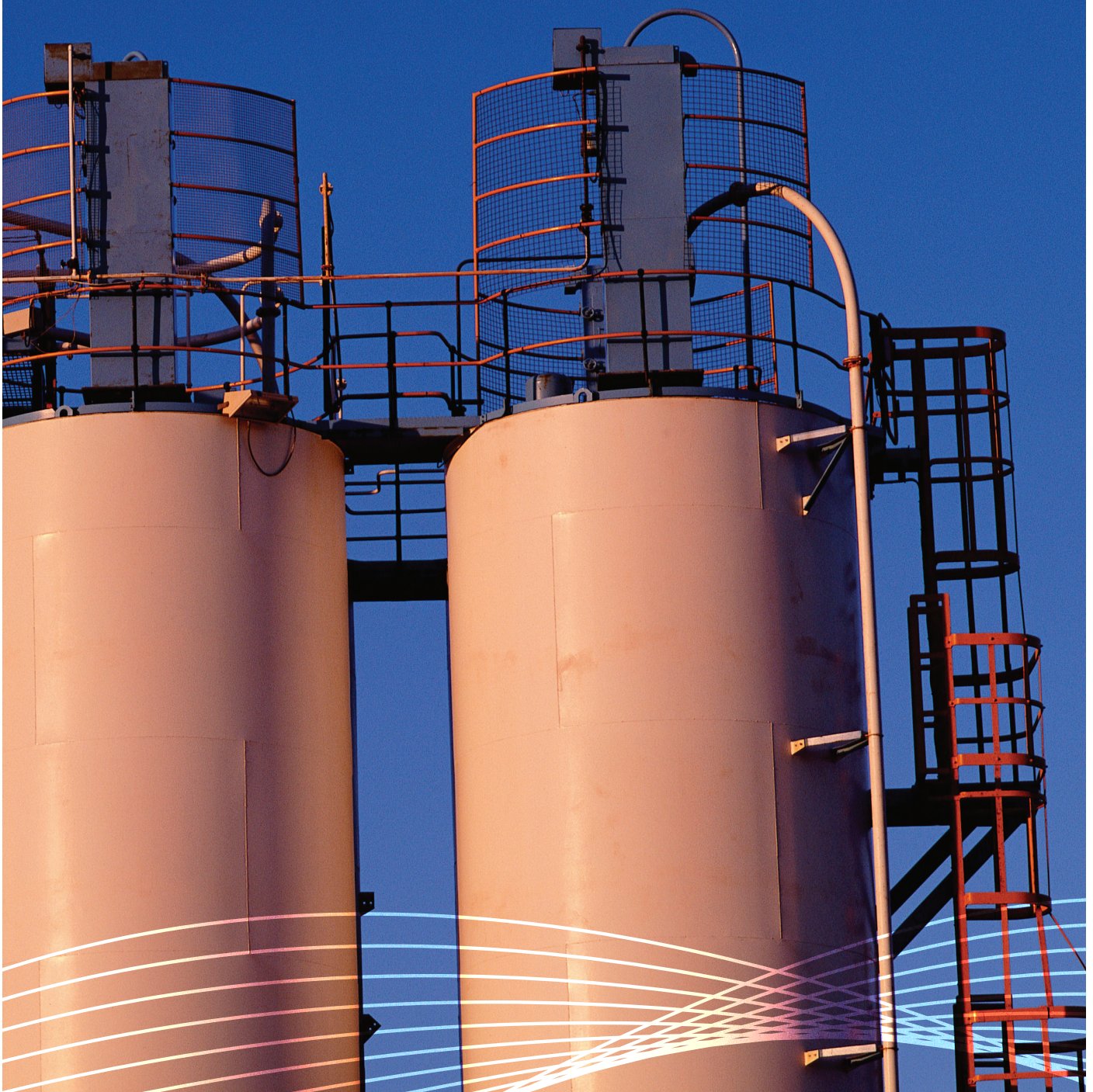




Melihat proses cara kerja kimpalan automatik ke atas talian paip di CRC-Evans Pipeline International Sdn Bhd, Kawasan Pelabuhan Johor, Pasir Gudang, Johor.  
*Observing the work processes of automatic welding on pipelines at the CRC-Evans Pipeline International Sdn Bhd, Johor Port Area, Pasir Gudang, Johor.*



## Bahagian Pengurusan Kimia *Chemical Management Division*





## Bahagian Pengurusan Kimia *Chemical Management Division*

### Latar Belakang Bahagian Pengurusan Kimia

Bahagian Pengurusan Kimia telah diwujudkan di Ibu Pejabat JKKP bagi menangani aktiviti pengurusan bahan kimia yang kian berkembang di dalam dan juga di luar negara. Bahagian ini bertanggungjawab terhadap isu pengurusan bahan kimia yang merangkumi penaksiran risiko kesihatan kimia, penetapan piawai pendedahan, pengelasan bahan kimia, komunikasi hazard, dan konvensyen antarabangsa tentang pengurusan dan keselamatan bahan kimia.

JKKP, melalui Bahagian ini, terlibat dalam penggubalan Akta Konvensyen Senjata Kimia 2005 yang dibuat oleh Kementerian Luar dan diluluskan oleh Parlimen dalam tahun 2005. JKKP juga dilantik oleh Kementerian Luar sebagai salah satu agensi dalam Pihak Berkuasa Kebangsaan bagi melaksanakan Konvensyen Persenjaan Kimia (CWC). Bahagian ini juga bertanggungjawab menangani isu berkaitan dengan pengurusan dan keselamatan bahan kimia termasuk konvensyen kimia.

Malaysia adalah salah sebuah negara yang dalam proses melaksanakan Sistem Terharmoni Global (GHS), selaras dengan kenyataan Menteri Perdagangan Antarabangsa dan Industri dalam Persidangan APEC pada Oktober 2002:

*“... encouraged APEC members to work towards implementing the GHS on hazard classification and labelling of chemicals and safety data sheets by 2006, including through capacity building”.*

Kenyataan ini telah membuka satu lembaran baru dalam proses pengurusan bahan kimia dan komunikasi hazard di Malaysia. Bahagian Pengurusan Kimia menjadi pusat tumpuan bagi pelaksanaan GHS dalam sektor tempat kerja. Unit Pengelasan dan Komunikasi Hazard bertanggungjawab untuk menjalankan aktiviti bagi melaksanakan sistem ini dalam sektor perindustrian di Malaysia.

### Fungsi Bahagian Pengurusan Kimia

Fungsi Bahagian Pengurusan Kimia lebih tertumpu kepada mewujudkan amalan sistem pengurusan dan keselamatan bahan kimia yang baik bagi mencegah kemalangan dan penyakit pekerjaan di tempat kerja. Antara fungsi bahagian yang telah digariskan adalah:

- i) Mengumpulkan, mengolah, mendokumentasi, dan menyebarkan maklumat tentang bahaya dan risiko kimia serta cara pengurusannya yang selamat dan tidak menjejaskan kesihatan.

### *Background Of The Chemical Management Division*

*The Chemical Management Division was established at the DOSH Headquarters to undertake management activities of the accreting chemical substance, domestically and internationally. This Division is responsible for chemical management issues which entails the assessment of chemical health risk, stipulation of exposure standards, chemical classification, hazard communication, and international conventions related to chemical safety management.*

*The DOSH, through this Division, had involved in the drafting of the Chemical Weapon Convention Act 2005, effectuated by the Ministry of Foreign Affairs and passed by the Parliament in 2005. The DOSH was appointed by the Ministry of Foreign Affairs as one of the agencies in the National Authority to organise the Chemical Weapons Convention (CWC). This Division was also charged with the responsibility to address issues related to chemical safety management as well as chemical conventions.*

*Malaysia is in the process of implementing the Globally Harmonized System (GHS), a process consistent with a statement made by the Minister of International Trade and Industry (MITI) in the APEC Conference in October 2002:*

*“... encouraged APEC members to work towards implementing the GHS on hazard classification and labelling of chemicals and safety data sheets by 2006, including through capacity building”.*

*This statement opened a new chapter in chemical management and hazard communications in Malaysia. The Chemical Management Division became the focal point for the implementation of GHS in workplaces and the Hazard Classification and Communication Unit was shouldered the responsibility to conduct activities to implement the system in the industrial sector in Malaysia.*

### *Functions Of The Chemical Management Division*

*The functions of the Chemical Management Division were geared towards developing a system of chemical management in Malaysia and a more rigorous enforcement of regulations governing the use of chemicals. Among the functions outlined are:*

- i) *Collecting, preparing, documenting, and disseminating information on chemical hazards and risks, and managing them with approaches that are safe and will not imperil human health.*



- |  |  |
|--|--|
| ii) Memberi khidmat nasihat kepada Bahagian lain dan Pejabat Negeri, agensi Kerajaan dan bukan Kerajaan apabila diminta berbuat demikian.  | ii) <i>Providing advisory services to other divisions, state offices, and non-governmental organisations whenever needed.</i>  |
| iii) Membangunkan kepakaran dalam pengurusan dan keselamatan kimia seperti komunikasi hazard, persenjataan kimia, pengurusan bahan kimia berbahaya, penetapan had pendedahan dibenarkan, dan pencegahan serta pengawalan risiko bahan kimia berbahaya. | iii) <i>Developing expertise in the management and safety of chemicals in areas such as hazard communications, chemical weapons, management of hazardous chemicals, permissible exposure limits stipulation as well as risk prevention and control of hazardous chemicals.</i> |
| iv) Bertindak sebagai Pihak Berkuasa Kebangsaan untuk menguatkuasakan Akta Konvensyen Senjata Kimia (CWC) 2005 di tempat kerja.  | iv) <i>Acting as a National Authority to enforce the Chemical Weapons Convention (CWC) 2005 at workplaces.</i>   |
| v) Bertindak sebagai pusat tumpuan bagi industri dalam aspek konvensyen antarabangsa berkaitan bahan kimia termasuk CWC.   | v) <i>Acting as a focal point for the industry in terms of international conventions relating to chemicals, including the CWC.</i>   |
| vi) Menjadi pusat tumpuan bagi kegiatan <i>Globally Harmonised System on Hazard Classification and Communication</i> berkaitan bahan kimia industri.   | vi) <i>Acting as a focal point for activities relating to the Globally Harmonized System on Hazard Classification and Communications for relevant chemicals.</i>   |
| vii) Membangunkan, mengaplikasikan, dan menambah baik kaedah penaksiran risiko kesihatan berpunca daripada penggunaan bahan kimia.   | vii) <i>Developing, applying, and improving methods of assessing health risks associated with the use of chemicals.</i>  |
| viii) Menjalinkan hubungan dan kerjasama dengan agensi kerajaan dan bukan kerajaan dalam negeri dan dengan OPCW dan agensi antarabangsa seperti UNITAR/ILO, UNEP, WHO dan agensi lain.   | viii) <i>Establishing relationships and cooperation between governmental and non-governmental agencies in the country and with OPCW as well as with international agencies such as UNITAR/ILO, WHO and others.</i>   |
| ix) Membangunkan standard pendedahan tempatan bagi bahan kimia.  | ix) <i>Developing domestic standards for chemical exposure.</i>  |
| x) Memberikan input pengurusan bahan kimia untuk dimasukkan ke dalam polisi, program penyelidikan dan bahan penerbitan Jabatan.  | x) <i>Providing inputs regarding chemical management for inclusion in occupational safety and health policies and research, and in the Department publications.</i>  |
| xi) Menjalankan kajian pengurusan bahan kimia untuk menambah baik amalan keselamatan dan kesihatan pekerjaan di tempat kerja.  | xi) <i>Conducting studies on chemical management in order to improve occupational safety and health practices at workplaces.</i>   |
| xii) Memantau aktiviti penguatkuasaan Akta dan Peraturan-peraturan berkaitan bahan kimia oleh pejabat negeri.  | xii) <i>Monitoring the enforcement of chemical-related Acts and Regulations by the state offices.</i>  |

## Pendahuluan

Bahagian Pengurusan Kimia diterajui oleh empat unit utama iaitu:

- i. Unit Penaksiran Risiko Kesihatan Kimia.
- ii. Unit Pengelasan dan Komunikasi Hazard.
- iii. Unit Kawalan Kimia.
- iv. Unit Persenjataan Kimia.

## Introduction

*The Chemical Management Division comprises of four key units:*

- i. Chemical Health Risk Assessment Unit.*
- ii. Classification and Hazard Communications Unit.*
- iii. Chemical Control Unit.*
- iv. Chemical Weapons Unit.*

## Fungsi Unit Di Bawah Pengurusan Kimia

Setiap unit mempunyai fungsi tersendiri yang memainkan peranan penting di sebalik kejayaan aktiviti Bahagian Pengurusan Kimia. Fungsi setiap unit dapat dilihat seperti yang berikut:

### Unit Penilaian Risiko Kesihatan Kimia

- i. Menilai pelaksanaan dan keberkesanan penilaian risiko kesihatan kimia di tempat kerja.
- ii. Membangunkan kepakaran dalam aspek penilaian risiko kesihatan kimia dan persampelan kimia dengan menjalankan kajian teknikal.
- iii. Mengkaji dan membuat cadangan tentang kaedah persampelan (teknik dan strategi persampelan) untuk kelulusan Jabatan.
- iv. Membangunkan dokumen kriteria bagi penetapan had pendedahan dibenarkan.
- v. Mengaplikasi dan menambahbaik kaedah penilaian risiko kesihatan berpunca bahan kimia sama ada kualitatif dan kuantitatif.

### Unit Pengelasan dan Komunikasi Hazard

- i. Membangunkan kepakaran dalam bidang GHS.
- ii. Membuat analisis semasa tentang pengelasan bahan kimia dan komunikasi hazard di Malaysia.
- iii. Membangunkan bahan panduan teknikal berkaitan GHS.
- iv. Membangunkan dan menyelenggara pangkalan data GHS.
- v. Memastikan komunikasi hazard yang berkesan kepada kumpulan sasar.
- vi. Membangunkan senarai bahan kimia yang dikelaskan berdasarkan GHS.
- vii. Memantau pembekal bahan kimia dalam pelaksanaan GHS.

### Unit Kawalan Kimia

- i. Membantu industri melaksanakan amalan terbaik antarabangsa dalam pengurusan kimia dan konvesyen antarabangsa berkenaan pengurusan bahan kimia yang telah dilaksanakan.
- ii. Membangunkan kepakaran dalam bidang amalan terbaik antarabangsa dalam pengurusan kimia, konvesyen, kawalan kimia, dan IAQ.

## Functions Of Units Under The Chemical Management Division

*Every unit has its own unique set of functions that play an important role in ensuring the success of activities organised by the Chemical Management Division. The functions of each unit are as listed below:*

### Chemical Health Risk Assessment Unit

- i. To evaluate the implementation and effectiveness of chemical health assessment at workplaces.*
- ii. To develop expertise in various aspects of chemical health risk assessment and chemical sampling by conducting technical studies.*
- iii. To study and submit proposals for sampling (technique and strategy) for approval by the Department.*
- iv. To compile documents of criteria for the determination of permissible exposure limits.*
- v. To identify and qualitatively and quantitatively improve methods of assessing chemical-related health risks.*

### Classification and Hazard Communication Unit

- i. To develop expertise in the GHS field.*
- ii. To carry out up-to-date analysis of chemical classification and hazard communications in Malaysia.*
- iii. To develop GHS-based technical references.*
- iv. To develop and maintain a GHS database.*
- v. To ensure effective hazard communications among the target groups.*
- vi. To develop GHS-based lists of classified chemicals.*
- vii. To monitor chemical suppliers during the implementation of GHS.*

### Chemical Control Unit

- i. To help the industry in implementing the International Best Practice in chemical management and in the international conventions already come into force.*
- ii. To develop expertise in International Best Practice in chemical management, conventions, chemical control, and IAQ.*

- iii. Membangunkan bahan panduan teknikal berkaitan amalan terbaik antarabangsa dalam pengurusan kimia, konvesyen, kawalan kimia, dan IAQ.
- iv. Membangunkan kaedah pengawalan kimia yang sesuai bagi industri tempatan dan IKS.
- v. Menyelenggara pangkalan data konvesyen dan kawalan kimia serta IAQ.
- vi. Mengkaji keberkesanan pelaksanaan konvesyen dan kawalan kimia serta IAQ.
- vii. Memastikan risiko kimia di tempat kerja terkawal.

- iii. To develop technical guidelines for International Best Practice in chemical management, conventions, chemical control and IAQ.*
- iv. To develop suitable chemical control approaches for local industries and SMIs/SMEs.*
- v. To maintain databases for conventions, chemical control, and IAQ.*
- vi. To review the effectiveness of the implementation of conventions, chemical control, and IAQ.*
- vii. To ensure chemical risks at workplaces are controlled.*

### Unit Persenjataan Kimia

- i. Membangunkan kepakaran dan menyelenggara tenaga kerja yang profesional dalam bidang CWC.
- ii. Mengawal penyalahgunaan senjata kimia.
- iii. Membangunkan dan menyelenggara pangkalan data deklarasi kepada Pihak Berkuasa Kebangsaan.
- iv. Memantau pengisytiharan awal yang dibuat oleh pihak industri kepada Pihak Berkuasa Kebangsaan.
- v. Menyediakan pihak industri bagi menerima pemeriksa antarabangsa daripada OPCW.
- vi. Menjadi urus setia Jawatankuasa Pemeriksa/Penguatkuasaan CWC.

### Chemical Weapons Unit

- i. To develop expertise and maintain professional workforce in CWC.*
- ii. To control misemployment of chemical weapons.*
- iii. To develop and maintain a database of declaration to the National Authority.*
- iv. To monitor the initial declaration imposed by the industry to the National Authority.*
- v. To prepare the industry to accommodate international inspectors from OPCW.*
- vi. To act as a secretariat to CWC Inspector/Enforcement Committee.*



## Aktiviti Bahagian Pengurusan Kimia Tahun 2012

### *Activities of the Chemical Management Division in 2012*

#### Aktiviti utama Bahagian Pengurusan Kimia

#### *Major Activities of the Chemical Management Division*

Jadual 1: Aktiviti Bahagian Pengurusan Kimia bagi tahun 2012.  
*Table 1: The Chemical Management Division activities in 2012.*

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian 2012 Achievement
1.	Memproses permohonan dan lawatan awalan Generik CHRA <i>Processing applications and preliminary visits on Generic CHRA</i>	1 permohonan <i>1 application</i>	0 permohonan <i>0 application</i>
2.	Menganjurkan kursus <i>Organizing courses</i>	8 kursus <i>8 courses</i>	8 kursus <i>8 courses</i>
3.	Menjalankan pemeriksaan CWC kebangsaan dan antarabangsa <i>Conducting national and international levels of CWC inspections</i>	3 pemeriksaan <i>3 inspections</i>	4 pemeriksaan <i>4 inspections</i>
4.	Membangunkan Draf Modul Seminar Penguatkuasaan Peraturan CLASS <i>Developing module draft for Seminar on CLASS Enforcement</i>	1 modul (50%) <i>1 module (50%)</i>	1 modul (50%) <i>1 module (50%)</i>
5.	Menyediakan Panduan Penggunaan CIMS untuk Pengeluar dan Pengimport Bahan Kimia <i>Preparing Guidelines on The Usage of CIMS for Chemical Manufacturers and Importers</i>	1 panduan (100%) <i>1 Guidelines (100%)</i>	1 panduan (100%) <i>1 Guidelines (100%)</i>
6.	Mengendalikan taklimat Akta Konvesyen Senjata Kimia 2005 dan Kajian Profail Senjata Kimia di Tempat Kerja <i>Briefing on Chemical Weapons Convention 2005 and Chemical Weapon Profiles Study at Workplace</i>	5 tempat kerja <i>5 workplaces</i>	4 tempat kerja <i>4 workplaces</i>
7.	Menyelaraskan OPCW Associate Programme di Malaysia <i>Coordinating OPCW Associate Programme in Malaysia</i>	1 program antarabangsa <i>1 international programme</i>	1 program antarabangsa <i>1 international programme</i>
8.	Menyediakan kit pemeriksaan CWC untuk pegawai JKKP <i>Preparing CWC Inspection Kit for the DOSH officers</i>	1 Kit <i>1 Kit</i>	1 Kit <i>1 Kit</i>
9.	Mengendalikan Bengkel Penggubalan Modul Kursus COC, SiRAC dan CHRA Edisi Ke 3 <i>Conducting Workshop on Drafting Module for COC, SiRAC &amp; CHRA Courses, 3<sup>rd</sup> Edition</i>	3 bengkel <i>3 workshops</i>	3 bengkel <i>3 workshops</i>
10.	Memantau pematuhan Generik CHRA <i>Monitoring compliance with Generic CHRA</i>	20 tempat kerja <i>20 workplaces</i>	26 tempat kerja <i>26 workplaces</i>
11.	Membuat verifikasi perkhidmatan pengujian bahan kimia <i>Conducting verification on chemical testing services</i>	10 makmal <i>10 labs</i>	10 makmal <i>10 labs</i>
12.	Menjalankan pengukuran/analisis paras bahan kimia di tempat kerja mengikut statistik penyakit pekerjaan PERKESO <i>Conducting chemical level measurement/analysis at workplaces based on SOCSO occupational diseases statistics</i>	10 tempat kerja <i>10 workplaces</i>	11 tempat kerja <i>11 workplaces</i>
13.	Memantau aktiviti Operasi USECHH 2000 <i>Monitoring USECHH 2000 operational activities</i>	3 operasi <i>3 operations</i>	3 operasi <i>3 operations</i>
14.	Menyelenggara/mengujian peralatan BPK <i>Maintaining/testing the Chemical Management Division instruments</i>	43 peralatan <i>43 Instruments</i>	53 peralatan <i>53 Instruments</i>

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian 2012 Achievement
15.	Menjalankan kajian KAP dalam sektor perladangan (kelapa sawit dan sayur) <i>Conducting KAP studies in farming sector (palm oil and vegetables)</i>	1 laporan interim <i>1 interim report</i>	1 laporan interim <i>1 interim report</i>
16.	Menjalankan kajian penyakit pekerjaan akibat pendedahan kepada bahan kimia berbahaya kepada kesihatan <i>Conducting a study on occupational diseases due to exposures to chemicals hazardous to health</i>	10 tempat kerja <i>10 workplaces</i>	11 tempat kerja <i>11 workplaces</i>
17.	Menjalankan kajian penggunaan nanomaterial di Malaysia <i>Conducting studies on the usage of nanomaterials in Malaysia</i>	10 tempat kerja <i>10 workplaces</i>	10 tempat kerja <i>10 workplaces</i>
18.	Menjalankan kajian pendedahan kepada radon di Malaysia <i>Conducting studies on radon exposure in Malaysia</i>	3 tempat kerja <i>3 workplaces</i>	3 tempat kerja <i>3 workplaces</i>

## Bengkel, Seminar, Kursus, dan Latihan Yang Dianjurkan *Workshops, Seminars, Courses, and Trainings*

Jadual 2: Bengkel, seminar, kursus, dan latihan anjuran Bahagian Pengurusan Kimia bagi tahun 2012.

*Table 2: Workshops, seminars, courses, and trainings organised by the Chemical Management Division in 2012.*

Tarikh   Date	Tempat   Place	Aktiviti   Activities	Bil. Peserta No. of Participants
13 – 16 Feb 2012 <i>13 – 16 Feb 2012</i>	JKKP Ibu Pejabat <i>DOSH Headquarters</i>	Kursus Penguatkuasaan Peraturan CLASS <i>CLASS Regulations Enforcement Course</i>	30
20 Mac 2012 <i>20 March 2012</i>	Institut Keselamatan dan Kesihatan Pekerjaan Negara, Bandar Baru Bangi <i>National Institute of Occupational Safety and Health (NIOSH)</i>	Bengkel Bahan Alternatif Asbestos kepada industri dan agensi Kerajaan <i>Asbestos Alternative Materials Workshop for the industry and Government agencies</i>	69
29 – 31 Mei 2012	INTEKMA, Shah Alam <i>INTEKMA, Shah Alam</i>	Seminar CLASS Compliance Support <i>Seminar on CLASS Compliance Support</i>	220
27 – 29 Mac 2012 <i>27 – 29 March 2012</i> 17 – 19 April 2012 <i>17 – 19 April 2012</i> 10 – 12 Jun 2012 <i>10 – 12 June 2012</i> 25 – 27 Jun 2012 <i>25 – 27 June 2012</i> 09 – 11 Julai 2012 <i>09 – 11 July 2012</i> 03 – 05 Sept 2012 <i>03 – 05 Sept 2012</i> 09 – 11 Okt 2012 <i>09 – 11 Oct 2012</i> 27 – 29 Nov 2012 <i>27 – 29 Nov 2012</i>	JKKP Negeri Sembilan <i>DOSH Negeri Sembilan</i> JKKP Melaka <i>DOSH Malacca</i> JKKP Kelantan <i>DOSH Kelantan</i> JKKP Terengganu <i>DOSH Terengganu</i> JKKP Perlis <i>DOSH Perlis</i> JKKP Kedah <i>DOSH Kedah</i> JKKP Ibu Pejabat <i>DOSH Headquarters</i> JKKP Perak <i>DOSH Perak</i>	Menjalankan Kursus Tataamalan Industri Kualiti Udara Dalam 2010 Fasa 2 di JKKP negeri <i>Indoor Air Quality Industry Code of Practice 2010 (Phase 2) Course at state offices</i>	140

Tarikh   Date	Tempat   Place	Aktiviti   Activities	Bil. Peserta No. of Participants
03 – 04 April 2012 <i>03 – 04 April 2012</i>	JKKP Selangor   <i>DOSH Selangor</i> JKKP Sarawak   <i>DOSH Sarawak</i> JKKP Johor   <i>DOSH Johore</i> JKKP Terengganu   <i>DOSH Terengganu</i>	Menganjurkan kursus peralatan baru teknikal IAQ (meter radon dan trek debu) di JKKP negeri <i>Courses on IAQ new technical equipment (radon meter and dust track) at state offices</i>	60
23 – 24 Mei 2012 <i>23 – 24 May 2012</i>			
04 – 05 Okt 2012 <i>04 – 05 Oct 2012</i>			
03 – 04 Dis 2012 <i>03 – 04 Dec 2012</i>			
23 – 27 April 2012 <i>23 – 27 April 2012</i>			
04 – 08 Jun 2012 <i>04 – 08 June 2012</i>	JKKP Negeri Sembilan   <i>DOSH Negeri Sembilan</i> JKKP Perlis   <i>DOSH Perlis</i> JKKP Kedah   <i>DOSH Kedah</i> JKKP Perak   <i>DOSH Perak</i> JKKP Kelantan   <i>DOSH Kelantan</i> JKKP Pahang   <i>DOSH Pahang</i>	Kursus penggunaan alat CWC (GCMS/GC Voyager/FTIR) di pejabat JKKP negeri <i>Courses on the usage of CWC equipment (GCMS/GC Voyager/FTIR) at the DOSH state offices</i>	90
15 – 18 Julai 2012 <i>15 – 18 July 2012</i>			
10 – 14 Sept 2012 <i>10 – 14 Sept 2012</i>			
15 – 18 Okt 2012 <i>15 – 18 Oct 2012</i>			
26 – 29 Nov 2012 <i>26 – 29 Nov 2012</i>			
24 – 27 Sept 2012 <i>24 – 27 Sept 2012</i>			
9 – 11 Okt 2012 <i>9 – 11 Oct 2012</i>			
16 – 18 Okt 2012 <i>16 – 18 Oct 2012</i>	Institut Keselamatan dan Kesihatan Pekerjaan Negara, Bandar Baru Bangi <i>National Institute of Occupational Safety and Health (NIOSH)</i>	Kursus Penaksiran Risiko Bahan Kimia Berbahaya Kepada Kesihatan (CHRA) Edisi ke-3 <i>Chemical Health Risk Assessment (CHRA) 3<sup>rd</sup> Edition Course</i>	30
	Institut Keselamatan dan Kesihatan Pekerjaan Negara, Bandar Baru Bangi <i>National Institute of Occupational Safety and Health (NIOSH)</i>	Kursus Penaksiran Ringkas Bahan Kimia dan Kawalannya (SiRAC) <i>Simple Risk Assessment and Control (SiRAC) Course</i>	30
	Institut Keselamatan dan Kesihatan Pekerjaan Negara, Bangi <i>National Institute of Occupational Safety and Health (NIOSH)</i>	Kursus Rantaian Penjagaan Sampel Bagi Bahan Kimia Berbahaya kepada Kesihatan (COC) <i>Chain of Sample Custody for Chemical Hazardous to Health Course</i>	20

## Seksyen Pengelasan Dan Penilaian Risiko *Classification And Risk Assessment Section*

### Unit Penaksiran Risiko Kesihatan Kimia *Chemical Health Risk Assessment Unit*

Jadual 3: Aktiviti Unit Penaksiran Risiko Kesihatan Kimia bagi tahun 2012.  
*Table 3: The Chemical Health Risk Assessment Unit activities in 2012.*

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
1.	Pemprosesan permohonan dan pemeriksaan awalan Generik CHRA <i>Processing applications and preliminary inspections on Generic CHRA</i>	1 permohonan <i>1 application</i>	0 permohonan <i>0 application</i>	



Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
2.	Pemantauan pematuhan Generik CHRA <i>Monitoring compliance with Generic CHRA</i>	20 tempat kerja <i>20 workplaces</i>	26 tempat kerja <i>26 workplaces</i>	130%
3.	Bengkel Penggubalan Modul Kursus Rantaian Penjagaan Sampel (COC) <i>Conducting Workshop on Drafting Module for Chain of Sample Custody (COC) Course</i>	1 bengkel <i>1 workshop</i>	1 bengkel <i>1 workshop</i>	100%
4.	Bengkel Penggubalan Modul Kursus Penaksiran Risiko Bahan Kimia Berbahaya kepada Kesihatan Edisi Ke-3 (CHRA) <i>Conducting Workshop on Drafting Module for Chemical Hazardous to Health Risk Assessment (CHRA) Course, 3<sup>rd</sup> Edition</i>	3 bengkel <i>3 workshops</i>	3 bengkel <i>3 workshops</i>	100%
5.	Bengkel Penggubalan Modul Kursus Penaksiran Ringkas Bahan Kimia dan Kawalannya (SiRAC) <i>Conducting Workshop on Drafting Module for Simple Chemical Assessment and Its Control (SiRAC) Course</i>	1 bengkel <i>1 workshop</i>	2 bengkel <i>2 workshops</i>	200%
6.	Kursus Pilot Rantaian Penjagaan Sampel (COC) <i>Conducting pilot course on chain of sample custody (COC)</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
7.	Kursus Pilot Penaksiran Risiko Bahan Kimia Berbahaya kepada Kesihatan Edisi Ke-3 (CHRA) <i>Conducting pilot course on Chemical Hazardous to Health Risk Assessment (CHRA) (3<sup>rd</sup> Edition)</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
8.	Kursus Pilot Penaksiran Ringkas Bahan Kimia dan Kawalannya (SiRAC) <i>Conducting pilot course on Simple Chemical Assessment and Its Control (SiRAC)</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
9.	Penyediaan maklumat dan data ringkas BPK <i>Preparing information and simple data of the Chemical Management Division</i>	1 buku (100%) <i>1 book (100%)</i>	1 buku (100%) <i>1 book (100%)</i>	100%
10.	Kajian Perbandingan antara SiRAC dan CHRA di kalangan pegawai JKKP <i>Conducting a study on understanding the differences between SiRAC and CHRA among the DOSH officers</i>	1 laporan (100%) <i>1 report (100%)</i>	1 laporan (100%) <i>1 report (100%)</i>	100%
11.	Penyediaan input teknikal/ceramah/kepakaran CHRA kepada pelanggan <i>Providing technical input/talks/expertise on CHRA to clients</i>	10 kes <i>10 cases</i>	37 kes <i>37 cases</i>	370%

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
12.	Latihan dalaman OSHMS <i>Internal training on OSHMS</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
13.	Kajian ilmu, sikap dan amalan (KAP) dalam sektor pertanian (kelapa sawit dan sayur) <i>Conducting a study on Knowledge, Attitude and Practise in Farming Sector (palm oil and vegetable)</i>	1 laporan (100%) <i>1 report (100%)</i>	1 laporan (100%) <i>1 report (100%)</i>	100%
14.	Sokongan pematuhan terhadap asas pengurusan keselamatan bahan kimia <i>Compliance support on basic chemical safety management</i>	10 tempat kerja <i>10 workplaces</i>	10 tempat kerja <i>10 workplaces</i>	100%
15	Penyediaan kertas jurnal/rencana/artikel/pembentangan <i>Preparing journal paper/article/presentation</i>	2 kertas <i>2 papers</i>	2 kertas <i>2 papers</i>	100%
16	Input kepada pelbagai Jawatankuasa Lembaga Racun Makhluk Perosak <i>Providing input for various Pesticide Board Committees</i>	11 mesyuarat <i>11 meetings</i>	11 mesyuarat <i>11 meetings</i>	100%

## Pemeriksaan Generik CHRA

Pemeriksaan telah dilaksanakan ke atas tempat kerja yang telah mendapat kelulusan untuk generik CHRA. Jadual di bawah menunjukkan tempat kerja yang telah dilawati untuk tujuan memantau pelaksanaan Generik CHRA.

## Generic CHRA Inspection

*Inspections were done in workplaces which had already received the Generic CHRA approval. The table below lists the workplaces visited for the purpose of monitoring the implementation of Generic CHRA.*

Jadual 4: Tempat Kerja yang dilawati bagi pemantauan Generik CHRA bagi tahun 2012.

Table 4: Workplaces visited for Generic CHRA monitoring purposes in 2012.

Bil. No.	Nama Syarikat   Name of Company	Lokasi   Location	Tarikh Pemantauan Monitoring Date
1.	Sime Darby Plantations Sdn Bhd (semenanjung) <i>Sime Darby Plantations Sdn Bhd (peninsular)</i>	a) Pusat Teknologi Kilang Sawit (POMTEC), 71900 Labu, N. Sembilan. Palm Oil Mill Technology Centre (POMTEC), 71900 Labu, N. Sembilan. b) Kilang Kelapa Sawit Chersonese, 34350 Kuala Kurau, Perak. c) KKS Tanah Merah, 71007 Port Dickson, N. Sembilan. d) Kilang Kelapa Sawit Selaba, Jalan Changkat Jong, 36000 Teluk Intan, Perak. e) KKS Koh Foh, 72109 Bahau, N. Sembilan. f) Kilang Kelapa Sawit Flemington, 36309 Sungai Sumun, Teluk Intan, Perak.	20 Februari 2012 <i>20 February 2012</i> 20 Februari 2012 <i>20 February 2012</i> 21 Februari 2012 <i>21 February 2012</i> 21 Februari 2012 <i>21 February 2012</i> 22 Februari 2012 <i>22 February 2012</i> 22 Februari 2012 <i>22 February 2012</i>

Bil. No.	Nama Syarikat   Name of Company	Lokasi   Location	Tarikh Pemantauan Monitoring Date
2.	Sime Darby Industrial Sdn Bhd <i>Sime Darby Industrial Sdn Bhd</i>	a) 1, Jalan Puchong, Taman Perindustrian Puchong Utama, 4710 Puchong, Selangor.	05 Mac 2012 <i>5 March 2012</i>
3.	Sime Darby Plantations Sdn Bhd (Sarawak) <i>Sime Darby Plantations Sdn Bhd (Sarawak)</i>	a) KKS Lavang, 97008 Bintulu, Sarawak. b) Ladang Lavang, 97008 Bintulu, Sarawak c) KKS Rajawali, 97011 Bintulu, Sarawak. d) Ladang Rajawali, 97011 Bintulu, Sarawak. e) KKS Derawan, 97011 Bintulu, Sarawak. f) Ladang Derawan, 97011 Bintulu, Sarawak. g) KKS Pekaka, 97008 Bintulu, Sarawak. h) Ladang Pekaka, 97008 Bintulu, Sarawak.	26 Mac 2012 <i>26 March 2012</i> 26 Mac 2012 <i>26 March 2012</i> 27 Mac 2012 <i>27 March 2012</i> 27 Mac 2012 <i>27 March 2012</i> 28 Mac 2012 <i>28 March 2012</i> 28 Mac 2012 <i>28 March 2012</i> 29 Mac 2012 <i>29 March 2012</i> 29 Mac 2012 <i>29 March 2012</i>
4.	Tabung Haji Plantations Berhad <i>Tabung Haji Plantations Berhad</i>	a) Ladang Kota Bahagia, Muadzam Shah, Pahang. b) Ladang Sungai Merchong, Muadzam Shah, Pahang. c) Ladang Sungai Mengah, Muadzam Shah, Pahang. d) Ladang Sungai Buan, Muadzam Shah, Pahang.	4 April 2012 <i>4 April 2012</i> 5 April 2012 <i>5 April 2012</i>
5.	Felda Palm Industries Sdn Bhd <i>Felda Palm Industries Sdn Bhd</i>	a) KKS Mercu Puspita, 91150 Lahad Datu, Sabah. b) KKS Hamparan Badai, 91150 Lahad Datu, Sabah. c) KKS Kembara Sakti, 91150 Lahad Datu, Sabah. d) KKS Nilam Permata, 91150 Lahad Datu, Sabah. e) KKS Jeragan Bestari, 91150 Lahad Datu, Sabah. f) KKS Lancang Kemudi, 91150 Lahad Datu, Sabah.	17 April 2012 <i>17 April 2012</i> 18 April 2012 <i>18 April 2012</i> 19 April 2012 <i>19 April 2012</i> 19 April 2012 <i>19 April 2012</i>

### Unit Pengelasan dan Komunikasi Hazard *Classification and Hazard Communication Unit*

Jadual 5: Aktiviti Unit Pengelasan dan Komunikasi Hazard bagi tahun 2012.  
**Table 5: The Classification and Hazard Communication Unit activities in 2012.**

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
1.	Membangunkan modul Seminar Penguatkuasaan Peraturan CLASS <i>Developing module for Seminar on CLASS Regulations Enforcement</i>	1 modul (100%) <i>1 module (100%)</i>	1 modul (100%) <i>1 module (100%)</i>	100%
2.	Memberikan input Pelaksanaan GHS di bawah Program "UNITAR Capacity Building" <i>Providing input on GHS implementation under UNITAR Capacity Building programmes</i>	4 mesyuarat <i>4 meetings</i>	4 mesyuarat <i>4 meetings</i>	100%



Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
3.	Menjalankan <i>retreat</i> pembangunan modul latihan GHS industri <i>Conducting retreat to develop modul on GHS training for the industry</i>	2 retreat <i>2 retreats</i>	2 retreat <i>2 retreats</i>	100%
4.	Menjalankan kursus pilot modul latihan GHS industri <i>Conducting pilot course on GHS Training Module for the Industry</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
5.	Menganjurkan Kursus Penguatkuasaan Peraturan CLASS di JKKP Ibu Pejabat <i>Organising CLASS Regulations Enforcement Course at DOSH Headquarters</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
6.	Mengendalikan program CLASS <i>Compliance Support</i> <i>Conducting CLASS Compliance Support programme</i>	3 program <i>3 programmes</i>	3 program <i>3 programmes</i>	100%
7.	Mengendalikan taklimat penggunaan Chemical Information Management System (CIMS) <i>Conducting briefings on Chemical Information Management System (CIMS)</i>	3 taklimat <i>3 briefings</i>	3 taklimat <i>3 briefings</i>	100%
8.	Menyediakan draf Manual Penguatkuasaan Peraturan CLASS <i>Preparing draft on CLASS Regulations Enforcement Manual</i>	Penyediaan draf (50%) <i>Draft preparation (50%)</i>	Penyediaan draf (50%) <i>Draft preparation (50%)</i>	100%
9.	Menyediakan Panduan Penggunaan CIMS untuk pengeluar dan pengimport Bahan Kimia <i>Preparing guidelines on the usage of CIMS for chemical manufacturers and importers</i>	1 panduan (100%) <i>1 Guidelines (100%)</i>	1 panduan (100%) <i>1 Guidelines (100%)</i>	100%
10.	Membuat verifikasi perkhidmatan pengujian bahan kimia <i>Conducting verification on chemical testing services</i>	10 makmal <i>10 labs</i>	10 makmal <i>10 labs</i>	100%
11.	Memaparkan maklumat terkini pelaksanaan GHS dan Peraturan CLASS <i>Posting latest information on GHS implementation and CLASS Regulations</i>	12 pengemaskinian <i>12 updates</i>	12 pengemaskinian <i>12 updates</i>	100%
12.	Menambah baik CIMS <i>Refining CIMS</i>	1 sistem (100%) <i>1 system (100%)</i>	1 sistem (100%) <i>1 system (100%)</i>	100%
13.	Menjalankan kajian penggunaan nanomaterial di Malaysia <i>Conducting a study on the usage of nanomaterials in Malaysia</i>	10 tempat kerja <i>10 workplaces</i>	10 tempat kerja <i>10 workplaces</i>	100%
14.	Draf Garis Panduan Penggunaan Nanomaterial di Malaysia <i>Preparing draft guidelines on the usage of nanomaterials in Malaysia</i>	1 draf (100%) <i>1 draft (100%)</i>	1 draf (100%) <i>1 draft (100%)</i>	100%

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
15.	Menyediakan laporan verifikasi perkhidmatan pengujian bahan kimia <i>Preparing report on verification of chemical testing services</i>	1 laporan (100%) <i>1 report (100%)</i>	1 laporan (100%) <i>1 report (100%)</i>	100%
16.	Menjalankan kajian lapangan pengelasan, pelabelan, dan helaian data keselamatan <i>Conducting a field study on classification, labelling, and safety data sheet</i>	1 laporan (20%) <i>1 report (20%)</i>	1 laporan (20%) <i>1 report (20%)</i>	100%
17.	Menyediakan kertas jurnal/rencana/ artikel/ pembentangan <i>Preparing journal paper/article/ presentation</i>	2 kertas <i>2 papers</i>	3 kertas <i>3 papers</i>	150%
18.	Memberikan input teknikal/ceramah/ kepakaran GHS/CLASS/CPL kepada pelanggan <i>Providing technical input/talks/expertise on GHS/CLASS/CPL to clients</i>	10 kes <i>10 cases</i>	10 kes <i>10 cases</i>	270%

## Seksyen Konvensyen dan Kawalan Kimia Convention and Chemical Control Section

### Unit Kawalan Kimia Chemical Control Unit

Jadual 6: Aktiviti Unit Kawalan Kimia bagi tahun 2012.  
Table 6: The Chemical Control Unit activities in 2012.

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
1.	Mengendalikan Bengkel Teknikal Bahan Alternatif Asbestos <i>Conducting Technical Workshop on Asbestos Alternative Materials</i>	1 bengkel <i>1 workshop</i>	1 bengkel <i>1 workshop</i>	100%
2.	Mengendalikan program IAQ Compliance Support untuk pemilik/pengurus bangunan Kerajaan di Putrajaya <i>Conducting IAQ Compliance Support programme for Government building owners/managers in Putrajaya</i>	10 tempat kerja <i>10 workplaces</i>	10 tempat kerja <i>10 workplaces</i>	100%
3.	Menganjurkan kursus peralatan teknikal IAQ (meter radon, trek debu bimbit dan pam persampelan) <i>Conducting course on IAQ technical equipment (radon meter, hand-held dustrack, and sampling pump)</i>	4 kursus <i>4 courses</i>	4 kursus <i>4 courses</i>	100%

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
4.	Menganjurkan Kursus Tataamalan Industri Kualiti Udara Dalam 2010 Fasa 2 <i>Conducting Code of Practice for Indoor Air Quality 2010 (Phase 2) Course</i>	7 kursus <i>7 courses</i>	7 kursus <i>7 courses</i>	100%
5.	Menjalankan kajian penyakit pekerjaan akibat pendedahan kepada bahan kimia berbahaya kepada kesihatan (statistik PERKESO) <i>Conducting a study on occupational diseases caused by exposures to chemical hazardous to health (SOCO statistics)</i>	10 tempat kerja <i>10 workplaces</i>	11 tempat kerja <i>11 workplaces</i>	110%
6.	Pemantauan aktiviti operasi USECHH 2012 <i>Monitoring USECHH operational activities in 2012</i>	3 operasi <i>3 operations</i>	3 operasi <i>3 operations</i>	100%
7.	Menjalankan pengukuran/analisis paras bahan kimia di tempat kerja mengikut statistik penyakit pekerjaan PERKESO <i>Conducting chemical level measurement/analysis at workplaces based on SOCO occupational diseases statistics</i>	10 tempat kerja <i>10 workplaces</i>	11 tempat kerja <i>11 workplaces</i>	110%
8.	Memberikan bantuan siasatan aduan/kemalangan/keracunan/kejadian berbahaya berkaitan dengan bahan kimia dan IAQ <i>Providing assistance in hazardous complaint/accident/poisoning/occurrence related to chemical substance and IAQ</i>	6 kes <i>6 cases</i>	6 kes <i>6 cases</i>	100%
9.	Menyelaraskan Projek Konvensyen JKPP-Rotterdam <i>Coordinating DOSH-Rotterdam Convention project</i>	1 kertas cadangan (100%) <i>1 proposal paper (100%)</i>	1 kertas cadangan (100%) <i>1 proposal paper (100%)</i>	100%
10.	Menghasilkan montaj kesengsaraan akibat pendedahan kepada bahan kimia berbahaya kepada kesihatan <i>Preparing montage on the sufferings caused by exposure to chemical hazardous to health</i>	1 montaj (100%) <i>1 montage (100%)</i>	1 montaj (100%) <i>1 montage (100%)</i>	100%
11.	Memberikan input kepada Jawatankuasa Perintah Larangan Penggunaan Asbestos di Tempat Kerja <i>Providing input to the Committee on the prohibition of use of asbestos at workplace</i>	3 siri perbincangan <i>3 discussion sessions</i>	4 siri perbincangan <i>4 discussion sessions</i>	133%
12.	Menyelenggara/menguji peralatan BPK <i>Maintaining/testing Chemical Management Division instruments</i>	43 peralatan <i>43 instruments</i>	53 peralatan <i>53 instruments</i>	123%



Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
13.	Menjalankan kajian pendedahan radon di Malaysia <i>Conducting a study on radon exposure in Malaysia</i>	3 tempat kerja <i>3 workplaces</i>	3 tempat kerja <i>3 workplaces</i>	100%
14.	Menyediakan kertas jurnal/rencana/artikel/pembentangan <i>Preparing journal paper/article/presentation</i>	2 kertas <i>2 papers</i>	2 kertas <i>2 papers</i>	100%
15.	Memberikan input teknikal/ceramah/kepakaran IAQ/kawalan kimia/USECHH/peralatan kepada pelanggan <i>Providing technical input/talks/expertise on IAQ/chemical control/USECHH/instruments to clients</i>	10 permohonan <i>10 applications</i>	21 permohonan <i>21 applications</i>	210%

### Unit Persenjataan Kimia Chemical Weapons Unit

Jadual 7: Aktiviti Unit Persenjataan Kimia bagi tahun 2012.

Table 7: The Chemical Weapons Unit activities in 2012.

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
1.	Taklimat Akta Konvesyen Senjata Kimia dan Konvesyen Senjata Kimia di tempat kerja <i>Briefing on Chemical Weapons Convention Act and chemical convention at workplaces</i>	5 tempat kerja <i>5 workplaces</i>	4 tempat kerja <i>4 workplaces</i>	80%
2.	Menyelaraskan OPCW Associate Programme di Malaysia <i>Coordinating OPCW Associate Programme in Malaysia</i>	1 program antarabangsa <i>1 international programme</i>	1 program antarabangsa <i>1 international programme</i>	100%
3.	Menjalankan pemeriksaan CWC kebangsaan dan antarabangsa <i>Conducting national and international CWC inspection</i>	3 siri pemeriksaan <i>3 series of inspection</i>	4 siri pemeriksaan <i>4 series of inspection</i>	133%
4.	Menghadiri OPCW Associate Programme 2012 <i>Attending OPCW Associate Programme 2012</i>	10 minggu kursus <i>10 weeks</i>	10 minggu kursus <i>10 weeks</i>	100%
5.	Menghadiri OPCW Conference State Party & National Authority Meeting 2012 <i>Attending OPCW Conference State Party and National Authority Meeting 2012</i>	2 minggu persidangan antarabangsa <i>2 weeks (international conference)</i>	2 minggu persidangan antarabangsa <i>2 weeks (international conference)</i>	100%

Bil. No.	Aktiviti   Activity	Penunjuk Aras Prestasi Key Performance Index	Pencapaian Achievement	Peratusan Pencapaian Keseluruhan Overall Achievement Percentage
6.	Mengendalikan Kursus FTIR, GC-MS, GC-Voyager dan Taklimat Akta Konvensyen Senjata Kimia 2005 di pejabat negeri <i>Conducting FTIR, GC-MS, GC-Voyager Courses and briefing on Chemical Weapons Convention Act 2005 at state offices</i>	5 kursus <i>5 courses</i>	6 kursus <i>6 courses</i>	120%
7.	Menjadi agensi peneraju untuk Article XI Konvensyen Senjata Kimia dan menguruskan mesyuarat Article XI <i>Acting as leading agency for Article XI under the Chemical Weapons Convention dan chairing meeting on Article XI</i>	2 mesyuarat <i>2 meetings</i>	4 mesyuarat <i>4 meetings</i>	200%
8.	Menghadiri kursus Prosedur Pemeriksaan Senjata Kimia Kebangsaan <i>Attending National Chemical Weapons Inspection Procedures Course</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
9.	Menyediakan kit pemeriksaan CWC untuk pegawai JKKP <i>Preparing CWC Inspection Kit for the DOSH officers</i>	1 kit <i>1 kit</i>	1 kit <i>1 kit</i>	100%
10.	Menghadiri mesyuarat/persidangan berkaitan CWC <i>Attending CWC-related meeting/conference</i>	10 mesyuarat/persidangan <i>10 meetings/conferences</i>	14 mesyuarat/persidangan <i>14 meetings/conferences</i>	140%
11.	Kursus ISO Dalam <i>Attending Internal ISO Course</i>	1 kursus <i>1 course</i>	1 kursus <i>1 course</i>	100%
12.	Menyediakan bahan RQTM – artikel di bawah CWC <i>Preparing RQTM materials – Article under CWC</i>	1 bahan RQTM <i>1 RQTM material</i>	1 bahan RQTM <i>1 RQTM material</i>	100%
13.	Menyediakan kertas jurnal/rencana/artikel/pembentangan <i>Preparing journal paper/article/presentation</i>	1 kertas <i>1 paper</i>	1 kertas <i>1 paper</i>	100%
14.	Memberikan input teknikal/ceramah/kepakaran persenjataan kimia/peralatan kepada pelanggan <i>Providing technical input/talks/expertise on chemical weapons/instruments to clients</i>	10 kes <i>10 cases</i>	11 kes <i>11 cases</i>	110%
15.	Menyelaraskan latihan/ceramah dalaman <i>Coordinating internal training/talks</i>	12 latihan/ceramah <i>12 training/talk</i>	10 latihan/ceramah <i>10 training/talk</i>	83.3%
16.	Menyediakan input kepada Jawatankuasa Konvensyen Antarabangsa/Polisi Kebangsaan Bahan Kimia <i>Providing input for International Convention Committee/National Chemical Policy</i>	6 mesyuarat <i>6 meetings</i>	6 mesyuarat <i>6 meetings</i>	100%

## Pemprofilan Konvensyen Senjata Kimia di Tempat Kerja

JKKP telah menjalankan kajian profil untuk Konvensyen Senjata Kimia di Malaysia bagi menyediakan data di peringkat kebangsaan dan mengenal pasti industri yang berpotensi untuk diisytiharkan di bawah konvensyen tersebut. Jadual 8 di bawah menunjukkan tempat kerja yang telah dilawati untuk tujuan kajian profil kimia tersebut.

Jadual 8: Tempat kerja yang telah dilawati untuk tujuan kajian profil CWC bagi tahun 2012.

*Table 8: Workplaces visited for the CWC profile studies in 2012.*

Bil. No.	Lokasi   Location	Tarikh Pemeriksaan Date of Inspection
1.	MOHM Chemical Sdn Bhd, Johor Bharu, Johor <i>MOHM Chemical Sdn Bhd, Johor Bharu, Johor</i>	21 Mac 2012 <i>21 March 2012</i>
2.	Southern Lion Sdn Bhd, Johor Bharu, Johor <i>Southern Lion Sdn Bhd, Johor Bharu, Johor</i>	22 Mac 2012 <i>22 March 2012</i>

## OPCW Associate Programme 2012

Seorang pegawai Bahagian Pengurusan Kimia telah dipilih untuk mengikuti kursus *Associate programme* 2012 anjuran Organisasi bagi Larangan terhadap Senjata Kimia (OPCW) bertempat di Netherlands, United Kingdom, dan Jepun pada 2 Ogos hingga 5 Oktober 2012.

JKKP telah berkerjasama dengan Pihak Berkuasa Kebangsaan bagi Senjata Kimia (PBK KSK) bagi menerima empat orang peserta *Associate Programme* 2012 yang telah dihantar oleh OPCW bagi menjalani latihan berkaitan industri kimia di Malaysia. Dua buah syarikat telah dipilih untuk menjadi tuan rumah bagi program ini iaitu BASF Petronas Sdn Bhd di Gebeng, Kuantan dan CCM Chemicals Sdn Bhd di Pasir Gudang, Johor.

## Operasi Penguatkuasaan Peraturan-Peraturan Keselamatan Dan Kesihatan Pekerja (Penggunaan Dan Standard Pendedahan Bahan Kimia Berbahaya Kepada Kesihatan) 2000

Peraturan USECHH telah diwartakan pada 4 April 2000. Bagi menilai tahap kesedaran, pemahaman dan pematuhan majikan terhadap Peraturan ini, Jabatan menjalankan Operasi Penguatkuasaan Peraturan USECHH sebanyak tiga kali setiap tahun.

## Chemical Weapons Convention Profiling at Workplace

*DOSH had carried out profile studies for Chemical Weapons Convention in Malaysia to prepare national-level data and to identify potentially declarable industries under the convention.*

## OPCW Associate Programme 2012

*An officer from the Chemical Management Division was selected to attend the Associate Programme 2012 Course organized by the Organisation for the Prohibition of Chemical Weapons (OPCW) in the Netherlands, United Kingdom, and Japan from 2 August 2012 till 5 October 2012.*

*DOSH collaborated with the National Authority for Chemical Weapons to accommodate four participants, designated by the OPCW for the Associate Programme 2012, to attend a training on chemical industry in Malaysia. Two firms, namely Petronas Sdn Bhd in Gebeng, Kuantan and CCM Chemicals Sdn Bhd in Pasir Gudang, Johor, were selected to host this programme.*

## Operation On The Enforcement Of The Occupational Safety And Health (Use And Standards Of Exposure Of Chemicals Hazardous To Health) Regulations (Usechh) 2000

The USECHH Regulations were gazetted on 4 April 2000. In order to evaluate an employer's level of awareness, understanding, and compliance with the Regulations, the Department conducted operation on enforcement of USECHH Regulations thrice a year.



## Hasil Operasi Penguatkuasaan Peraturan USECHH

Hasil yang dapat dilihat daripada operasi yang dijalankan adalah berkisar pada:

- Perbandingan tahap pematuhan tempat kerja yang diperiksa mengikut kategori;
- Prestasi pematuhan elemen di bawah Peraturan USECHH;
- Kategori pematuhan mengikut bilangan pekerja pada sesebuah tempat kerja;
- Tindakan yang diambil terhadap sesebuah tempat kerja; dan
- Tahap pematuhan oleh tempat kerja yang diperiksa, dinilai dan dikategorikan sebagai A, B, C, D, dan E berdasarkan pencapaian markah mengikut skema pemarkahan yang telah ditetapkan.

## Outcome Of Operation On The Enforcement Of The USECHH Regulations

Outcome of the operations conducted revolved around the followings:

- Comparison of the levels of compliance at the inspected workplaces by category;
- Performance in compliance with elements under the USECHH Regulations;
- Compliance category according to the number of workers in a workplace;
- Actions taken on a workplace; and
- The levels of compliance at the inspected workplaces were assessed and categorised into A, B, C, D, and E based on points received under a pre-determined grading system.

Jadual 1: Pemarkahan yang digunakan dalam operasi Peraturan USECHH.

Table 1: Grading system used in the USECHH Regulations operations.

Gred   Grade	Pencapaian   Achievement	Markah   Point
A	Cemerlang   <i>Excellent</i>	80% - 100%
B	Baik   <i>Good</i>	65% - 79%
C	Memuaskan   <i>Satisfactory</i>	50% - 64%
D	Kurang Memuaskan   <i>Less than satisfactory</i>	26% - 49%
E	Tidak memuaskan   <i>Not satisfactory</i>	0% - 25%

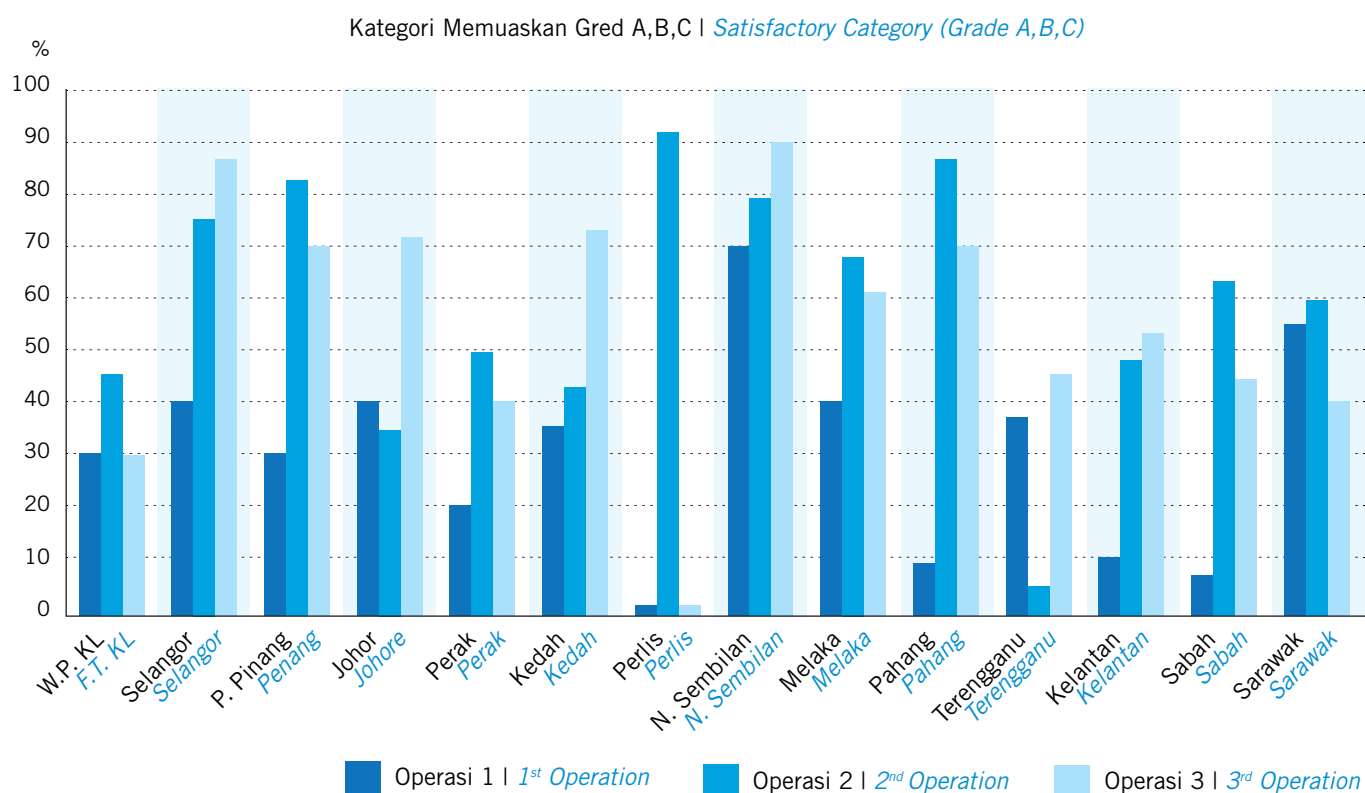
Pencapaian Tempat Kerja  
Workplace Achievement

Jadual 2: Pencapaian tempat kerja mengikut negeri, bilangan operasi, dan peratusan memuaskan dan tidak memuaskan.  
Table 2: Workplace achievement by state, number of operations, and percentage of satisfactory and not satisfactory performances.

Negeri   States	Operasi 1   1 <sup>st</sup> Operation				Operasi 2   2 <sup>nd</sup> Operation				Operasi 3   3 <sup>rd</sup> Operation			
	Bil. Tempat Kerja Number of Workplaces Gred A/B/C	% Memuaskan Satisfactory	Bil. Tempat Number of Workplaces Gred D/E	% Tidak Memuaskan Not Satisfactory	Bil. Tempat Number of Workplaces Gred A/B/C	% Memuaskan Satisfactory	Bil. Tempat Number of Workplaces Gred D/E	% Tidak Memuaskan Not Satisfactory	Bil. Tempat Number of Workplaces Gred A/B/C	% Memuaskan Satisfactory	Bil. Tempat Number of Workplaces Gred D/E	% Tidak Memuaskan Not Satisfactory
W.P. KL   <i>F.T. KL</i>	12	33.33	24	66.67	14	50.00	14	50.00	7	35.00	13	65.00
Selangor   <i>Selangor</i>	7	46.67	8	53.33	10	83.33	2	16.67	8	88.89	1	11.11
Pulau Pinang   <i>Penang</i>	3	33.33	6	66.67	10	90.91	1	9.09	8	72.73	3	27.27
Johor   <i>Johore</i>	13	46.43	15	53.57	19	40.43	28	59.57	18	75.00	6	25.00
Perak   <i>Perak</i>	8	21.05	30	78.95	28	62.22	17	37.78	7	43.75	9	56.25
Kedah   <i>Kedah</i>	6	40.00	9	60.00	8	53.33	7	46.67	17	77.27	5	22.73
Perlis   <i>Perlis</i>	0	0.00	5	100.00	3	100.00	0	0.00	0	0.00	5	100.00
N. Sembilan   <i>N. Sembilan</i>	11	73.33	4	26.67	18	85.71	3	14.29	14	93.33	1	6.67
Melaka   <i>Malacca</i>	11	55.00	9	45.00	10	83.33	2	16.67	6	66.67	3	33.33
Pahang   <i>Pahang</i>	10	26.32	28	73.68	13	92.86	1	7.14	5	71.43	2	28.57
Terengganu   <i>Terengganu</i>	21	44.68	26	55.32	7	14.00	43	86.00	18	50.00	18	50.00
Kelantan   <i>Kelantan</i>	7	26.92	19	73.08	18	58.06	13	41.94	10	55.56	8	44.44
Sabah   <i>Sabah</i>	2	16.67	10	83.33	10	71.43	4	28.57	4	50.00	4	50.00
Sarawak   <i>Sarawak</i>	9	69.23	4	30.77	10	66.67	5	33.33	6	42.86	8	57.14
<b>Purata Pencapaian Average Achievement</b>		<b>38.07</b>		<b>61.93</b>		<b>68.02</b>		<b>31.98</b>		<b>58.75</b>		<b>41.25</b>

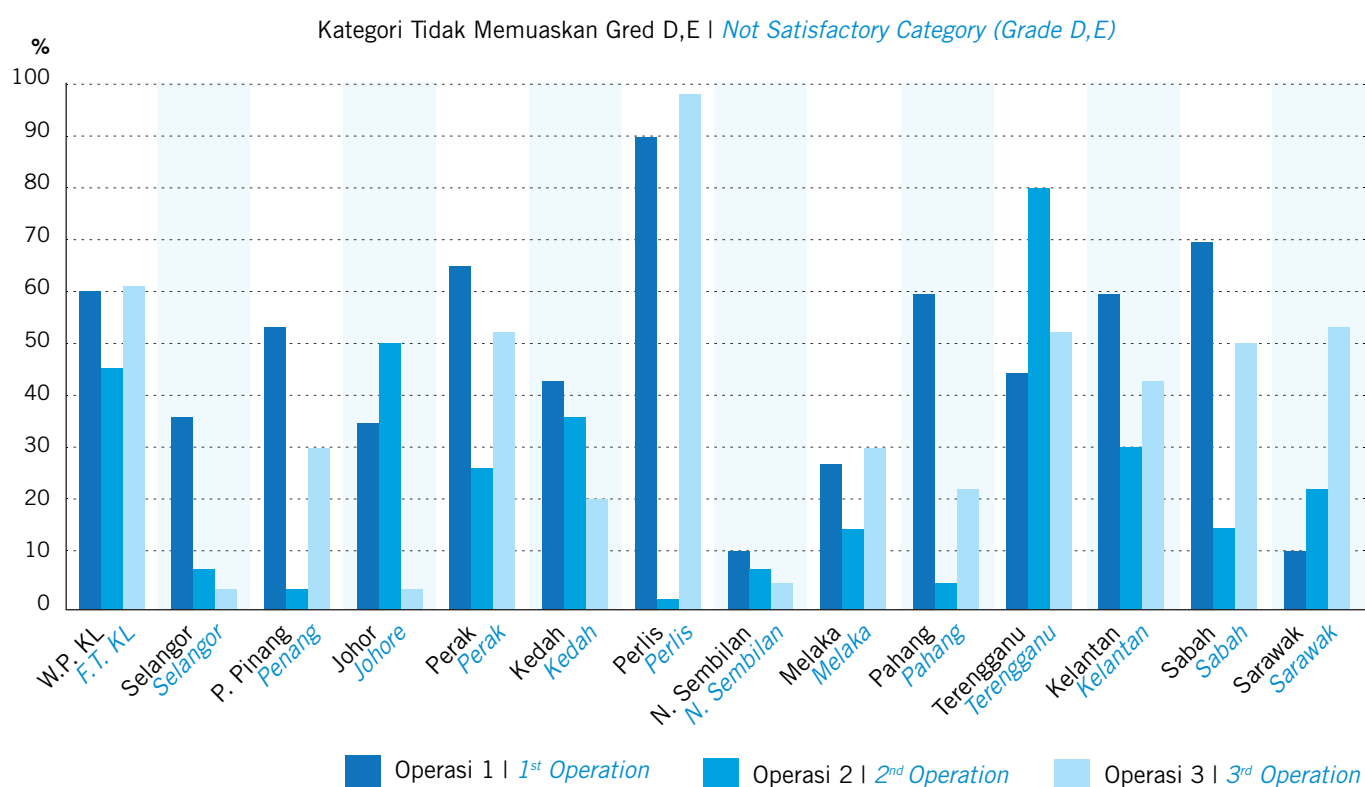
Graf 1: Peratusan pencapaian memuaskan mengikut negeri dan operasi.

Graph 1: Percentage of satisfactory performance by state and operation.



Graf 2: Peratusan pencapaian tidak memuaskan mengikut negeri dan operasi.

Graph 2: Percentage of not satisfactory performance by state and operation.





Jadual 2, Graf 1, dan Graf 2 menunjukkan pencapaian tempat kerja mengikut negeri, bilangan operasi, dan peratusan untuk kategori yang memuaskan atau tidak memuaskan. Kategori memuaskan adalah tempat kerja yang mendapat gred A, B, dan C manakala kategori tidak memuaskan adalah tempat kerja yang mendapat gred D dan E.

*Table 2, Graph 1, and Graph 2 show the performance of workplaces by state, operation, and percentage of satisfactory and not satisfactory performances. Satisfactory category is for workplaces which acquired Grades A, B, and C while not satisfactory category is for workplaces which acquired Grades D and E.*

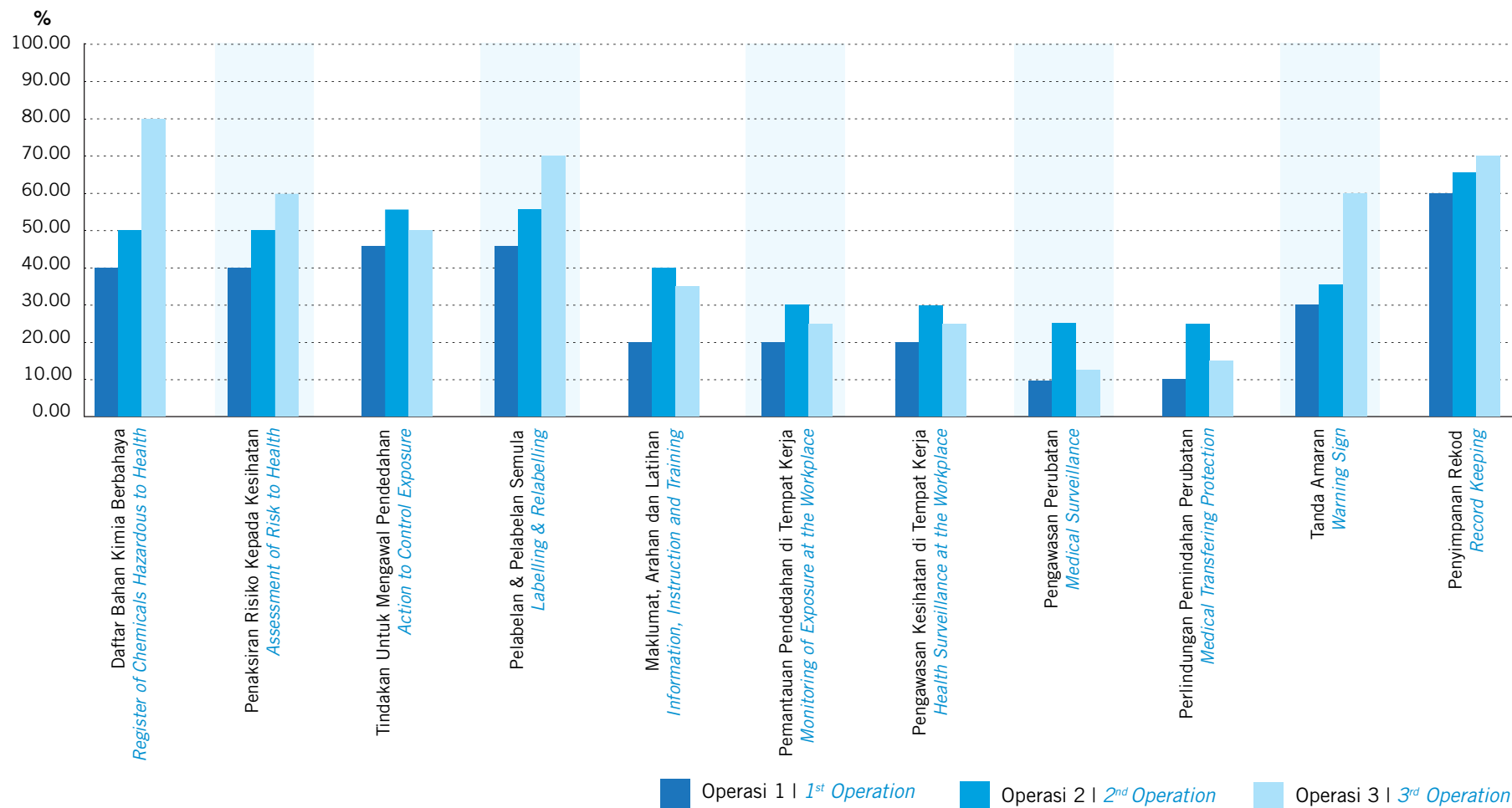
### Peratusan Pematuan Peraturan USECHH Mengikut Elemen *Percentage Of Workplace Compliant With USECHH Regulations By Element*

Jadual 3: Peratusan mengikut kategori dan bilangan operasi.  
*Table 3: Percentage by category and operation.*

Bil. No.	Perkara   Element	Operasi Bil. 1 1 <sup>st</sup> Operation (%)		Operasi Bil. 2 2 <sup>nd</sup> Operation (%)		Operasi Bil. 3 3 <sup>rd</sup> Operation (%)	
		A/B/C	D/E	A/B/C	D/E	A/B/C	D/E
1.	Daftar bahan kimia berbahaya <i>Register of chemicals hazardous to health</i>	41.38	58.62	56.15	43.85	81.04	18.96
2.	Penaksiran risiko kepada kesihatan <i>Risk to health assessment</i>	39.01	60.99	60.44	39.56	64.32	35.68
3.	Tindakan untuk mengawal pendedahan <i>Action to control exposure</i>	45.57	54.43	56.86	43.14	56.44	43.56
4.	Pelabelan dan pelabelan semula <i>Labelling and relabelling</i>	45.98	54.02	67.52	32.48	70.77	29.23
5.	Maklumat, arahan, dan latihan <i>Information, instruction, and training</i>	31.65	68.35	53.50	46.50	42.79	57.21
6.	Pemantauan pendedahan di tempat kerja <i>Monitoring of exposure at workplace</i>	32.37	67.63	35.88	64.12	28.40	71.60
7.	Pengawasan kesihatan di tempat kerja <i>Health surveillance at workplace</i>	27.95	72.05	36.97	63.03	29.32	70.68
8.	Pengawasan perubatan <i>Medical surveillance</i>	21.67	78.33	32.73	67.27	18.27	81.73
9.	Perlindungan pemindahan perubatan <i>Medical transfer protection</i>	16.16	83.84	32.53	67.47	17.95	82.05
10.	Tanda amaran <i>Warning sign</i>	45.31	54.69	45.54	54.46	64.25	35.75
11.	Penyimpanan rekod <i>Record keeping</i>	67.95	32.05	74.84	25.16	76.08	23.92

Graf 3: Pencapaian elemen pematuhan Peraturan USECHH untuk kategori memuaskan.

Graph 3: Compliance with elements of USECHH Regulations performance for satisfactory category.



Jadual 3 dan Graf 3 menunjukkan peratusan pematuhan tempat kerja terhadap elemen yang dinyatakan dalam Peraturan USECHH. Menurut statistik, elemen seperti Pelabelan dan pelabelan semula, Tanda amaran, dan Penyimpanan rekod merupakan antara elemen yang mempunyai peratusan pematuhan yang tinggi manakala elemen Pengawasan kesihatan di tempat kerja, Perlindungan pemindahan perubatan dan Pengawasan perubatan merupakan tiga perkara yang mempunyai peratusan pematuhan yang terendah.

Table 3 and Graph 3 show the percentage compliances with elements of the USECHH Regulations at workplaces. By statistics, Labelling and relabelling, Warning sign, and Record keeping are the three elements with the highest percentage compliance whereas Monitoring of exposure at workplace, Medical transfer protection and Medical surveillance are the three elements with the lowest percentage compliance.

## Pencapaian Mengikut Bilangan Pekerja Performance By Number Of Workers

Jadual 4: Pencapaian mengikut bilangan pekerja (bilangan tempat kerja dan peratusan).

Table 4: Performance by number of workers (number of workplaces and percentages).

Kategori   Category	Bilangan pekerja di tempat kerja Number of workers at workplace					
	< 40		40 - 500		> 500	
	Bilangan Number	%	Bilangan Number	%	Bilangan Number	%
A	15	3.73	46	11.65	27	52.94
B	45	11.19	102	25.82	13	25.49
C	71	17.66	96	24.30	7	13.73
D	119	29.60	94	23.80	4	7.84
E	152	37.81	57	14.43	0	0.00
Jumlah   Total	402		395		51	

Jadual 4 menunjukkan tempat kerja yang mempunyai pekerja kurang daripada 40 orang, mempunyai tahap pemuatan yang rendah dengan kebanyakannya mencapai peratusan pemuatan dalam kategori D dan E. Kategori ini mencapai peratusan tertinggi, iaitu 29.60% dan 37.81%, masing-masing bagi kategori D dan E.

Merujuk Akta 514, tempat kerja yang mempunyai pekerja melebihi 40 orang dikehendaki menubuhkan Jawatankuasa Keselamatan dan Kesihatan (JKK). Kesimpulannya, JKK yang wujud di tempat kerja mungkin dapat membantu industri mematuhi kehendak Peraturan USECHH. Ini dapat dilihat daripada pencapaian bagi kategori A, B, dan C jika dibandingkan dengan tempat kerja yang mempunyai kurang daripada 40 orang pekerja.

Table 4 shows that workplaces with less than 40 workers had the lowest compliance levels with most of them achieved percentage compliance under category D and E. These categories represent the highest percentage at 29.6% and 37.81% for category D and E, respectively.

Pursuant to Act 514, a workplace with more than 40 workers is required to establish a Safety and Health Committee (SHC). It can be concluded that SHC at workplaces can contribute to the industry in enhancing compliance with the USECHH Regulations. This is evidenced in the achievements of categories A, B, and C as compared to workplaces with less than 40 workers.



## Tindakan Yang Diambil *Action Taken*

Jadual 5: Tindakan yang diambil mengikut bilangan operasi dan jenis tindakan.

*Table 5: Actions taken by sequence of operation types of action taken.*

Tindakan Yang Diambil   <i>Action Taken</i>	Bilangan pekerja di tempat kerja <i>Number of workers at workplace</i>			Jumlah   <i>Total</i>
	OPS 1	OPS 2	OPS 3	
Notis Larangan AKTA 514 <i>Notice of Prohibition (NOP) of Act 514</i>	2	7	1	10
Notis Pembaikan AKTA 514 <i>Notice of Improvement (NOI) of Act 514</i>	254	261	73	588
Surat Arahan <i>Letter of Instruction</i>	199	206	148	553
Sita <i>Seal</i>	3	6	0	9

Keseluruhannya, sebanyak 588 notis pembaikan dan 10 notis larangan dikeluarkan semasa operasi pada tahun 2012. Bilangan ini meningkat berbanding operasi dalam tahun sebelumnya kerana peningkatan jumlah bilangan tempat kerja untuk tahun 2012. Sebanyak 553 surat arahan telah dikeluarkan.

*Collectively, 588 notices of improvement and 10 notices of prohibition were issued during the 2012 operations. The number of issuance had increased as compared to previous year operations due to the increasing number of workplaces in 2012. A total of 553 letter of instructions were issued.*

## Peralatan Bahagian *Division Equipment*

Jadual 6: Peralatan Bahagian Pengurusan Kimia bagi tahun 2012.

*Table 6: The Chemical Management Division equipment in 2012.*

Bil. No.	Jenis Alat   <i>Types of Equipment</i>	Jumlah   <i>Total</i>	Fungsi   <i>Function</i>
1.	Gas kromatograf mudah alih/spektrometer jisim <i>Portable gas chromatograph/mass spectrometer</i>	1	Menganalisis komposisi kimia organik dalam udara. <i>Analyses organic chemical composition in air.</i>
2.	Pam pensampel mikrobiologi <i>Microbiological sampler pump</i>	4	Persampelan kulat dan bakteria. <i>Fungus and bacteria sampling.</i>
3.	Pelbagai fungsi evolusi meter KIMO <i>Evolution multi-function meter KIMO</i>	3	Anemometer – mengukur kadar pergerakan udara. <i>Anemometer – measures air flow rate.</i>
4.	Accubalance Plus <i>Accubalance Plus</i>	3	Anemometer – mengukur kadar pergerakan udara. <i>Anemometer – measures air flow rate.</i>
5	Monitor aerosol trek debu <i>Dust trak aerosol monitor</i>	5	Memonitor zarah ternafaskan. <i>Monitors respirable particulate.</i>

Bil. No.	Jenis Alat   <i>Types of Equipment</i>	Jumlah   <i>Total</i>	Fungsi   <i>Function</i>
6	PPM fomaldemeter <i>PPM fomaldemeter</i>	4	Memonitor formaldehid. <i>Monitors formaldehyde.</i>
7	Pengesan sebatian organik meruap <i>Volatile organic compound detector</i>	4	Memonitor sebatian organik meruap seluruhnya. <i>Monitors total volatile organic compound, TVOC.</i>
8	Monitor kualiti udara <i>Air quality monitor</i>	4	Memonitor gas karbon dioksida, karbon monoksida, suhu dan kelembapan relatif. <i>Monitors carbon dioxide, carbon monoxide, temperature, and relative humidity.</i>
9	VELOCICALC <i>VELOCICALC</i>	2	Anemometer untuk mengukur suhu dan kelembapan relatif. <i>Anemometer to measure temperature and relative humidity.</i>
10	Monitor kualiti udara aeroqual <i>Air quality monitor aeroqual</i>	4	Memonitor gas ozon. <i>Monitors the ozone level.</i>
11	Penganalisis gas kromatografi mudah alih <i>Portable gas chromatography analyzer</i>	1	Menganalisis komposisi sebatian organik meruap dalam udara. <i>Analyses volatile organic compound composition in air.</i>
12	Pengesan gas pelbagai (Multilog 2000) <i>Multi gas detector (Multilog 2000)</i>	1	Mengesan gas (nitrogen dioksida, sulfur dioksida, ammonia dan hidrogen sianida). <i>Detects gases (nitrogen dioxide, sulfur dioxide, ammonia and hydrogen cyanide).</i>
13	Penganalisis wap merkuri <i>Mercury Vapour Analyzer</i>	1	Menganalisis wap merkuri. <i>Analyses mercury vapour.</i>
14	Pengesan radon dan toron RAD 7 <i>Radon and thoron detector RAD 7</i>	2	Mengesan gas toksik radon dan toron dalam udara. <i>Detects toxic radon and thoron gas in airborne.</i>
15	Penganalisis gas mudah alih <i>Portable Fourier transform infrared gas analyzer</i>	1	Menganalisis komposisi kimia organik dalam udara. <i>Analyses organic chemical composition in air.</i>
16	Pam persampelan aliran rendah dan tinggi <i>High flow sampling pump</i>	2 set (10 unit) <i>2 sets (10 units)</i>	Pam untuk memonitor kimia. <i>Integrated chemical monitoring pump.</i>



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 22 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) in a palm oil factory on 22 February 2012.



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 23 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) in a palm oil factory on 23 February 2012.



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 20 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) in a palm oil factory on 20 February 2012.



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 20 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) in a palm oil factory on 20 February 2012.



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 22 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) in a palm oil factory on 22 February 2012.



Pemantauan generik penaksiran risiko bahan kimia berbahaya kepada kesihatan (CHRA) di kilang kelapa sawit, 22 Februari 2012.  
 Conducting a generic monitoring on chemical health risk assessment (CHRA) at a palm oil factory on 22 February 2012.





Kajian ilmu, sikap dan amalan (KAP) di Cameron Highlands pada 3 November 2012.

*Conducting a study on knowledge, attitude, and practice (KAP) in Cameron Highlands on 3 November 2012.*



Kajian ilmu, sikap dan amalan (KAP) di Tapak Kekal Pengeluaran Makanan (TKPM) Hulu Yam pada 14 Disember 2012.

*Conducting a study on knowledge, attitude, and practice (KAP) at a Food Production Permanent Park in Hulu Yam on 14 Disember 2012.*



Latihan praktikal penguatkuasaan Peraturan CLASS yang dijalankan oleh salah satu kumpulan pegawai JKPP Ibu Pejabat.

*A practical training for the enforcement of the CLASS Regulations carried out by one of the teams from the DOSH Headquarters.*



Latihan pemeriksaan lintas lalu bagi penguatkuasaan Peraturan CLASS di salah sebuah kilang kimia di Selangor.

*A pass through inspection for the enforcement of the CLASS Regulations in a chemical plant in Selangor.*



Lawatan ke makmal SIRIM bagi tujuan verifikasi terhadap makmal yang berkeupayaan menjalankan pengujian selaras dengan kehendak Peraturan CLASS.

*A visit to a SIRIM lab for the purpose of verifying labs capable of carrying out testings in accordance with the CLASS Regulations.*



Bengkel Bimbingan Pematuhan Cadangan Peraturan CLASS 201X dan Penggunaan Sistem CIMS untuk wakil industri di INTEKMA, Shah Alam pada 29 – 31 Mei 2012.

*A Compliance Guide Workshop for the CLASS Regulations 201X Proposal and Application of CIMS System for industrial representatives held at INTEKMA, Shah Alam on 29 – 31 May 2012.*





Pembentangan berkaitan peruntukan Peraturan CLASS yang akan digunakan untuk menggantikan Peraturan CPL.  
*A presentation on the allocation of the CLASS Regulations which will supersede the CPL Regulations.*



Kunjungan hormat Ketua Pengarah Organisation for the Prohibition of Chemical Weapons (OPCW) pada 7 Mei 2012.  
*A courtesy visit by the Director-General of Organisation for the Prohibition of Chemical Weapons (OPCW) on 7 May 2012.*



Sesi perbincangan antara Organisation for the Prohibition of Chemical Weapons (OPCW) dengan Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) pada 7 Mei 2012.  
*A discussion session between the Organisation for the Prohibition of Chemical Weapons (OPCW) and the Department of Occupational Safety and Health (DOSH) on 7 May 2012.*



Kumpulan Inovatif & Kreatif (KIK) Bahagian Pengurusan Kimia yang telah dipilih mewakili Kementerian Sumber Manusia di Peringkat Saringan Konvensyen KIK 2012 dan berjaya layak ke saingan akhir Peringkat Kebangsaan di Awana Porto Malai, Langkawi pada 5 – 7 November 2012 melalui projek IAQ Mobile.  
*The Creative and Innovative Team (CIT) from the Chemical Management Division was chosen to represent the Ministry of Human Resources in the CIT Convention Screening Level 2012 and succeeded to the final round in the national level at Awana Porto Malai in Langkawi on 5 – 7 November 2012 through the IAQ Mobile project.*



Pengujian penggunaan projek IAQ Mobile bersama IAQ Assessor bagi pertandingan Kumpulan Inovatif Kreatif (KIK) Perkhidmatan Awam Peringkat Kebangsaan 2012.  
*Testing the application of IAQ Mobile with an IAQ assessor for the National Level Public Service Creative & Innovative Team Competition 2012.*



Pengambilan sampel media bagi bahan cemar biologik untuk parameter kualiti udara dalaman.  
*Collecting media sample of biological pollutants for internal air quality parameter.*





Pemantauan parameter kualiti udara dalaman ketika menyiasat masalah kualiti udara dalaman di salah sebuah jabatan kerajaan.  
*Monitoring internal air quality parameter in an internal quality problem investigation at a Government agency office.*



Pengukuran gas radon di ruang parkir menggunakan kaedah sniff.  
*Measuring radon gas level in a car parking area using the sniff method.*



Pemasangan tabung silika ke atas alat pengesan gas radon untuk mengukur gas radon bagi menjalankan kaedah pemantauan penuh.  
*Installing silica canister into a radon gas detector to measure radon gas level in order to carry out full monitoring method.*



Pengukuran gas radon menggunakan pengesan gas radon di ruang bawah tanah.  
*Measuring radon gas level using a radon gas detector in an underground area.*



Mengukur dan mengenal pasti pendedahan bahan kimia di sebuah kilang automatik di Melaka menggunakan spektroskopi inframerah transform fourier (FTIR).  
*Identifying and measuring chemical exposures at an automotive plant, in Melaka, using a fourier transform infrared spectroscopy (FTIR).*



Pemeriksaan visual tahap kualiti penapis di Unit Pengendalian Udara.  
*Visual examination for filter quality level by the Air Handling Unit.*





Pemantauan hidrogen sianida menggunakan spektroskopi inframerah transform fourier (FTIR) di lombong emas.  
*Hydrogen cyanide monitoring using a fourier transform infrared spectroscopy (FTIR) in a gold mine.*



Kursus penggunaan alat persenjataan kimia di JKPP negeri.  
*Attending a course on the usage of chemical weapons held at a DOSH state office.*



Penerangan tentang cara menggunakan alat spektrometri jisim kromatografi gas (GCMS).  
*A briefing session on the usage of gas chromatography mass spectrometry (GCMS) device.*





Kursus Associate Program OPCW 2012 di The Hague, Belanda yang dihadiri oleh seorang pegawai Bahagian Pengurusan Kimia.  
*An officer from the Chemical Management Division attending a course under the Associate Programme OPCW 2012 at The Hague, Netherlands.*



Sesi praktikal kursus penggunaan alat persenjataan kimia di salah sebuah kilang di Pahang.  
*A practical training session in a chemical weapon usage course conducted at a plant in Pahang.*



Latihan industri di Mitsubishi Chemicals Corporation di Jepun semasa kursus Associate Program OPCW 2012.  
*Participants of an industrial training, at the Mitsubishi Chemicals Corporation in Japan, which was part of a course under the Associate Programme OPCW 2012.*

## Glosari

### *Glossary*

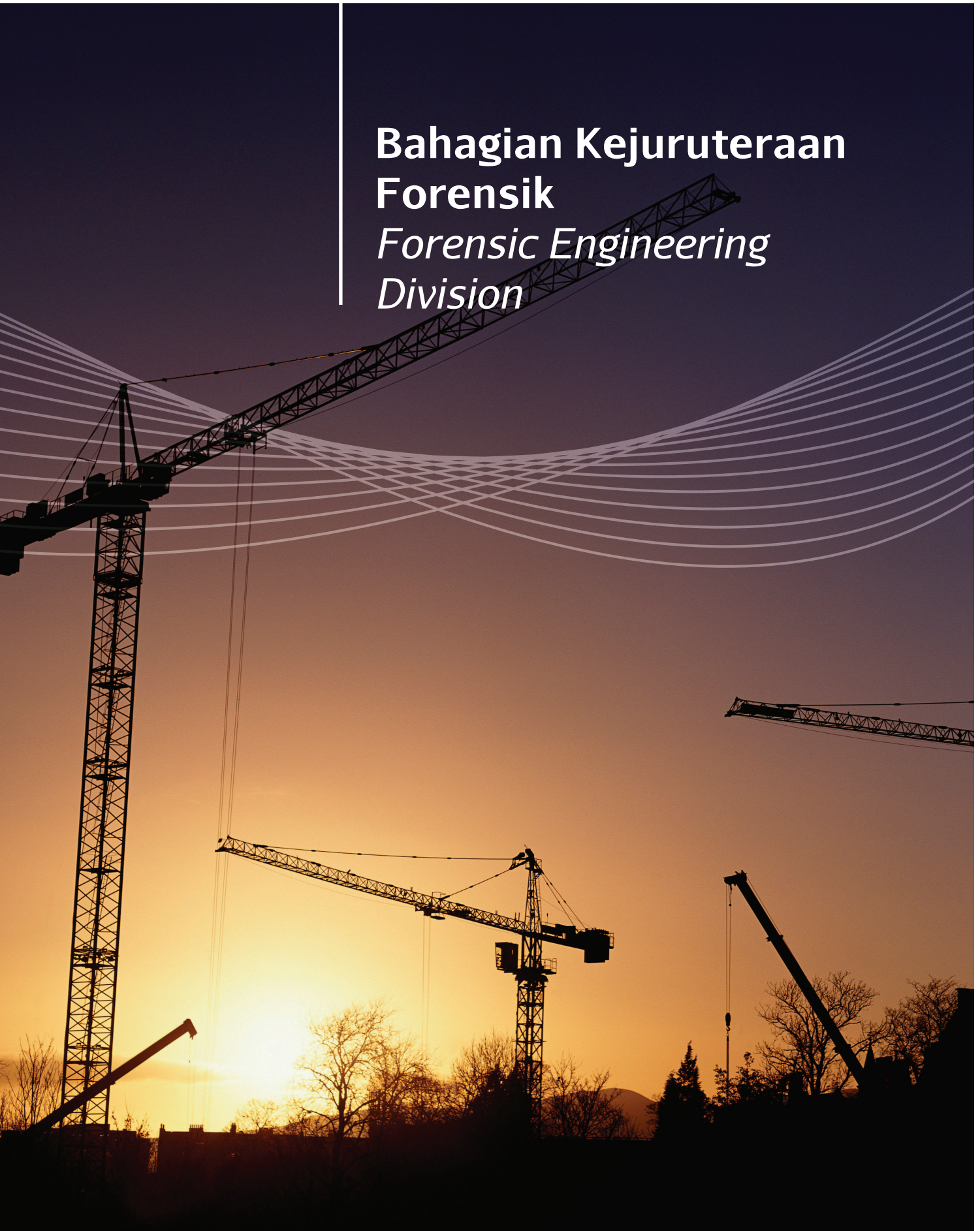
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<b>APEC</b>	Asia Pacific Economic Cooperation
<b>BPK</b>	Bahagian Pengurusan Kimia
<b>CHRA</b>	Chemical Health Risk Assessment
<b>CLASS</b>	Classification, Labelling and Safety Data Sheet of Hazardous Chemicals
<b>CIMS</b>	Chemicals Information Management System
<b>COC</b>	Chain of Custody
<b>CPL</b>	Classification, Packaging and Labelling of Hazardous Chemicals
<b>FTIR</b>	Fourier Transform Infrared Spectroscopy
<b>GCMS</b>	Gas Chromatography Mass Spectrometry
<b>ILO</b>	International Labour Organization
<b>IAQ</b>	Indoor Air Quality
<b>KAP</b>	Knowledge, Attitude and Practice
<b>OPCW</b>	Organisation for the Prohibition of Chemical Weapons
<b>OSHMS</b>	Occupational Safety and Health Management System
<b>PPM</b>	Part per Million
<b>RQTM</b>	Reverse Quick Training Material
<b>SiRAC</b>	Simple Risk Assessment and Control
<b>UNITAR</b>	United Nations Institute for Training and Research
<b>UNEP</b>	United Nations Environment Programme
<b>USECHH</b>	Use and Standards of Exposure of Chemicals Hazardous to Health
<b>WHO</b>	World Health Organization



# Bahagian Kejuruteraan Forensik

## *Forensic Engineering Division*





## Bahagian Kejuruteraan Forensik

### Forensic Engineering Division

Bahagian Kejuruteraan Forensik (BKF) telah menyiasat pelbagai jenis kes pada tahun 2012 terutamanya yang mendapat liputan luas di dada akhbar. Antara kes kemalangan yang disiasat melibatkan mesin angkat, letupan dan kebakaran, kemalangan petrokimia, dan kegagalan struktur pembinaan. Kebanyakan kes ini mendapat liputan meluas dalam media massa dan memerlukan tindakan segera daripada Bahagian Kejuruteraan Forensik.

*In 2012, Forensic Engineering Division (FED) investigated a variety of cases especially those that received wide coverage in the press. Cases that were investigated included accidents involving hoisting machines, explosions and fires, petrochemicals as well as buildings structural failures. The majority of these cases received wide coverage in the mass media and required expeditious actions from Forensic Engineering Division.*

**Jadual 1: Kepelbagaian kes kemalangan yang disiasat oleh Bahagian Kejuruteraan Forensik.**

**Table 1: Diversity of accident cases investigated by the Forensic Engineering Division.**

Bil.   No.	Perihal Ringkas Kemalangan   <i>Brief Description of Accident</i>
1.	Perubahan bentuk cangkuk mesin angkat   <i>Hoisting machine hook deformation.</i>
2.	Letupan silinder ammonia tanpa air   <i>Explosion of anhydrous ammonia cylinder.</i>
3.	Kemalangan kren bergerak terbalik   <i>Tower crane wire rope failure due to overload.</i>
4.	Kegagalan tali dawai kren menara akibat beban lampau   <i>Cable failure of tower crane with excessive load.</i>
5.	Kemalangan pekerja tersepit tali sawat   <i>Worker caught between conveyor belt.</i>
6.	Kegagalan silo jagung akibat lengkokan   <i>Failure of corn silo due to buckling.</i>
7.	Pelepasan ammonia tidak terkawal   <i>Uncontrolled release of ammonia.</i>
8.	Kegagalan struktur rasuk konkrit   <i>Structural failure of concrete beam.</i>
9.	Kegagalan tapak asas kren menara   <i>Tower crane foundation failure.</i>
10.	Lif terlajak dan menghentam bumbung slab bangunan   <i>Lift overshoots and hits roof slab building.</i>
11.	Letupan dan kebakaran hidrokarbon di loji penapisan   <i>Explosion and fire of Hydrocarbon in oil refinery.</i>
12.	Kegagalan struktur joran kren bergerak   <i>Structural failure of mobile crane boom.</i>
13.	Kegagalan struktur konkrit acuan semasa pembinaan   <i>Structural failure of concrete formwork during construction.</i>
14.	Kebakaran kapal di jeti   <i>Fire in boat docked at jetty.</i>
15.	Kegagalan komponen rak dan pinan lif penumpang di kren kontena   <i>Failure of rack and pinion component of passenger lift in quay crane.</i>
16.	Kemalangan traktor di ladang sawit   <i>Tractor accident in oil palm estate.</i>
17.	Kebakaran kilat dandang di kilang sawit   <i>Flash fire of boiler in palm oil factory.</i>
18.	Runtuhan struktur bangunan dalam pembinaan   <i>Collapse of building structure during construction.</i>
19.	Kemalangan penumpang traktor di kilang sawit   <i>Accident involving passengers of tractor in palm oil factory.</i>

## Penyiasatan Kejuruteraan Forensik

Tumpuan siasatan BKF adalah terhadap kes kemalangan yang memerlukan siasatan lanjut dan analisis terperinci menggunakan kaedah kejuruteraan forensik. Jadual 2 menunjukkan bilangan kes yang disiasat oleh BKF sejak penubuhannya.

**Jadual 2: Bilangan kes yang disiasat oleh BKF sejak penubuhannya.**

**Table 2: Number of cases investigated by the FED since its inception.**

Tahun   Year	Kes Yang Disiasat   Number of Cases Investigated
2012	19
2011	24
2010	14
2009	18
2008	27
2007	11

Melalui penyiasatan yang dijalankan, pegawai BKF berserta pegawai JKKP negeri dapat menimba lebih pengetahuan tentang kegagalan sesuatu jentera atau proses. Penyiasatan yang bermutu dan berkualiti juga perlu untuk menjamin proses pendakwaan yang lancar dan berjaya.

## Forensic Engineering Investigation

*Cases investigated by the FED are predominantly accident cases that require further investigations and detailed analyses using methods of forensic engineering. Table 2 shows the number of cases that have been investigated by the FED since its inception.*

*Through these investigations, FED officers, together with DOSH officers of the particular state, are able to gain further insight into the failure of a machine or a process. High standard and quality investigation are needed to ensure a smooth and successful prosecution.*



Gambar 1: Pegawai BKF sedang meneliti komponen gear yang terlibat dalam kes kemalangan di Selangor.

*Photo 1: The FED officers examining a gear component that involved in an accident in Selangor.*



Gambar 2: Kegagalan tapak asas sebuah kren menara di Kuala Lumpur.

*Photo 2: Tower crane foundation failure in Kuala Lumpur.*



## Penganalisisan Barang Kes

Penganalisisan barang kes penting untuk menyokong atau menyangkal hipotesis yang telah dibuat. Penganalisisan secara matematikal dan simulasi barang kes hanya dilakukan di makmal yang dilantik. Penjagaan rantaian pembuktian barang kes adalah penting, bermula dari tempat kemalangan hingga lengkapnya laporan penuh untuk memastikan kredibiliti barang kes tidak dipersoal di mahkamah. Jadual 3 menunjukkan bilangan penganalisisan dan ujian barang kes yang dijalankan pada 2012. Jumlah analisis yang dibuat menunjukkan peningkatan.

## Analysis of Court Exhibits

*The analyses conducted on court exhibits are important to establishing disprove or support the hypotheses. Mathematical analyses and simulations of exhibits are carried out only in designated laboratories. It is very important to safe-guard court exhibits, for the whole chain of evidence, starting from the site of accident to the completion of the full report. Otherwise, the credibility of these exhibits will be questioned in a court of law. Table 3 shows the number of analyses and tests carried out in 2012 on exhibits. The total for the year shows an increase each year.*

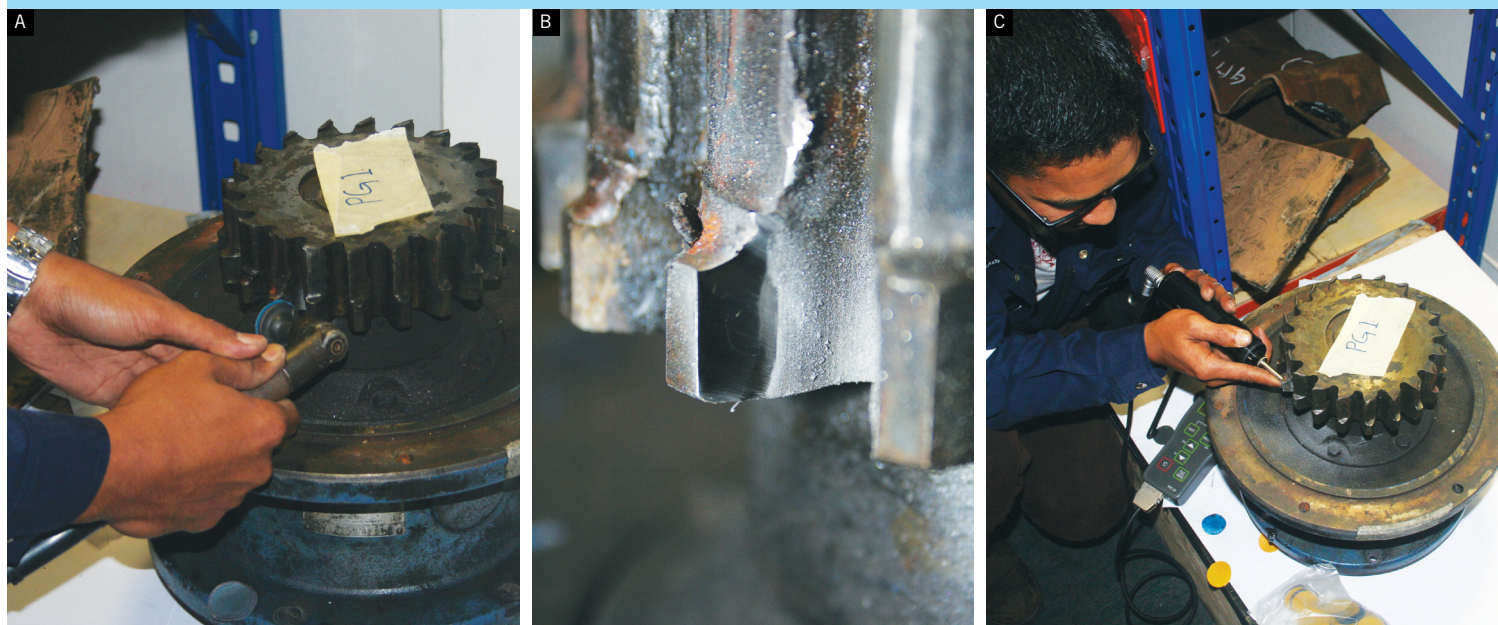
Jadual 3: Bilangan penganalisisan dan ujian yang dijalankan pada tahun 2012.

Table 3: Number of analyses and tests carried out in 2012.

Tahun   Year	Ujian dan Analisis Barang Bukti   Tests and Analyses on Court Exhibits
2012	10
2011	4
2010	6
2009	5
2008	9
2007	2

Gambar 3: Penyediaan dan ujian barang kes yang dilakukan. a) Barang kes dicanai dan digilap. b) Bahagian barang kes yang telah siap dicanai dan digilap. c) Ujian kekerasan untuk mendapatkan kepastian sifat kekerasan barang kes.

Photo 3: Preparations and tests on exhibits. a) Part of a exhibit is grind and polished. b) Part of the exhibit that has been grind and polished. c) Hardness test to confirm the hardness of a court exhibit.



## Aktiviti Promosi

Hasil penyiasatan BKF sejak dari awal penubuhannya telah dikongsi dengan orang awam ketika aktiviti promosi. Kebanyakan aktiviti promosi BKF dijalankan dengan kerjasama Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKPP). Aktiviti promosi dijalankan melalui pameran dan penerbitan Safety Alert serta risalah teknikal. Safety Alert yang berkisar tentang kes kemalangan yang berlaku turut dipaparkan dalam laman sesawang JKKP (<http://www.dosh.gov.my/doshV2/>). Ia bertujuan memberikan informasi awal berkenaan kes kemalangan, mengutarakan perkara berkaitan dan cadangan untuk mengelak kemalangan sama daripada berulang. Jadual 4 menunjukkan bilangan *Safety Alert* yang diterbitkan dalam laman sesawang JKKP.

**Jadual 4: Bilangan *Safety Alert* yang diterbitkan dalam laman sesawang JKKP.**

**Table 4: The number of safety alerts published in the DOSH website.**

Tahun   Year	Safety Alert
2012	10
2011	15
2010	15
2009	11
2008	4
2007	-

## Lawatan Teknikal

Lawatan teknikal merupakan salah satu aktiviti tahunan Bahagian Kejuruteraan Forensik. Melalui lawatan teknikal tersebut pegawai dapat mempelajari teknologi kejuruteraan terkini sejajar dengan pembangunan ekonomi Malaysia yang pesat. Pegawai juga dapat menyaksikan secara langsung pelaksanaan sesuatu projek kejuruteraan selain mempelajari asas reka bentuk dan batasan yang sangat berguna semasa penyiasatan kelak. Selain projek itu sendiri, pegawai juga dapat mempelajari pelbagai alat terbaru yang digunakan dalam projek pembinaan tersebut.

Lawatan teknikal yang dilakukan sepanjang tahun 2012 adalah:

1. Projek LEKAS di Sungai Udang, Melaka.
2. IHI Co. Ltd. Jepun.
3. Waiko Engineering Works Sdn Bhd di Selangor dan Perak.
4. Projek Saluran Air Mentah dari Pahang ke Selangor.
5. Projek Landasan Berkembar Elektrik di Perak.

## Promotional Activities

*The results of investigations carried out by FED since its inception were shared with the public during promotional activities. The National Council of Occupational Health and Safety (NCOHS) was the co-host in the majorities of these promotional activities which include exhibitions and the publication of Safety Alert and other articles of a technical nature. The contents of Safety Alert, which are about accidents that have occurred, can also be read in the DOSH website (<http://www.dosh.gov.my/doshV2/>). The objective of the publication is to provide early information on accident cases, raise awareness for related matters, and suggest ways to prevent recurrence of the accidents. Table 4 shows the number of Safety Alerts published on the DOSH website.*

## Technical Visits

*Technical visits are some of the activities carried out by the Forensic Engineering Division every year. These visits provide the opportunities for the Department's officers to learn the latest engineering technologies to keep pace with the fast growing Malaysian economy. The officers were able to witness firsthand the execution of an engineering project besides learning the design basics and the limitations, knowledge that will come in handy when they carry out investigations in the future. Besides the project itself, the officers were able to familiarise themselves with the latest equipment that are used in the project.*

*Technical visits throughout 2012 were:*

1. LEKAS project in Sungai Udang, Malacca.
2. IHI Co. Ltd. Japan.
3. Waiko Engineering Works Sdn Bhd in Selangor and Perak.
4. Pahang-Selangor Raw Water Transfer project.
5. Electrified Double Track project in Perak.





Gambar 4: Lawatan teknikal di projek LEKAS, Sungai Udang Melaka.  
*Photo 4: Technical visit to LEKAS project, Sungai Udang, Melaka.*



Gambar 5: Pembentangan teknik penyiasatan tripod beta oleh Petronas Melaka kepada pegawai JKKP Melaka dan pegawai BKF.  
*Photo 5: Presentation on tripod beta investigation technique by Petronas Melaka to officers of the DOSH Melaka, and officers of FED.*



Gambar 6: Lawatan teknikal ke projek Landasan Berkembar Elektrik di Perak. Lawatan ini disertai oleh pegawai dari pejabat JKKP Perak, diketuai oleh Tmbalan Pengarah Negeri Perak.  
*Photo 6: Technical visit to Electrified Double Track Project in Perak. The entourage was headed by the Assistant Director of DOSH, Perak.*



## Pembangunan Modal Insan

Penyiasatan Bahagian Kejuruteraan Forensik memerlukan pengetahuan yang meluas dalam pelbagai bidang. Untuk memastikan pegawai dilengkapi ilmu pengetahuan dan teknologi yang terkini, latihan dalaman dan luaran diberikan kepada pegawai BKF. Latihan dan kursus tersebut dijalankan sama ada oleh pegawai JKPP sendiri atau agensi luar yang dilantik seperti pusat latihan swasta atau universiti tempatan. Antara kursus teknikal yang dihadiri oleh pegawai BKF adalah seperti yang berikut:

1. Kursus pendakwaan.
2. Ceramah teknikal *Soft Soil Foundation & Pavement Solution*.
3. Ceramah teknikal *Digital Imaging Procedure*.
4. Latihan penggunaan peralatan makmal BKF.
5. Kursus tripod beta.
6. Kursus *Learning From Expert: Forensic Engineering Failure Cases*.

Pegawai BKF juga berkongsi pengetahuan dan pengalaman yang diperoleh semasa penyiasatan bersama pegawai JKPP negeri melalui khidmat nasihat. Antara perkongsian pengetahuan yang dilakukan adalah ceramah berkaitan kemalangan yang melibatkan silinder LPG, teknik lakaran menggunakan perisian komputer, dan penyediaan kertas siasatan. Selain itu, pegawai BKF juga menjadi saksi pakar di mahkamah.

## Human Capital Development

*Wide-ranging knowledge in diverse fields is needed by the Forensic Engineering Division to carry out investigations. FED officers are trained in-house and by outside entities to equip them with the latest knowledge and technologies. These training and courses are conducted by officers of the DOSH itself or by outside agencies such as private training centres or local universities. Among the technical courses attended by the FED officers in 2012 were:*

1. *Prosecution course.*
2. *Technical lecture on Soft Soil Foundation and Pavement Solution.*
3. *Technical lecture on Digital Imaging Procedures.*
4. *FED laboratory equipment training.*
5. *Tripod beta course.*
6. *Learning from the expert courses on Forensic Engineering Failure Cases.*

*FED officers also shared knowledge and experience accumulated from past investigations with DOSH state officers through the advisory service. Among the fields of knowledge shared are knowledge on accidents involving liquefied petroleum gas containers, techniques of drawing using computer software, and the preparation of investigation papers. Besides these, the FED officers also attended court proceedings as expert witnesses.*



Gambar 7: Kegagalan lesu yang dikesan pada mekanisma pinan pada sebuah lif orang di Selangor.  
*Photo 7: Failure caused by metal fatigue detected at the pinion mechanism of a manlift in Selangor.*



Gambar 8: Penutup longkang air ribut yang telah terbuka semasa letupan dan kebakaran di sebuah loji penapisan minyak.  
*Photo 8: A storm water drain cover blown off by an explosion and fire in an oil refinery.*





Gambar 9: Pegawai BKF membuat penyiasatan di tapak kemalangan kren menara di Selangor.

*Photo 9: The FED officers conducting investigations at a tower crane accident site in Selangor.*



Gambar 10: Kren bergerak yang mengalami kegagalan di bahagian struktur joran, di sebuah tapak pembinaan di Kedah.

*Photo 10: A mobile crane with failure at its boom structure, at a construction site in Kedah.*



Gambar 11: Pegawai BKF sedang mendengar penerangan mengenai kecacatan yang biasanya berlaku pada sesebuah silinder.

*Photo 11: The FED officers being briefed on normally occurring defects in a cylinder.*



Gambar 12: Pegawai BKF membuat perbincangan tentang punca kemalangan tapak sebuah silo di Pulau Pinang.

*Photo 12: The FED officers discussing the cause of accident involving foundation of a silo in Pulau Pinang.*



# Bahagian Kesihatan Pekerjaan *Occupational Health Division*





## Bahagian Kesihatan Pekerjaan

### *Occupational Health Division*

Bahagian Kesihatan Pekerjaan terdiri daripada pegawai perubatan, ketua jururawat, inspektor kesihatan dan jururawat. Bahagian ini mempunyai dua seksyen, iaitu Seksyen Perubatan Pekerjaan dan Seksyen Pengiktirafan di Ibu Pejabat.

#### Objektif Bahagian

Objektif utama Bahagian ini adalah untuk menguatkuasakan kehendak perundangan berkaitan kesihatan pekerjaan serta menggalakkan pengamalan promosi dan perlindungan kesihatan di setiap tempat kerja.

#### Nama Seksyen dan Unit

Bahagian Kesihatan Pekerjaan terbahagi kepada dua seksyen, iaitu:

- i. Seksyen Perubatan Pekerjaan, dan
- ii. Seksyen Pengiktirafan.

#### Fungsi Setiap Seksyen

Seksyen Perubatan Pekerjaan

- a) Memantau notifikasi penyakit dan keracunan pekerjaan yang dilaporkan dan membantu penyiasatan penyakit dan keracunan pekerjaan di setiap negeri.
- b) Memantau aktiviti penyiasatan penyakit pekerjaan oleh pejabat negeri.
- c) Menjalankan penyiasatan penyakit khidmat untuk pampasan *ex-gratia* kakitangan kerajaan dengan kerjasama Kementerian Kewangan Malaysia dan Polis Diraja Malaysia.
- d) Menganalisis data penyakit dan keracunan pekerjaan yang dilaporkan dan menyediakan laporan kejadian penyakit dan keracunan pekerjaan.
- e) Memberikan khidmat nasihat kepada pejabat negeri, agensi luar, pengamal kesihatan, dan orang ramai berkaitan isu kesihatan pekerjaan.
- f) Memberikan input dalam isu kesihatan pekerjaan kepada jabatan atau kementerian lain.
- g) Memantau pelaksanaan Koda Amalan HIV/AIDS serta Dadah, Alkohol, dan Bahan di tempat kerja.
- h) Menjalankan Program Kesihatan Pekerjaan Asas (BOH), terutamanya dalam sektor industri kecil dan sederhana.
- i) Menjalankan Program Saringan Kesihatan (MyHess) bagi kakitangan Jabatan Keselamatan dan Kesihatan Pekerjaan.

*The Occupational Health Division is made up of doctors, head nurses, health inspectors, and nurses. This division consists of two sections, namely, the Occupational Medical Section and the Accreditation Section at the headquarters level.*

#### Objectives of the Division:

*The main objectives of this division are to enforce occupational health-related legal requirements and to encourage the adoption of health promotion and health protection in all workplaces.*

#### Sections under the Division

*Occupational Health Division comprises of two sections, namely:*

- i. Occupational Medical Section, and*
- ii. Accreditation Section.*

#### Functions of Each Section

*Occupational Medical Section*

- a) Monitoring notifications of occupational diseases and poisonings that have been reported and assist in the investigations of diseases and poisonings in the states.*
- b) Monitoring the investigations of occupational diseases in the states.*
- c) Conducting investigations on occupational diseases for ex-gratia compensation of government employees in collaboration with the Ministry of Finance and the Royal Malaysian Police.*
- d) Analysing the data of occupational diseases and poisonings that have been reported and compiling reports of the occupational diseases and poisonings.*
- e) Providing advice to state officials, outside agencies, health practitioners, and the public on issues pertaining to occupational health.*
- f) Providing input on occupational health issues to various departments and ministries.*
- g) Monitoring the implementation of the Code of Practice for HIV/AIDS as well as for drugs, alcohol, and substances in the workplace.*
- h) Conducting Basic Occupational Health Programme (BOH), mainly in small and medium industries.*
- i) Conducting Health Screening Programme (MyHess) for the Department of Occupational Safety and Health staffs.*

## Seksyen Pengiktirafan

- Mendaftar dan memperbaharui sijil Doktor Kesihatan Pekerjaan di bawah Peraturan Penggunaan dan Standard Bahan Kimia Berbahaya kepada Kesihatan 2000 (USECHH 2000).
- Memantau aktiviti pengawasan kesihatan atau perubatan oleh Doktor Kesihatan Pekerjaan yang berdaftar dengan Jabatan.
- Merancang seminar, kursus, atau dialog bagi mempromosi kesedaran kesihatan pekerjaan.
- Menganjurkan Program Pertolongan Cemas di tempat kerja bagi kakitangan Jabatan Keselamatan dan Kesihatan Pekerjaan.

## Accreditation Section

- Registering and renewing certificates of Occupational Health Doctors under the Regulations of the Use and Standards of Chemicals Hazardous to Health 2000 (USECHH 2000).*
- Monitoring health and medical surveillance activities of the Occupational Health Doctors registered with the Department.*
- Planning seminars, courses or dialogues to promote occupational health awareness.*
- Organizing First Aid Programme at the workplace for the staffs of the Department of Occupational Safety dan Health.*

**Jadual 1: Pencapaian Bahagian Kesihatan Pekerjaan pada tahun 2012.**

**Table 1: Achievements of the Occupational Health Division in 2012.**

Bil.   No.	Aktiviti   Activity	Pencapaian   Achievement
1.	Pendaftaran Doktor Kesihatan Pekerjaan Baharu <i>New registration of Occupational Health Doctor</i>	49
2.	Pembaharuan Pendaftaran Doktor Kesihatan Pekerjaan <i>Renewal of registration for Occupational Health Doctors</i>	131
3.	Pemantauan Orang Yang Kompeten (Doktor Kesihatan Pekerjaan) <i>Monitoring of Competent Person (Occupational Health Doctor)</i>	63
4.	Seminar Kesedaran Kesihatan Pekerjaan <i>Seminar on Occupational Health Awareness</i>	2
5.	Pemantauan Seksyen Kesihatan Pekerjaan di pejabat negeri <i>Monitoring of the Occupational Health Section in state offices</i>	7
6.	Menilai laporan bulanan penyakit dan keracunan pekerjaan <i>Evaluation of occupational diseases and poisoning monthly report</i>	12
7.	Menilai laporan bulanan Bahagian Kesihatan Pekerjaan <i>Evaluation of Occupational Health Section monthly report</i>	12
	Menilai laporan bulanan pengawasan perubatan (USECHH) <i>Evaluation of medical surveillance monthly report (USECHH)</i>	12
8.	Menganalisis borang pengawasan perubatan (USECHH) <i>Analysis on medical surveillance form (USECHH)</i>	1303
9.	Menilai laporan suku tahun Pelaksanaan Koda Amalan HIV/AIDS <i>Evaluation of the implementation of the Code of Practice on HIV/AIDS quarterly report</i>	4
10.	Menilai laporan suku tahun Pelaksanaan Koda Amalan Dadah, Alkohol dan Bahan <i>Evaluation of the implementation of the Code of Practice on Drugs, Alcohol, and Substance at the workplace quarterly report</i>	4
11.	Siasatan Permohonan Penyakit Khidmat (Ex-Gratia) <i>Investigation of Application of Service Diseases (Ex-gratia)</i>	10
12.	Siasatan penyakit dan keracunan pekerjaan bersama pejabat negeri <i>Investigation of occupational diseases and poisonings with state offices</i>	130
13.	Ceramah Kesedaran Kesihatan Pekerjaan <i>Talks on occupational health awareness</i>	24
14.	Persidangan Kesihatan Pekerjaan <i>Occupational Health Conference</i>	3
15.	Kursus Pertolongan Cemas di Tempat Kerja <i>First Aid Courses at Workplace</i>	2

Bil.   No.	Aktiviti   Activity	Pencapaian   Achievement
16.	Program Pemeriksaan Kesihatan Asas (MyHess) <i>Basic Health Examination Programme (MyHess)</i>	313
	Menilai laporan separuh tahun Program Pemeriksaan Kesihatan Asas (MyHess) <i>Evaluation of mid-term report on Basic Health Examination Programme (MyHess)</i>	2
17.	Mengaudit Program Kesihatan Pekerja Asas dalam industri kecil dan sederhana <i>Auditing of Basic Occupational Health Programme in small and medium industries</i>	4
18.	Menilai laporan suku tahun Program Kesihatan Pekerja Asas dalam industri kecil dan sederhana <i>Evaluation of Basic Occupational Health Programme, in small and medium industries, quarterly report</i>	4
19.	Latihan panduan pelaksanaan perkhidmatan kesihatan pekerja <i>Training on the guides to implement occupational health services</i>	1

## Siasatan Penyakit dan Keracunan Pekerja

Pada tahun 2012, sebanyak 1792 kes penyakit dan keracunan pekerja telah dilaporkan ke Bahagian Kesihatan Pekerja berbanding dengan 1198 kes yang dilaporkan pada tahun sebelumnya. Ini menunjukkan peningkatan kes dilaporkan sebanyak 33% dan ini mungkin disebabkan oleh meningkatnya kesedaran dalam kalangan pekerja atau majikan untuk melaporkan penyakit dan keracunan pekerja kepada pegawai perubatan. Selain itu, kemungkinan juga meningkatnya kesedaran dalam kalangan pegawai perubatan, khususnya doktor kesihatan pekerja dalam melaporkan penyakit dan keracunan pekerja kepada Jabatan. Tiga negeri yang mencatatkan laporan penyakit dan keracunan pekerja tertinggi pada tahun 2012 adalah Pulau Pinang (541 kes), Kedah (318 kes), dan Selangor (138 kes). Sebanyak 1338 kes berjaya disiasat untuk menjalankan penambahbaikan ke tempat kerja dari aspek kesihatan pekerja. Peningkatan kes yang berjaya disiasat ini disebabkan oleh peningkatan bilangan pegawai dalam Seksyen Kesihatan Pekerja di pejabat negeri dan Ibu Pejabat.

Kes hilang pendengaran akibat bunyi bising masih menjadi penyakit pekerja utama yang direkodkan pada tahun 2012 berbanding penyakit lain dengan jumlah kes disiasat sebanyak 956 kes (71%). Ini diikuti dengan penyakit paru-paru akibat pekerja, iaitu sebanyak 111 kes (8%), dan penyakit kulit akibat pekerja, iaitu sebanyak 95 kes (4%), telah disiasat sepanjang tahun 2012. Penyakit pekerja yang paling sedikit dilaporkan adalah penyakit pekerja disebabkan agen fizikal dan penyakit kanser disebabkan pekerja dengan masing-masing hanya satu kes (0.1%).

Pecahan penyakit dan keracunan pekerja mengikut sektor pula menunjukkan bahawa sektor pengilangan masih mencatatkan bilangan kes penyakit dan keracunan pekerja disiasat paling tinggi bagi tahun 2012, iaitu sebanyak 933 kes (70%). Ini diikuti oleh sektor perkhidmatan awam, sebanyak 153 kes (11%) dan sektor kemudahan, sebanyak 104 kes (8%).

## Investigations on Occupational Diseases and Poisonings

*In 2012, a total of 1792 cases of occupational diseases and poisonings were reported to the Occupational Health Division, compared to 1426 cases in the previous year. The figures showed an increasing trend in the number of reports and the increase might be due to an increase of awareness among the workers or employers to report cases of diseases and poisonings to medical officers. Apart from this, there could also be an increase of awareness among the medical officers, particularly the Occupational Health Doctors, in reporting occupational diseases and poisonings to the Department. The top three states with the highest number of occupational diseases and poisonings cases in 2011 were Pulau Pinang (541 cases), Kedah (318 cases), and Selangor (138 cases). A total of 1338 cases were successfully investigated to enhance the workplace in terms of occupational health. This increase cases investigated is due to the increased number of officers in the Section of Occupational Health at state offices as well as at the headquarters.*

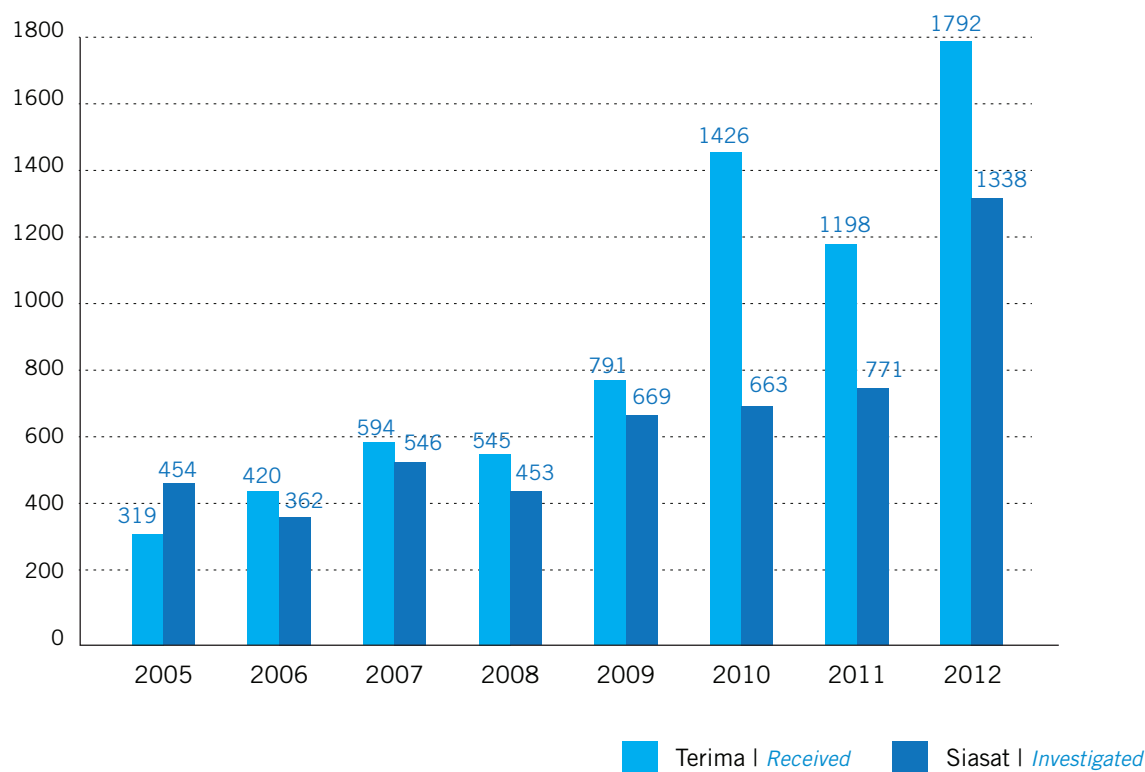
*Noise-induced hearing loss was still the main occupational disease reported in 2012 with a total of 956 cases investigated (71%). This was followed by occupational lung diseases with 111 cases (11.6%) and occupational skin diseases with 95 cases (9.9%). Occupational diseases caused by physical agents and cancer diseases caused by occupation were the least reported with one case (0.1%) reported in each category.*

*The breakdown of occupational diseases and poisonings by sector shows that manufacturing was still the sector with the highest number of cases in 2012 with 933 cases (70%) investigated. This was followed by the public service sector with 153 cases (11%) and facility sector with 104 cases (8.0%).*



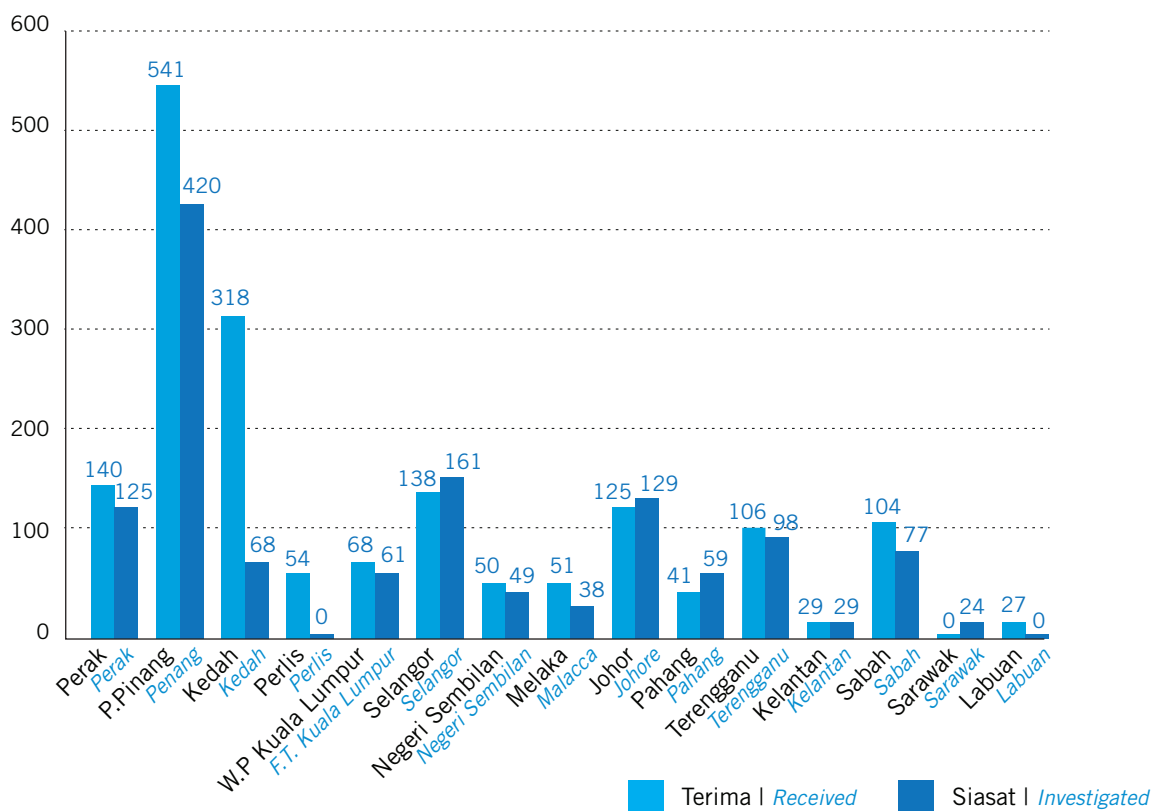
Rajah 1: Perbandingan kes yang diterima dengan yang disiasat dari tahun 2005 hingga 2012.

Figure 1: Comparison of cases received and investigated from 2005 to 2011.



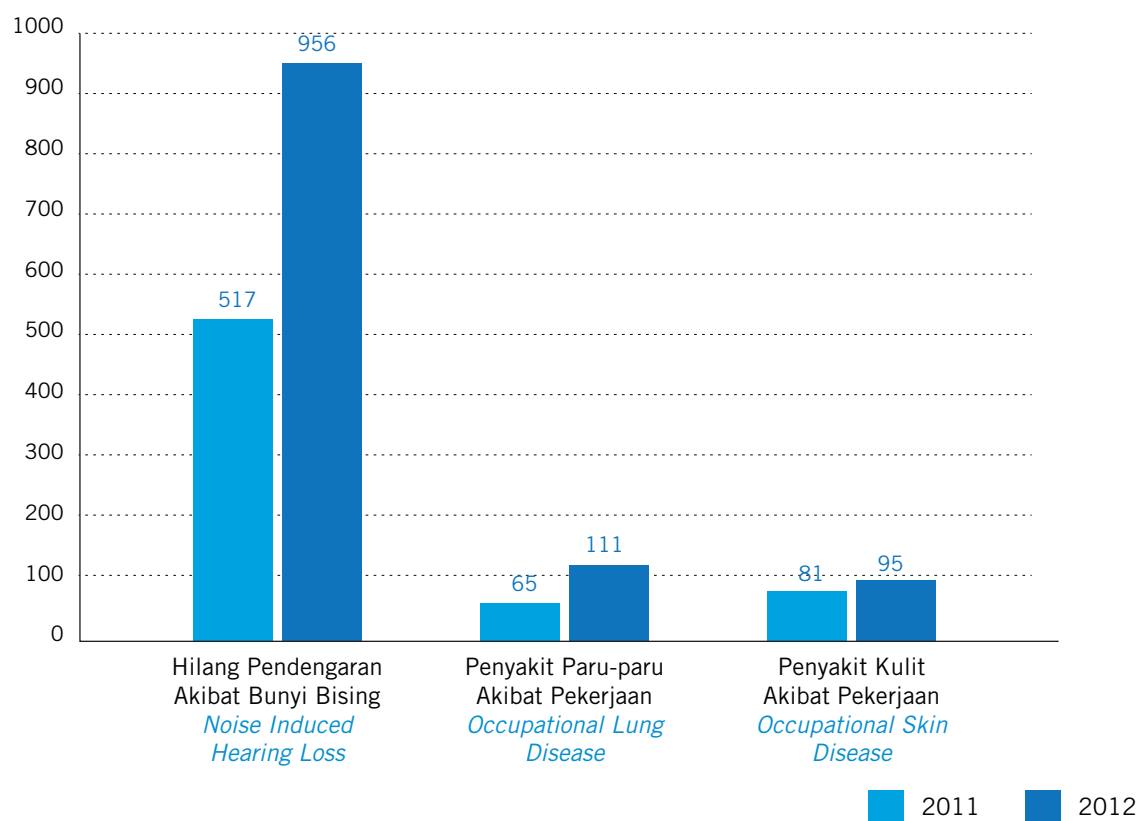
Rajah 2: Perbandingan bilangan kes penyakit dengan keracunan pekerjaan mengikut negeri untuk tahun 2012.

Figure 2: Comparison of the number of cases of occupational disease and poisoning by state in 2012.



Rajah 3: Jumlah kes penyakit pekerjaan utama bagi tahun 2012.

Figure 3: Number of cases of primary occupational diseases in 2012.



Jadual 2: Kes penyakit dan keracunan pekerjaan yang dilaporkan bagi tahun 2012.

Table 2: Cases of occupational disease and poisoning investigated in 2012.

Diagnosis   <i>Diagnosis</i>	Jumlah   <i>Total</i>
Penyakit paru-paru pekerjaan   <i>Occupational lung disease</i>	115
Penyakit kulit pekerjaan   <i>Occupational skin disease</i>	40
Hilang pendengaran akibat bunyi bising di tempat kerja   <i>Noise-induced hearing loss at workplace</i>	1395
Penyakit muskuloskeletal pekerjaan   <i>Occupational musculoskeletal disease</i>	82
Keracunan pekerjaan   <i>Occupational poisoning</i>	61
Penyakit pekerjaan akibat agen fizikal   <i>Occupational disease caused by physical agents</i>	4
Penyakit pekerjaan akibat agen biologi   <i>Occupational disease caused by biological agents</i>	28
Penyakit kanser pekerjaan   <i>Occupational cancer disease</i>	1
Penyakit psikososial pekerjaan   <i>Occupational psychosocial disease</i>	1
Penyakit pekerjaan lain   <i>Other occupational disease</i>	15
Bukan penyakit pekerjaan   <i>Non-occupational disease</i>	50
<b>Jumlah   <i>Total</i></b>	<b>1792</b>

## Pendaftaran Baru Dan Pembaharuan Sijil Doktor Kesihatan Pekerjaan

Pendaftaran baru dan pembaharuan sijil Doktor Kesihatan Pekerjaan merupakan salah satu daripada aktiviti utama di bawah pengurusan Bahagian Kesihatan Pekerjaan. Ia sejajar dengan kehendak Peraturan dan Standard Pendedahan Bahan Kimia Berbahaya kepada Kesihatan 2000 (USECHH 2000) Peraturan ini menyatakan bahawa pengawasan perubatan hendaklah dijalankan oleh Doktor Kesihatan Pekerjaan yang berdaftar dengan JKKP dan mempunyai sijil yang sah tempohnya. Di bawah peraturan ini juga, pengawasan perubatan hendaklah dijalankan oleh Doktor Kesihatan Pekerjaan untuk melindungi pekerja yang terdedah atau mungkin terdedah kepada bahan kimia berbahaya kepada kesihatan.

Selain pengawasan perubatan, Doktor Kesihatan Pekerjaan juga bertanggungjawab menjalankan pengawasan kesihatan kepada pekerja yang bekerja di dalam ruang terkurung bagi memastikan tahap kesihatan pekerja terbabit dalam keadaan optimum dari segi fizikal dan mental. Pengawasan kesihatan bagi pekerja yang bekerja di dalam ruang terkurung terkandung dalam Tataamalan Industri Bekerja Selamat di dalam Ruang Terkurung 2010.

Senarai nama Doktor Kesihatan Pekerjaan yang berdaftar dengan Jabatan Keselamatan dan Kesihatan Pekerjaan dipaparkan dalam laman portal Jabatan ini. Bagi memudahkan proses pendaftaran baru dan juga pembaharuan sijil Doktor Kesihatan Pekerjaan, Bahagian Kesihatan Pekerjaan Ibu Pejabat telah memasukkan borang yang boleh dimuat turun melalui portal Jabatan yang bertujuan memudahkan dan mempercepat proses permohonan mereka. Bagi pembaharuan sijil Doktor Kesihatan Pekerjaan, pegawai perubatan terbabit perlu menghantar permohonan terbabit tiga bulan sebelum tamat tempoh sijil terbabit.

Sehingga akhir bulan Disember 2012, jumlah Doktor Kesihatan Pekerjaan yang berdaftar dengan JKKP adalah seramai 174 orang, iaitu bagi pendaftaran baharu seramai 44 orang dan bagi pembaharuan pendaftaran seramai 130 orang.

Jumlah Doktor Kesihatan Pekerjaan yang aktif berdaftar dengan JKKP adalah seramai 656 orang. Negeri Selangor mencatatkan bilangan Doktor Kesihatan Pekerjaan yang paling ramai, iaitu 145 orang diikuti oleh Sabah, iaitu 71 orang. Satu program dialog bersama Doktor Kesihatan Pekerjaan telah diadakan pada 30 hingga 31 Oktober 2012 bertempat di Pusat Konvensyen Antarabangsa Putrajaya untuk mengetahui masalah yang dihadapi oleh Doktor Kesihatan Pekerjaan semasa menjalankan pengawasan perubatan serta pelaporan penyakit atau keracunan pekerjaan. Selain itu, ia juga bertujuan menguar-uarkan kepada Doktor Kesihatan Pekerjaan tentang perkembangan terbaru dalam bidang kesihatan pekerjaan dan juga sistem permarkahan dalam Program Pendidikan Berterusan. Program tersebut juga bertujuan untuk berkongsi pendapat dan pengalaman diantara Doktor Kesihatan itu sendiri.

## New Registration and Certificate Renewal of Occupational Health Doctors

*New registration and certificates renewal are among the main activities of the Occupational Health Division. This is in conformance with the Regulation on the Use and Standards of Exposure to Chemicals Hazardous to Health 2000 (USECHH 2000) which stipulates that health surveillance has to be conducted by Occupational Health Doctors registered with the department and having valid certificates. In compliance with this regulation, medical surveillances are conducted by the Occupational Health Doctors to protect workers exposed to, or likely to be exposed to, chemicals hazardous to health.*

*Besides carrying out medical surveillance, Occupational Health Doctors are also responsible for monitoring the health of workers who work in confined spaces to ensure that they are optimally healthy in mind and in body. Health monitoring for workers in confined spaces falls within the scope of Industry Codes of Practice for Work Safety in a Confined Space 2010.*

*The list of Occupational Health Doctors registered with the Department of Occupational Safety and Health is displayed in the portal of the Department. To make new registration and renewal easy, the Occupational Health Division in the Head Office has included a form that can be downloaded from the portal, thus making the registration now a simple and speedy process. For renewal of registration, doctors are required to submit their application forms at least three months before the expiry of their current registration.*

*For the year ending 31 December 2012, Occupational Health Doctors registered with DOSH numbered 174 persons, 44 of them were new registrations and 130 were renewals.*

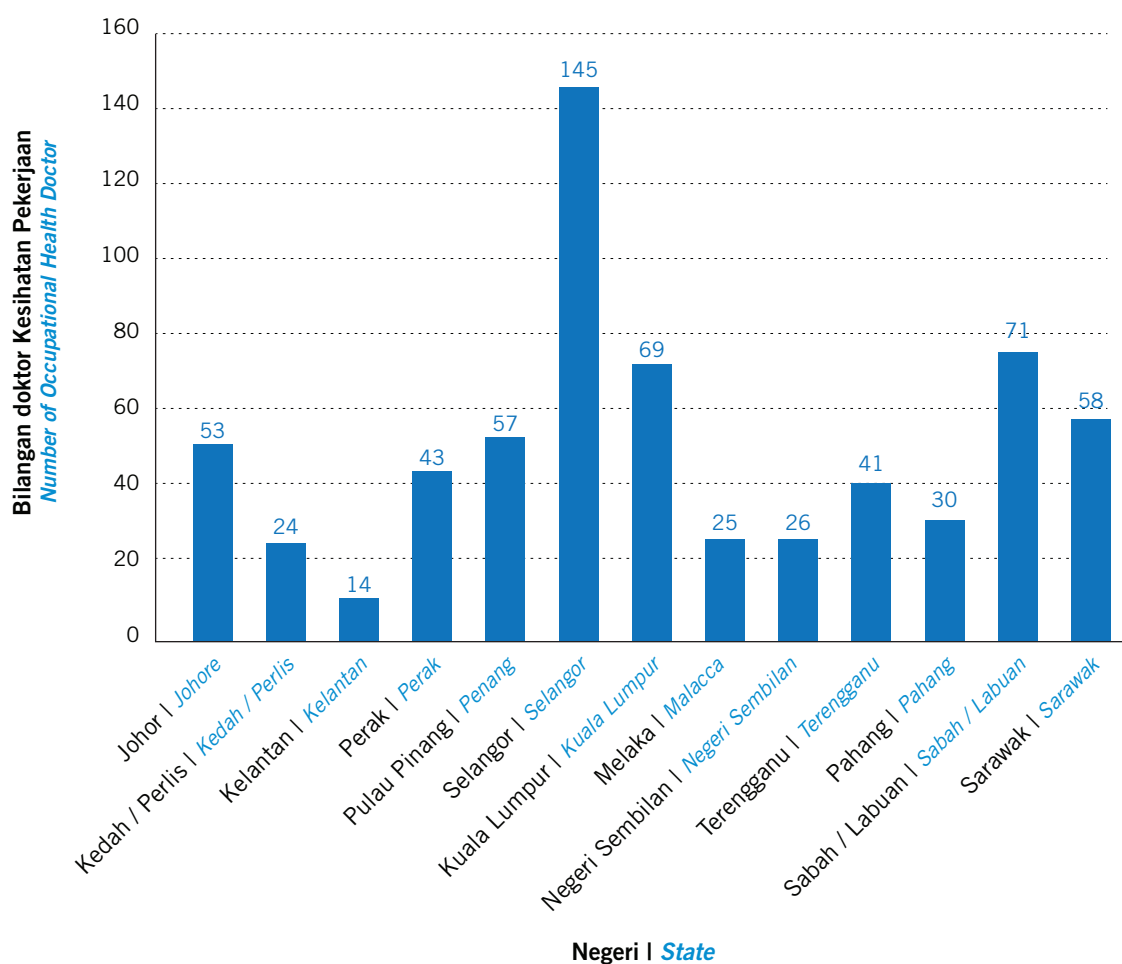
*At present, there are 656 active Occupational Health Doctors in the country. The state with the highest number of Occupational Health Doctors is Selangor with 145 doctors, followed by Sabah with 71 doctors. One dialogue sessions with Occupational Health Doctors were held on 30 – 31 October 2012 at the Putrajaya International Convention Centre. This dialogue session was aimed to evaluate problems faced by the doctors while doing medical surveillance and the reporting of occupational diseases and poisonings. In addition, this dialogue session was intended as a means of sharing with them the latest developments in the field of occupational health and the marking system in the Continuous Learning Programme. This programme was also intended to be a platform for the Occupational Health Doctors to share their opinions and experiences.*



Jadual 3: Jumlah Permohonan Pendaftaran Baru dan Permohonan Pembaharuan Sijil Doktor Kesihatan Pekerjaan bagi tahun 2012.  
Table 3: Number of applications for new registration and certificate renewal of Occupational Health Doctor in 2012.

Bil.   No.	Aktiviti   Activity	Bilangan Doktor Kesihatan Pekerjaan Number of Occupational Health Doctor
1	Pendaftaran baharu   <i>New registration</i>	44
2	Pembaharuan pendaftaran   <i>Certificate renewal</i>	130

Rajah 4: Jumlah kumulatif Doktor Kesihatan Pekerjaan yang masih berdaftar dengan JKPP mengikut negeri bagi tahun 2012.  
Figure 4: Cumulative total number of Occupational Health Doctors still registered with the DOSH by state in 2012.



## Program Pengawasan Perubatan

Malaysia sedang mengambil inisiatif yang besar untuk menjadi sebuah negara perindustrian menjelang tahun 2020 dan ini akan melibatkan penggunaan meluas bahan kimia dalam pelbagai sektor industri di Malaysia. Tujuan utama Program Pengawasan Perubatan adalah untuk mengenal pasti penyakit pekerjaan di peringkat awal yang pendedahan kepada bahan kimia terbabit boleh meningkatkan risiko kesan kesihatan yang buruk berkait dengan tugas yang dilakukan dan juga proses pencegahan dapat dilakukan dengan lebih awal dengan memindahkan pekerja terbabit ke tempat yang tiada pendedahan kepada bahan kimia terbabit.

Program Pengawasan Perubatan, sama ada disyorkan atau diperlukan, berdasarkan jenis kerja yang dilakukan, termasuk mengambil kira faktor seperti tempoh tugas, bahan yang digunakan, potensi kepada pendedahan dan juga kawalan kejuruteraan yang dilakukan.

Peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan dan Standard Pendedahan Bahan Kimia Berbahaya kepada Kesihatan) 2000 merupakan satu usaha untuk meningkatkan lagi penggunaan bahan kimia yang selamat dan sihat di tempat kerja. Di bawah peraturan ini, Program Pengawasan Perubatan ini dilakukan berdasarkan penilaian risiko pendedahan bahan kimia berbahaya kepada kesihatan seperti yang ditetapkan dalam peraturan tersebut. Program Pengawasan Perubatan yang dijalankan di bawah Peraturan Keselamatan dan Kesihatan Pekerjaan (Penggunaan dan Standard Pendedahan Bahan Kimia Berbahaya kepada Kesihatan) 2000 mesti dijalankan oleh Doktor Kesihatan Pekerjaan.

Garis panduan berkaitan Program Pengawasan Perubatan yang telah dihasilkan oleh Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia menerangkan berkaitan tugas Doktor Kesihatan Pekerjaan:

- Menjalankan pemeriksaan program pra-pekerjaan dan pra-penempatan (data perubatan asas) pekerja untuk menilai kecergasan untuk bekerja, dengan mengambil kira bahaya dan penilaian risiko di tempat kerja. Penggunaan Buku Rekod Pengawasan Perubatan disyorkan.
- Penentuan keupayaan untuk bekerja semasa memakai peralatan perlindungan diri.
- Mengekalkan rekod perubatan pekerja semasa bekerja (berkala) dan selepas tamat bekerja.
- Mendokumentasikan pendedahan pekerja kepada bahaya kesihatan di tempat kerja.
- Mentafsir dan menjelaskan hasil siasatan kepada pekerja dan majikan dan menentukan jika tindakan susulan adalah perlu.
- Menganalisis penyakit dan keracunan pekerjaan.
- Menyiasat punca penyakit pekerjaan/keracunan. Melawat tempat kerja dan mengesyorkan tindakan kawalan untuk tujuan program perlindungan perubatan.

## Medical Surveillance Programme

*Malaysia is taking a big initiative towards becoming an industrialised nation by the year 2020 and chemical substances will surely be used on an increasingly larger scale by various industrial sectors in Malaysia. The main objective of the Medical Surveillance Programme is to diagnose, at their early stages, occupational diseases which may be exacerbated by exposure to chemicals during work, and to initiate early preventive measures such as shifting workers to environments that are free from the harmful chemicals.*

*The Medical Surveillance Programme, either recommended or needed, depending on the type of work, includes taking into account factors such as duration of work, substances used, potential for exposure during work as well as the engineering controls that are being practised.*

*Occupational Safety and Health Regulations (Usage and Standards of Exposure of Chemical Hazardous to Health) 2000 is an endeavour to increase the workplace use of chemicals that are safe and harmless to health. Under these regulations, the Medical Surveillance Programme is conducted in accordance with risk assessment of exposure to chemicals hazardous to health as stipulated in the Regulations. The Medical Surveillance Programme that are being carried out under the Occupational Safety and Health Regulations (Usage and Standards of Exposure of Chemical Hazardous to Health) 2000 must be carried out by Occupational Health Doctors.*

*Guidelines relating to the Medical Surveillance Programme prepared by the Department of Occupational Safety and Health of Malaysia explain the duties of Occupational Health Doctors as follows:*

- *Conducting pre-employment and pre-posting medical examinations of workers (basic medical data) to evaluate their fitness for work by taking into consideration the danger that they will be exposed to and evaluating risks in their workplace. The use of the Book of Medical Surveillance Records is recommended.*
- *Determining workers' capacity for work when donning personal protective equipment.*
- *Maintaining medical records of workers during their term of employment (regular records) and after their have stopped working.*
- *Documenting exposure of workers to health hazards in the workplace.*
- *Interpreting and explaining the results of investigation to the workers and the employers and deciding whether follow-up actions are necessary.*
- *Analysing occupational diseases and poisonings.*
- *Investigating causes of occupational diseases/poisonings; visiting workplaces and recommending control measures for medical protection programme purposes.*

- Memaklumkan penyakit pekerjaan dan keracunan kepada Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP) dan majikan.
- Membantu dalam pelaksanaan program kesihatan pekerjaan di tempat kerja.
- Membantu dalam pengurusan penyakit pekerjaan dan keracunan termasuk Program Perlindungan Perubatan, rawatan, pemulihan, penilaian ketidakupayaan, program kembali untuk bekerja dan atau pampasan.
- Menyediakan latihan dalam kesihatan pekerjaan untuk majikan dan pekerja.
- Membantu dalam audit atau penilaian Program Kesihatan Pekerjaan di tempat kerja.

Bagi tahun 2012, Bahagian Kesihatan Pekerjaan menerima sebanyak 1164 Laporan Pengawasan Perubatan daripada Doktor Kesihatan Pekerjaan dari seluruh negara yang melibatkan pemeriksaan kesihatan terhadap pekerja yang terdedah kepada bahan kimia di tempat kerja. Daripada laporan yang diterima, sejumlah 21,027 orang pekerja telah menjalani pemeriksaan kesihatan yang ditetapkan oleh Doktor Kesihatan Pekerjaan terbabit. Merujuk Jadual 1, terdapat peningkatan pelaporan berbanding dengan tahun 2010 dan 2011, iaitu peningkatan sebanyak 15.2% daripada tahun 2011. Sektor pertanian dan juga sektor pembuatan merupakan penyumbang utama. Bahan kimia yang sering digunakan dalam sektor pertanian adalah organofosfat dan juga paraquat manakala dalam sektor pembuatan, bahan kimia yang sering digunakan adalah n-heksan, benzena, plumbum, dan toluena.

- Reporting occupational diseases and poisonings to the Department of Occupational Safety and Health and to the employers.
- Assisting in the implementation of occupational health programmes in the workplace.
- Assisting in the management of occupational diseases and poisonings, including Medical Protection Programme, visits, rehabilitation, evaluating incapacity, back-to-work programmes and/or compensations.
- Providing training in occupational health to both employers and workers.
- Assisting in the audit or assessment of the Occupational Diseases Programme in the workplace.

*In 2012, the Occupational Health Division received a total of 1164 medical surveillance reports from Occupational Health Doctors after they had examined workers exposed to chemicals in the workplace. From these reports, 21,027 workers underwent medical examinations, as prescribed by the Occupational Health Doctors concerned. Table 1 shows that there was more reporting compared to 2010 and 2011, a 15% rise over 2011. The agriculture sector as well as the medical sector were the greatest contributors to this programme. Chemicals that were most frequently used in the agriculture sector were organophosphate and paraquat whereas in the medical sector, the most frequently used chemicals were n-hexane, benzene, lead, and toluene.*

**Jadual 5: Jumlah Laporan Program Pengawasan Perubatan yang diterima oleh Bahagian Kesihatan Pekerjaan mengikut tahun.**  
**Table 5: Number of Medical Surveillance Programme Reports received by the Occupational Health Division.**

Bil.   No.	Tahun   Year	Bilangan Laporan Yang Telah Diterima Number of reports received
1.	2010	786
2.	2011	987
3.	2012	1303



Walau bagaimanapun, masih ada Doktor Kesihatan Pekerjaan yang menjalankan program ini tanpa melaporkan hasil pemeriksaan kesihatan yang melibatkan pengawasan perubatan kepada Jabatan. Bahagian Kesihatan Pekerjaan sering menjalankan pemantauan berkala terhadap aktiviti Doktor Kesihatan Pekerjaan di seluruh negara bagi memastikan pekerja yang terdedah kepada bahan kimia mendapat manfaat daripada Program Pengawasan Perubatan ini.

Pekerja yang mempunyai keputusan abnormal hasil daripada pemeriksaan kesihatan akan dipindahkan ke tempat kerja yang baharu yang tidak lagi mendedahkan pekerja tersebut kepada bahan kimia terbabit sehinggalah pekerja tersebut menjalani pemeriksaan kesihatan ulangan dan dibenarkan untuk bekerja semula oleh Doktor Kesihatan Pekerjaan. Semua keputusan abnormal hasil daripada Program Pengawasan Perubatan ini mestilah dilaporkan kepada Jabatan Keselamatan dan Kesihatan Pekerjaan bagi membolehkan penambahbaikan tempat kerja dilakukan di peringkat awal.

## Pelaksanaan Program Kesihatan Pekerjaan Asas dalam Industri Kecil dan Sederhana

Program Asas Kesihatan Pekerjaan bertujuan mengenal pasti masalah penyakit atau keracunan pekerjaan dalam kalangan pekerja yang belum pernah melalui pemantauan perubatan atau pemeriksaan kesihatan asas, terutamanya dalam industri kecil dan sederhana bagi membolehkan cadangan langkah pencegahan awal dan pengawalan di tempat kerja diberikan kepada pihak majikan dengan tujuan yang berikut:

- Mengetahui masalah penyakit dan keracunan pekerjaan dalam kalangan pekerja industri kecil dan sederhana.
- Mengurangkan kejadian penyakit dan keracunan pekerjaan di negara ini.
- Memberikan nasihat kepada pihak majikan bagi melindungi kesihatan golongan pekerja.
- Memberikan cadangan bagi membolehkan majikan melakukan pencegahan dan pengawalan pada kadar yang boleh diamalkan (ALARP).
- Meningkatkan tahap kesedaran golongan pekerja dan majikan tentang penyakit dan keracunan pekerjaan serta perundangan yang berkaitan.

Antara kaedah pendekatan yang digunakan bagi melaksanakan program ini adalah:

- Mengajukan Kerjasama dengan Program Payung di bawah Seksyen Industri Kecil dan Sederhana di pejabat negeri.
- Menjalankan program bimbingan dan teknikal untuk mengajar tentang kesihatan pekerjaan.
- Menjalankan pemeriksaan kesihatan asas ke atas golongan pekerja bagi mengenal pasti penyakit dan keracunan pekerjaan.

*Nevertheless, there were Occupational Health Doctors who conducted the programme without reporting the results of surveillance-related medical examinations to the Department. The Occupational Health Division regularly monitored the activities of the Occupational Health Doctors in the whole country to ensure that workers exposed to chemicals received benefits from the Medical Surveillance Programme.*

*Workers whose medical examinations showed abnormalities would be moved to a new workplace (Medical Removal Protection) where they would not be exposed to the chemicals concerned until a repeat medical examination cleared them and they were allowed to go back to work by the Occupational Health Doctors. All abnormal results from the Medical Surveillance Programme must be reported to the Department of Occupational Safety and Health so that improvement to the workplace could be initiated at an early stage.*

## Implementation of Basic Occupational Health Services Programme at Small and Medium Enterprises (Basic Occupational Health Services)

*The Basic Occupational Health Programme is implemented to identify problems of occupational diseases or poisoning among workers who have not been through any basic health screening or basic medical check-ups, particularly in small and medium enterprises (SMEs). The programme recommends pre-emptive and control measures to employers with the following goals:*

- *Identify problems related to occupational diseases and poisoning among workers in small and medium industries.*
- *Reduce the incidence of occupational diseases and poisoning in this country.*
- *Provide advice to employers on the health protection of workers.*
- *Provide recommendations to enable employers to execute prevention and control at a rate that is practicable (ALARP).*
- *Increase the level of awareness of occupational poisoning and diseases and the relevant regulations among employers and employees.*

*Among the approaches used to implement this programme are:*

- *Cooperation with the Umbrella Programme under the Small and Medium Industries Section in state offices.*
- *Guidance and technical programmes with emphasis on imparting knowledge of occupational health.*
- *Carrying out basic health checks among the employees to identify occupational diseases and poisoning.*

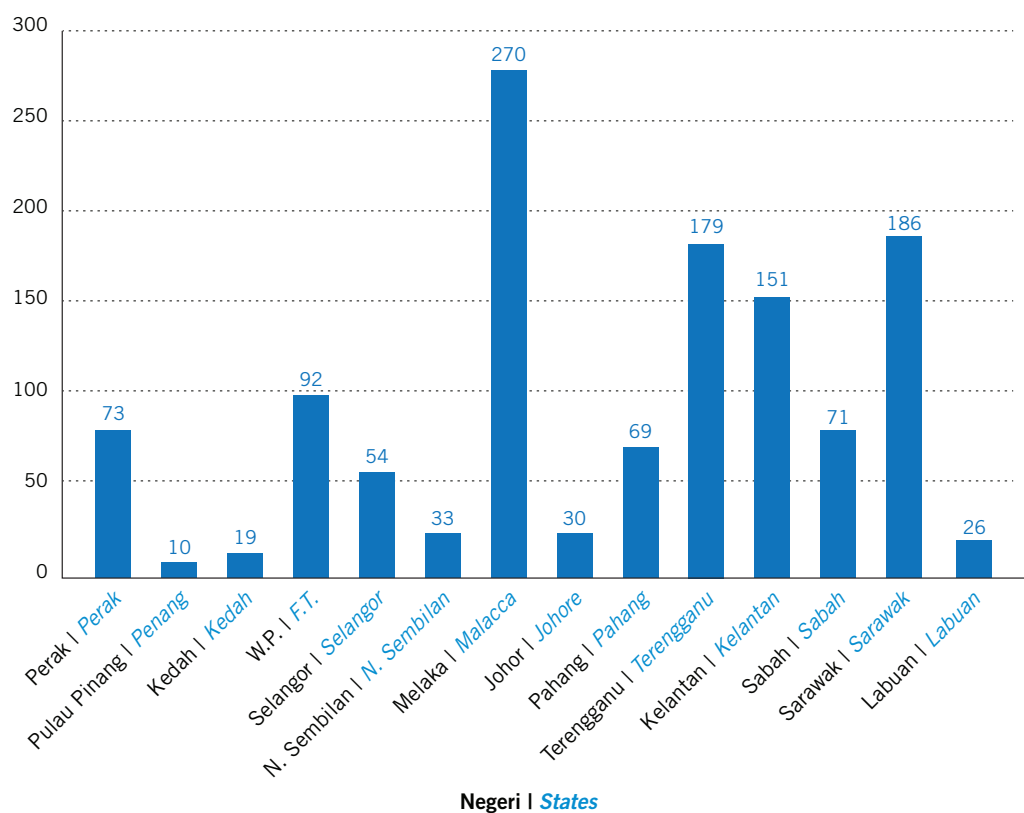
Jadual 6: Pelaksanaan Program Asas Kesihatan Pekerja mengikut negeri.

Table 6: Implementation of Occupational Health Basic Occupational Health Programme by state.

Bil.   No.	Negeri   State	Bilangan Pekerja Yang Menjalani Program Asas Kesihatan Pekerja Number of workers participated in Occupational Health Basic Programme
1	Perak   <i>Perak</i>	73
2	Pulau Pinang   <i>Penang</i>	10
3	Kedah   <i>Kedah</i>	19
4	W.P. Kuala Lumpur   <i>F.T. Kuala Lumpur</i>	92
5	Selangor   <i>Selangor</i>	54
6	Negeri Sembilan   <i>Negeri Sembilan</i>	33
7	Melaka   <i>Malacca</i>	270
8	Johor   <i>Johore</i>	30
9	Pahang   <i>Pahang</i>	69
10	Terengganu   <i>Terengganu</i>	179
11	Kelantan   <i>Kelantan</i>	151
12	Sabah   <i>Sabah</i>	71
13	Sarawak   <i>Sarawak</i>	186
14	W.P. Labuan   <i>F.T. Labuan</i>	26
Jumlah   Total		1263

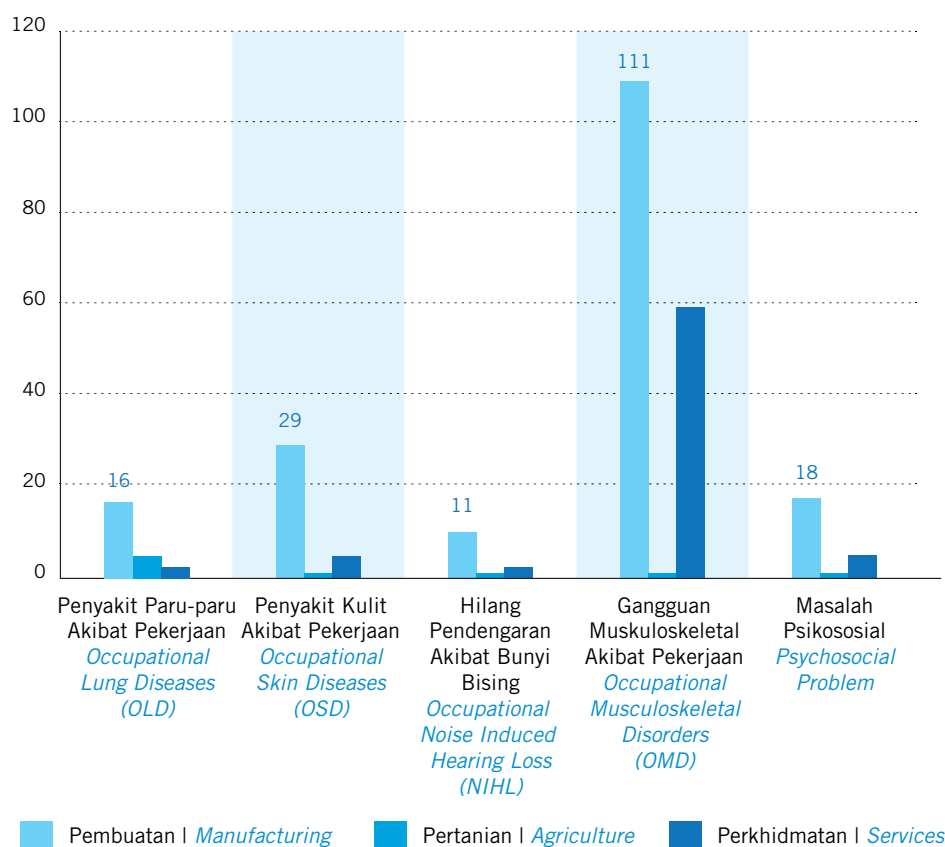
Rajah 5: Perkhidmatan Kesihatan Pekerjaan Asas mengikut negeri.

Figure 5: Basic Occupational Health Services by state.



Rajah 6: Perkhidmatan Kesihatan Pekerjaan Asas mengikut jenis penyakit dan sektor.

Figure 6: Basic Occupational Health Services by types of diseases and sector.





## Pelaksanaan Kod Amalan Pencegahan dan Pengurusan HIV/AIDS di Tempat Kerja

Kod Amalan Pencegahan dan Pengurusan HIV/AIDS di Tempat Kerja disediakan oleh Jabatan pada tahun 2001 dengan kerjasama perwakilan dari pelbagai agensi kerajaan, pertubuhan bukan kerajaan, dan pertubuhan antarabangsa. Tujuan kod amalan ini adalah untuk mengurangkan penyebaran HIV/AIDS dan membimbing majikan serta pekerja menguruskan isu berkaitan HIV/AIDS di tempat kerja. Pada tahun 2012, sebanyak lapan tempat kerja telah mengadaptasi Kod Amalan HIV/AIDS di Tempat Kerja.

Antara proses pelaksanaan kod amalan tersebut adalah seperti yang berikut:

- i. Menyediakan polisi HIV/AIDS di tempat kerja.
- ii. Melantik orang yang bertanggungjawab.
- iii. Mengadakan program kesedaran pencegahan dan pengawalan sebaran HIV/AIDS di tempat kerja.
- iv. Mengadakan latihan berkaitan untuk pekerja dan orang bertanggungjawab.
- v. Mengimplementasikan polisi HIV/AIDS di tempat kerja.

Pihak majikan telah bersetuju melaksanakan program ini untuk mewujudkan tempat kerja yang mempunyai kesedaran yang tinggi tentang sebaran HIV/AIDS dan mengurangkan risiko pekerjaanya mengidap penyakit tersebut. Selain itu, pelaksanaan kod amalan ini turut memberikan pandangan yang positif kepada pelanggan bahawa sesuatu tempat kerja tersebut tidak bermasalah dan dapat mencegah diskriminasi terhadap pekerja yang mengidap HIV/AIDS. Isu HIV/AIDS di tempat kerja perlu diberikan penekanan di lebih banyak tempat kerja kerana pengamalannya dijangka dapat mengurangkan risiko atau potensi kehilangan kakitangan dan buruh mahir akibat sakit berpanjangan, ketidakhadiran, dan kematian, dan seterusnya menjejaskan produktiviti, faedah kerja, keselamatan dan kesihatan pekerjaan (KKP), kos pengeluaran, dan semangat kerja di tempat kerja.

Jabatan Keselamatan dan Kesihatan Pekerjaan turut mewakili Kementerian Sumber Manusia sebagai ahli Jawatankuasa Mekanisme Penyelarasan Negara bagi Pelan Strategik Nasional HIV/AIDS 2011 – 2015. Di bawah pelan tersebut, Kementerian Sumber Manusia diberikan tanggungjawab bagi memastikan 30 tempat kerja melaksanakan Kod Amalan tersebut sepanjang tempoh lima tahun ini. Selain itu, Jabatan yang menjadi pusat tumpuan HIV/AIDS di tempat kerja di negara ini turut dilantik sebagai Timbalan Pengerusi bagi Kumpulan Kerja HIV/AIDS di Tempat Kerja di peringkat ASEAN bagi tempoh 2011 – 2013. Pada tahun 2012, sebanyak lapan tempat kerja telah melaksanakan Kod Amalan tersebut.

## Implementation of the Code of Practice on Prevention and Management of HIV/AIDS in the workplace

*The Code of Practice on the Prevention and Management of HIV/AIDS in the Workplace was prepared by the Department in 2001 in collaboration with representatives from various government agencies, non-governmental organisations, and international organisations. The purpose of this code of practice was to reduce the spread of HIV/AIDS and assist employers and employees in managing issues related to HIV/AIDS in the workplace. In 2012, a total of eight workplaces adopted the HIV/AIDS Code of Practice.*

*Processes in the implementation of the Code of Practice are as follows:*

- i. Prepare a sound HIV/AIDS policy in the workplace.*
- ii. Appoint a person-in-charge.*
- iii. Conduct awareness programmes on prevention and control of the spread of HIV/AIDS in the workplace.*
- iv. Provide relevant training to workers and the person-in-charge.*
- v. Implementation of the HIV/AIDS policy in the workplace.*

*Employers agreed to implement this programme to create a workplace with a high level of awareness about the spread of HIV/AIDS and to reduce the risk of employees contracting the disease. In addition, the implementation of the Code of Practice by a workplace also makes its clients view the workplace in a positive light as they know that this workplace is problem free and does not practise discrimination against HIV/AIDS sufferers. The HIV/AIDS issue in the workplace should be given more emphasis as the implementation of such programme is expected to reduce the risk or potential loss of staff and skilled labour through prolonged illness, absenteeism and death and the attendant effects on productivity, job benefits, occupational safety and health (OSH), production costs, and workplace morale.*

*The Occupational Safety and Health Department represents the Ministry of Human Resources in the latter's role as a committee member of the National Coordinating Mechanism for the National Strategic Plan on HIV/AIDS for 2011 – 2015. Under this plan, the Ministry of Human Resources is given the responsibility of ensuring that 30 workplaces implement the Code of Practice over a period of five years. In addition, being the focal point of HIV/AIDS in the workplace in this country, this Department has been appointed as the Deputy Chairman of the Working Group on HIV/AIDS in The Workplace in ASEAN for the term 2011 – 2013. In 2012, a total of eight workplaces implemented this Code of Practice.*

## Pelaksanaan Koda Amalan Pencegahan dan Pembasmian Penyalahgunaan Dadah, Alkohol dan Bahan di Tempat Kerja

Koda Amalan ini bertujuan membantu majikan dan pekerja memenuhi tanggungjawab di bawah Akta Keselamatan dan Kesihatan Pekerjaan (AKKP) 1994 untuk menangani masalah dadah, alkohol, dan bahan di tempat kerja. Di bawah Seksyen 15 Akta Keselamatan dan Kesihatan Pekerjaan (AKKP) 1994, majikan bertanggungjawab memastikan keselamatan, kesihatan, dan kebajikan semua pekerjanya. Seksyen 24(1) AKKP pula menjelaskan bahawa pekerja bertanggungjawab memberikan perhatian yang munasabah bagi keselamatan dan kesihatan dirinya dan orang lain yang mungkin terjejas oleh tindakannya di tempat kerja.

Bagi tujuan tersebut, Bahagian Kesihatan Pekerjaan dipertanggungjawab memantau pelaksanaan Koda Amalan Pencegahan dan Pembasmian Penyalahgunaan Dadah, Alkohol, dan Bahan di Tempat Kerja. Majikan atau tempat kerja dipantau berpandukan beberapa aspek, seperti penggubalan dasar, pembentukan jawatankuasa dan latihan pekerja serta pegawai yang bertanggungjawab. Pada tahun 2011, sebanyak tujuh tempat kerja telah melaksanakan Koda Amalan tersebut. Pelaksanaan Koda Amalan ini turut bertujuan mengurangkan kadar kemalangan, ketidakhadiran, kadar berhenti kerja yang tinggi dan penglibatan dalam jenayah dalam kalangan pekerja disebabkan penyalahgunaan dadah, alkohol, dan bahan. Pada tahun 2012, sebanyak lapan tempat kerja telah melaksanakan Koda Amalan tersebut.

## Pembangunan Modal Insan

Sebagai langkah untuk memantapkan pengetahuan pegawai dalam bidang keselamatan dan kesihatan pekerjaan, Bahagian Kesihatan Pekerjaan menganjurkan beberapa program dalaman di peringkat ibu pejabat dan pegawai dari bahagian ini turut serta dalam beberapa program luaran bagi meningkatkan pengetahuan dan mengikuti perkembangan terkini dalam bidang ini.

## Implementation of the Code of Practice on Prevention and Eradication of Drug Abuse, Alcohol and Substance in the Workplace

*This Code of Practice is intended to assist employers and employees to meet their responsibilities under the Occupational Safety and Health Act (OSHA) 1994 and to address the problem of drugs and alcohol in the workplace. Under Section 15 of the Occupational Safety and Health Act (OSHA) 1994, employers are responsible for ensuring the safety, health, and welfare of all employees. Section 24(1) OSHA also states that employees are responsible for ensuring reasonable care for the safety and health of himself and others who may be affected by his actions in the workplace.*

*The Occupational Health Division is responsible for monitoring the implementation of the Code of Practice on Prevention and Eradication of Drug Abuse, Alcohol and Substance in the Workplace. The monitored employers at workplace is guided in a few aspects, such as policy making, the setting up of committees, and the training of employees and officers in charge.*

*In 2011, seven workplaces implemented the Code of Practice with guidance from the Department. The implementation of this Code of Practice was also meant to reduce accidents, absenteeism, high rate of resignation, and involvement in crime among their employees caused by drug abuse, alcohol, and substance. In 2012, a total of eight workplaces implemented this Code of Practice.*

## Human Capital Development

*As a measure to improve the knowledge of officers in the field of occupational safety and health, the Occupational Health Division conducted a number of internal programmes at headquarters level and officers from this division also took part in several external programmes to improve their knowledge and to follow the latest developments in this field.*

Jadual 7: Program pembangunan modal insan yang dihadiri pegawai Bahagian Kesihatan Pekerjaan.  
Table 7: Human capital development programmes attended by the Occupational Health Division officers.

Bil.   No.	Nama Program Dan Lokasi Programme and Location	Tarikh   Date	Bilangan Peserta Number of Participant
1.	Latihan Pemantapan Perkhidmatan Siri 2/2012 di JKKP Ibu Pejabat <i>Service Enhancement Programme Series 2/2012 at DOSH Headquarters</i>	9 – 13 Jan. 2012 <i>9 – 13 Jan. 2012</i>	4
2.	Latihan Modul SMBF di JKKP Ibu Pejabat <i>SMBF Module Training at DOSH Headquarters</i>	27 Jan. 2012 <i>27 Jan. 2012</i>	4
3.	Bengkel Bahan Alternatif Asbestos <i>Asbestos Alternative Materials Workshop</i>	20 Mac 2012 <i>20 March 2012</i>	1
4.	Bengkel Kajian Pendedahan Kebisingan Pemandu Ambulans <i>Ambulance Driver Noise Exposure Study Workshop</i>	16-17 April 2012 <i>16 – 17 April 2012</i>	1
5.	Kursus Doktor Kesihatan pekerjaan Modul 1 – 3 di NIOSH, Bandar Baru Bangi <i>Occupational Health Doctor Module 1 – 3 Course at NIOSH, Bandar Baru Bangi</i>	April, Mei dan Jun 2012 <i>April, May and June 2012</i>	3
6.	Kursus Penguatkuasaan Peraturan CLASS 201x di NIOSH, Bandar Baru Bangi <i>CLASS Regulation 201x Enforcement Course at NIOSH, Bandar Baru Bangi</i>	13 – 16 Feb 2012 <i>13 – 16 Feb. 2012</i>	2
7.	Bengkel Penambahbaikan Taksonomik dan Kandungan Laman Web di JKKP Ibu Pejabat <i>Taxonomic Improvisation and Website Content Workshop at DOSH Headquarters</i>	24 – 25 April 2012 <i>24 – 25 April 2012</i>	2
8.	Kursus Pemantapan Jawatankuasa Keselamatan di NIOSH, Bangi <i>Safety Committee Enhancement Course at NIOSH, Bandar Baru Bangi</i>	10 Mei 2012 <i>10 May 2012</i>	1
9.	Kursus Pilot Pembangunan Modul Ergonomik di NIOSH, Bandar Baru Bangi <i>Ergonomic Module Development Pilot Course at NIOSH, Bandar Baru Bangi</i>	27 – 29 Mac 2012 <i>27 – 29 March 2012</i>	3
10.	Program Pengenalan Peralatan Perlindungan Diri <i>Introduction to Personal Protective Equipment Programme</i>	2 Mei 2012 <i>2 May 2012</i>	1
11.	Kursus Pemantapan Pegawai Latihan dan Pindaan PK 17 di NIOSH, Bandar Baru Bangi <i>Enhancement for Training Officers and PK 17 Amendment Course at NIOSH, Bandar Baru Bangi</i>	18 – 22 Jun 2012 <i>18 – 22 June 2012</i>	1
12.	Bengkel Pengubalan Modul Kursus Penaksiran Risiko kepada Kesihatan CHRA di NIOSH, Bandar Baru Bangi <i>Module Development Workshop for Risk to Health Assessment (CHRA) Course at NIOSH, Bandar Baru Bangi</i>	19 – 21 Jun 2012 <i>19 – 21 June 2012</i>	1
13.	Kursus Penerangan Workplace Ergonomic Risk Assesment [WERA] Diagnostic Tool di JKKP Ibu Pejabat	20 Jun 2012 <i>20 June 2012</i>	1



Bil.   No.	Nama Program Dan Lokasi <i>Programme and Location</i>	Tarikh   Date	Bilangan Peserta <i>Number of Participant</i>
14.	Kursus SIRARC <i>Course on SIRARC</i>	9 – 11 Okt 2012 <i>9 – 11 Oct. 2012</i>	1
15.	Latihan berkumpulan bagi Pencegahan Penyalit dan Penambahbaikan Persekitaran Kerja <i>Group Training on Occupational Disease Prevention and Working Environment Improvement</i>	4 Jun- 28 Julai 2012 <i>4 Jun – 28 July 2012</i>	1
16.	Kursus Rintis Penaksiran Risiko kepada Kesihatan Berdasarkan Manual CHRA, Edisi 3 <i>Pilot Course on Risk to Health Assessment Based on CHRA Manual, 3rd Edition</i>	24 – 27 Sept. 2012 <i>24 – 27 Sept. 2012</i>	1
17.	Kursus Bekerja Selamat di Ruang Terkurung di NIOSH, Bandar Baru Bangi <i>Working Safely in A Confined Area Course at NIOSH, Bandar Baru Bangi</i>	18 – 19 Dis. 2012 <i>18 – 19 Dec. 2012</i>	2
18.	Latihan tentang Occupational Health and Preventive Medicine for Workers di University of Occupational and Environmental Health, Kyushu, Jepun <i>Training on Occupational Health and Preventive Medicine for Workers at University of Occupational and Environmental Health, Kyushu, Japan</i>	Ogos – Dis. 2012 <i>Aug. – Dec. 2012</i>	1

**Jadual 8: Program pembangunan modal insan anjuran Bahagian Kesihatan Pekerjaan.**

**Table 8: Human Capital Development Programme organized by the Occupational Health Division.**

Bil.   No.	Nama Program Dan Lokasi <i>Programme and Location</i>	Tarikh   Date	Bilangan Peserta <i>Number of Participant</i>
1.	Bengkel Kesedaran Kesihatan Pekerjaan Bagi Program Pencegahan HIV/AIDS dan Pengurusan Koda Amalan di Tempat Kerja <i>Workshop on Occupational Health Awareness for HIV/AIDS Prevention Programme and Code of Practice Management at Workplaces</i>	29 Mei 2012 <i>29 May 2012</i>	180
2.	Bengkel Kesedaran Kesihatan Pekerjaan di NIOSH, Bandar Baru Bangi <i>Workshop on Occupational Health Awareness at NIOSH, Bandar Baru Bangi</i>	19 Sept. 2012 <i>19 Sept. 2012</i>	300
3.	Seminar Kesihatan Pekerjaan Peringkat Kebangsaan dengan kerjasama Hospital Kuala Lumpur di Auditorium Utama, Hospital Kuala Lumpur <i>National Level Occupational Health Seminar in collaboration with the Kuala Lumpur General Hospital</i>	11 – 12 Okt. 2012 <i>11 – 12 Oct. 2012</i>	180
4.	Kursus Pertolongan Cemas di Tempat Kerja Siri 1 di NIOSH, Bandar Baru Bangi <i>First Aid at Workplaces Course, Series 1, at NIOSH, Bandar Baru Bangi</i>	29 – 31 Mei 2012 <i>29 – 31 May 2012</i>	22
5.	Kursus Pertolongan Cemas di Tempat Kerja Siri 2 di NIOSH, Bandar Baru Bangi <i>First Aid at Workplaces Course, Series 2, at NIOSH, Bandar Baru Bangi</i>	26 – 28 June 2012 <i>26 – 28 June 2012</i>	19

## Program Saringan Kesihatan bagi pegawai Jabatan Keselamatan dan Kesihatan Pekerjaan Ibu Pejabat

Program MyHess (*My Health Status Surveillance*) diteruskan lagi oleh Bahagian Kesihatan Pekerjaan pada tahun ini. Program pada tahun ini bermula pada bulan Februari 2012 dan berakhir pada bulan Disember 2012. Seramai 132 orang pegawai mengambil bahagian dalam pemeriksaan kesihatan yang dijalankan di Bilik Rawatan Aras 2, JKKP Ibu Pejabat. Pegawai yang terlibat adalah dari Bahagian Khidmat Pengurusan, Bahagian Dasar dan Penyelidikan, Bahagian Higien Industri dan Ergonomik, Bahagian Pengurusan Kimia, Bahagian Luar Pantai, Bahagian Keselamatan Industri, Bahagian Major Hazard, Bahagian Kesihatan Pekerjaan dan Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan. Antara pemeriksaan yang dijalankan adalah seperti yang berikut:

1. Indeks jisim tubuh.
2. Tekanan darah.
3. Pengukuran paras gula dalam darah (berpuasa).
4. Pengukuran paras kolesterol dalam darah (berpuasa).

## Bilangan pegawai mengikut kategori umur dan jantina

Pada amnya, pegawai dibahagikan kepada kategori umur seperti jadual di bawah. Majoriti pegawai berumur kurang daripada, (<) 40 tahun iaitu seramai 99 orang, dan baki 33 orang berumur lebih daripada (>) 40 tahun.

Jadual 9: Bilangan dan peratusan pegawai mengikut kategori umur.

Table 9: Number and percentage of officers by age category.

Umur   Age	Bilangan   Number	Peratus (%)   Percentage (%)
< 40 tahun   < 40 years	99	75
> 40 tahun   > 40 years	33	25

Jumlah pegawai lelaki pula adalah 90 orang (68%) daripada 132 orang jumlah pegawai JKKP Ibu Pejabat yang telah menjalani pemeriksaan, manakala baki 42 orang (32%) adalah pegawai perempuan.

Jadual 10: Bilangan dan peratusan pegawai mengikut kategori jantina.

Table 10: Number and percentage of officers by gender category.

Jantina   Gender	Bilangan   Number	Peratus (%)   Percentage (%)
Lelaki   Male	90	68
Perempuan   Female	42	32

## My Health Status Surveillance (MyHess) Programme for Officers in the Headquarters of the Department of Occupational Safety and Health

This year the MyHess (*My Health Status Surveillance*) Programme was launched by the Health Division. The programme of the year began in February 2012 and ended in December 2012. A total of 132 officers took part in the medical examinations which took place in the Treatment Room at Level 2 of the DOSH Head Office. The officers were from the Management Services Division, Policies and Research Division, Industrial Hygiene and Ergonomics Division, Chemicals Management Division, Offshore Division, Industrial Safety Division, Major Hazards Division, Occupational Health Division, and National Council for Occupational Safety and Health. The followings are some of the physical examinations carried out:

1. Body Mass Index.
2. Blood pressure.
3. Measurement of blood sugar level (fasting).
4. Measurement of blood cholesterol level (fasting).

## Number of officers by age and gender

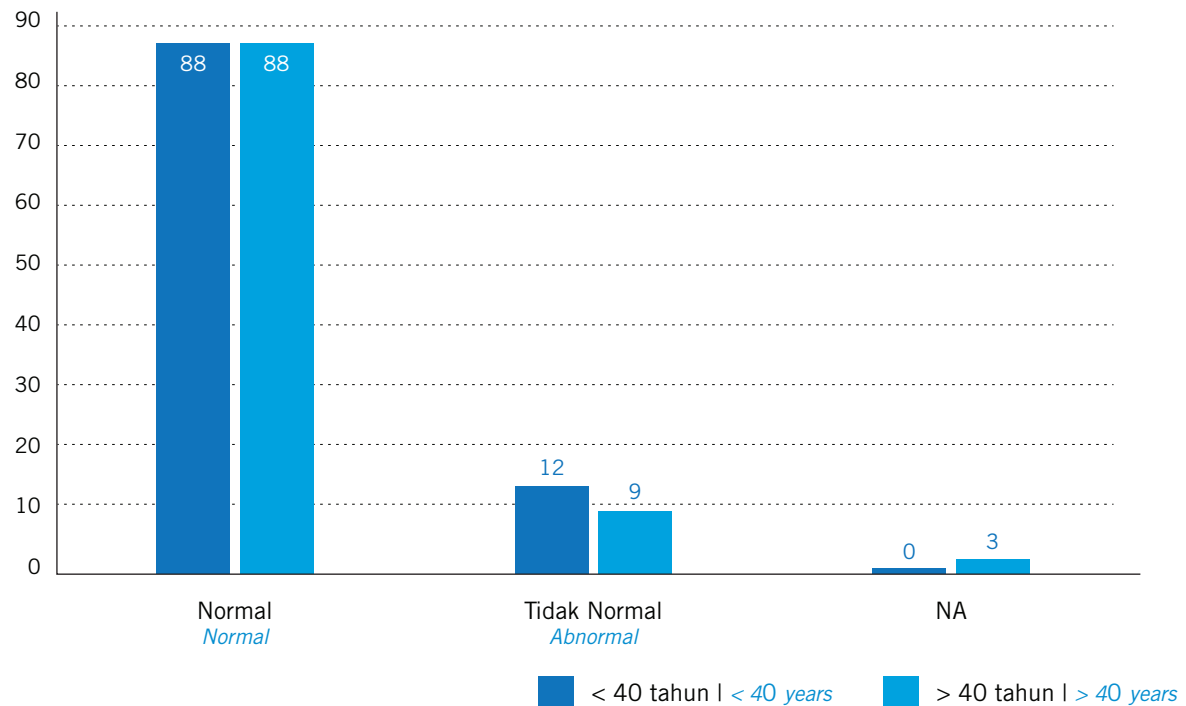
A breakdown of the officers by age is shown in the table below. The majority of the officers, or 99 persons, were 40 years old and younger, and the remaining 33 persons were more than 40 years old.

Ninety male officers (68%) from a total of 132 persons from the DOSH Headquarters underwent medical examinations. The remaining 42 persons (32%) were female officers.

## Pengukuran paras gula dalam darah (berpuasa) Sugar level in blood measurement (fasting)

Rajah 7: Peratusan pegawai mengikut kategori kumpulan umur berbanding tahap gula dalam darah.

Figure 7: Percentage of officers by age group category versus sugar level in blood.



Rajah di atas menunjukkan majoriti pegawai JKPP Ibu Pejabat di bawah kedua-dua kategori umur mempunyai paras gula dalam darah yang normal. Sebanyak 88% pegawai berumur kurang 40 tahun mempunyai paras gula dalam darah yang normal manakala 12% lagi abnormal. Bagi pegawai berumur lebih 40 tahun pula, seramai 88% mempunyai paras gula dalam darah yang normal, 9% abnormal dan 3% lagi tidak berkenaan. Keputusan tidak berkenaan ini adalah yang datanya tidak diperoleh kerana ujian tidak dilakukan atas beberapa sebab tertentu.

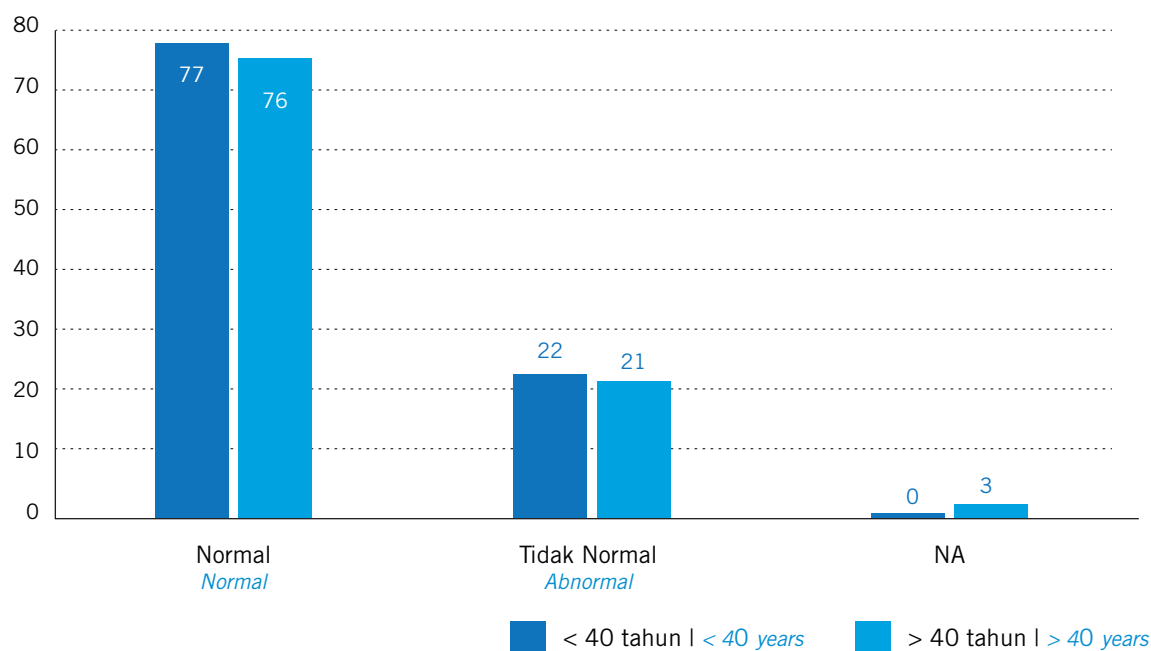
The chart above shows that the blood sugar levels of the majority of the DOSH officers in the two age groups were within the normal range. As many as 88% of officers aged 40 and below had normal blood sugar levels while 12% had abnormal levels. For the above-40 age group, 88% had normal blood sugar levels, 9% had high blood sugar levels while the remaining 3% were categorised as not applicable. For some reasons, data for the not applicable officers were not available.



## Pengukuran paras kolesterol di dalam darah (berpuasa) *Results of (fasting) blood cholesterol measurements*

Rajah 8: Peratusan pegawai mengikut kategori kumpulan umur berbanding tahap kolesterol di dalam darah.

*Figure 8: Percentage of officers by age versus blood cholesterol level*



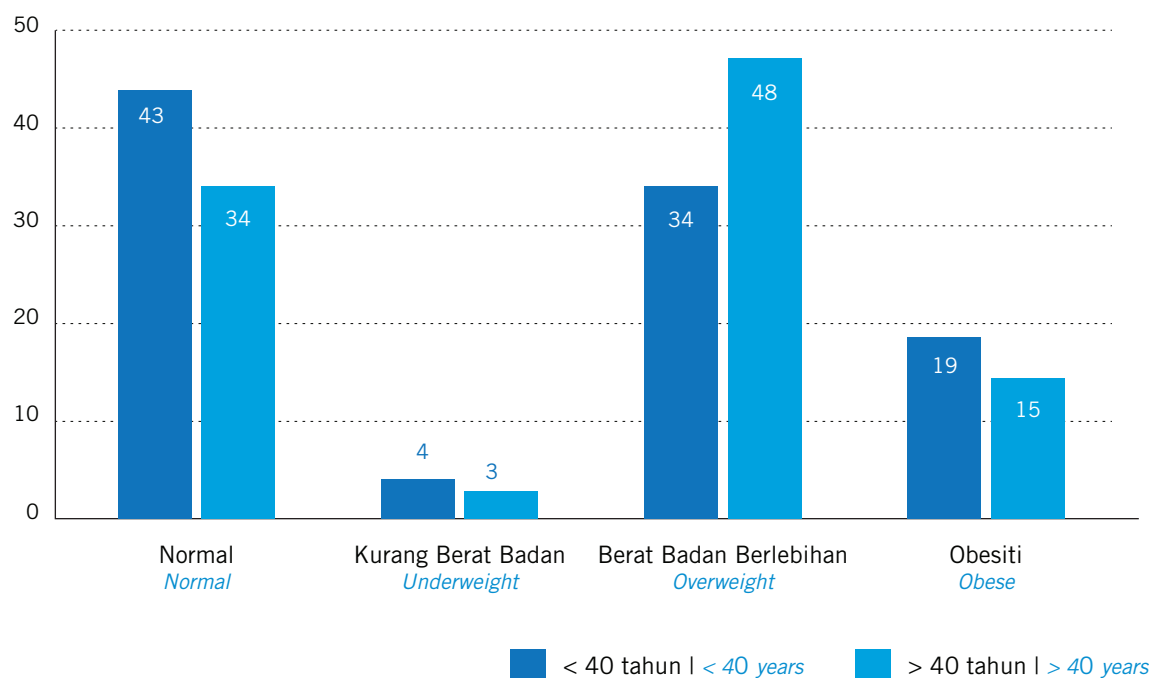
Merujuk kepada rajah di atas, kebanyakan pegawai masih mempunyai paras kolesterol di dalam darah yang normal, iaitu 77% daripada pegawai bawah 40 tahun, manakala baki 22% mempunyai paras kolesterol yang abnormal. Bagi pegawai berumur lebih 40 tahun, 76% pegawai mempunyai paras kolesterol yang normal, 21% abnormal dan baki 3% tidak berkenaan.

*Referring to the chart above, the majority or 77% of the officers aged 40 and below had blood cholesterol levels within the normal range while the remaining 22% had levels exceeding normal. For officers older than 40, the blood cholesterol levels were normal for 76% of them, too high for 21% while the remaining 3% were not applicable.*

## Pengukuran Indeks Jisim Tubuh Body Mass Index Measurements

Rajah 9: Peratusan pegawai mengikut kategori kumpulan umur berbanding indeks jisim tubuh.

Figure 9: Percentage of officers by age versus body mass index



Daripada rajah di atas, kebanyakan pegawai bawah 40 tahun yang mempunyai indeks jisim tubuh (BMI) yang normal (18.5 – 24.9), iaitu sebanyak 43%, dan diikuti dengan pegawai yang mempunyai lebih berat badan (25.0 – 29.9) sebanyak 34%. Seramai 19% daripada pegawai bawah 40 tahun mempunyai berat badan berlebihan (>30), manakala 4% lagi adalah dalam kategori kurang berat badan (<18.5).

Bagi pegawai berumur lebih 40 tahun pula, majoriti mempunyai berat badan berlebihan, iaitu sebanyak 48%, diikuti dengan 34% yang mempunyai berat badan ideal. Baki 15% dan 3%, masing-masing terdiri daripada mereka yang mempunyai berat badan berlebihan dan kurang berat badan (underweight).

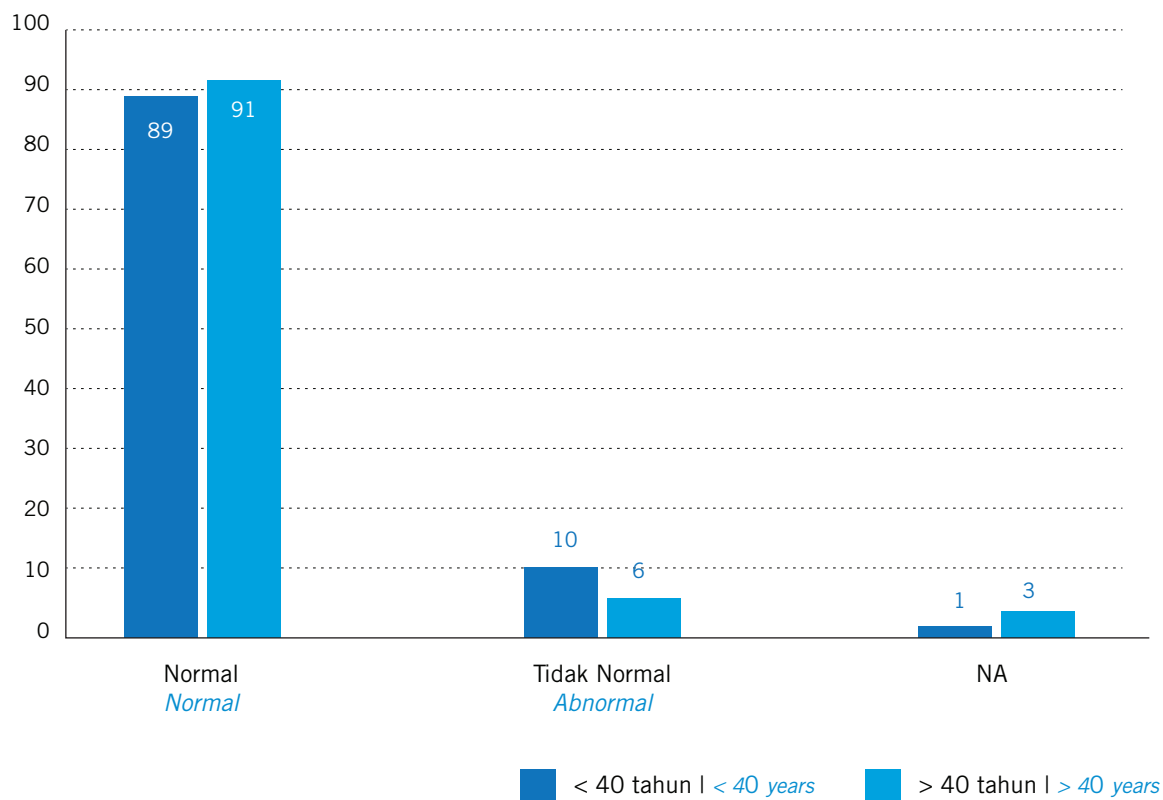
From the chart above, a simple majority or 43% of officers aged 40 and below had normal body mass index (BMI) (18.5 – 24.9), followed by 34% who were overweight (25 – 29.9) while 19% of them were obese (>30) and a further 4% were underweight (<18.5).

In the above-40 age group, a simple majority or 48% of them were overweight, followed by 34% who had ideal body weight. The remaining 15% and 3% were obese and underweight, respectively.

## Pengukuran tekanan darah Blood pressure measurements

Rajah 10: Peratusan pegawai mengikut kategori kumpulan umur lawan tekanan darah.

Figure 10: Percentage of officers by age versus blood pressure



Rajah di atas menunjukkan peratusan pegawai dengan keputusan tekanan darah yang normal dan abnormal. Tekanan darah abnormal adalah yang mempunyai tekanan darah terlalu rendah atau terlalu tinggi daripada julat normal. Majoriti pegawai mempunyai tekanan darah yang normal, iaitu seramai 89% daripada yang bawah 40 tahun dan 91% daripada pegawai lebih 40 tahun. Baki 10% pegawai bawah 40 tahun dan 6% pegawai lebih 40 tahun mempunyai tekanan darah abnormal. Keputusan tidak berkenaan adalah yang datanya tidak diperoleh kerana ujian tidak dilakukan atas beberapa sebab tertentu.

The chart above shows the percentages of officers who had normal and abnormal blood pressures. Abnormal blood pressures refers to blood pressures that were higher or lower than the normal range. The majority of the officers had normal blood pressures, that is, 89% from the <40 age group and 91% from the >40 age group. The remaining 10% in the <40 age group and 6% in the >40 age group had abnormal blood pressures. The results labelled not applicable refers to tests that were not carried out for some reasons.





Lawatan kerja ke Radicare Sdn Bhd di Teluk Panglima Garang pada 27 Februari 2012 bersama Timbalan Ketua Pengarah (Dasar).  
*Working visit to Radicare Sdn Bhd, Teluk Panglima Garang, on 27 February 2012, led by the Deputy Director-General (Policies Division).*



Program saringan kesihatan (MyHESS) bersama JKKP Pulau Pinang pada bulan Mac 2012.  
*My Health Status Surveillance Programme (MyHess) with the DOSH Pulau Pinang in March 2012.*



Persidangan dan mesyuarat Bahagian Kesihatan Pekerjaan di Dewan Seri Cempaka, NIOSH di Bandar Baru Bangi pada 18 dan 19 April 2012.  
*Conferences and meetings of the Occupational Health Division at the Sri Cempaka Hall of NIOSH in Bangi on 18 – 19 April 2012.*



Lawatan kerja ke Shell MDS Bintulu, Sarawak pada 15 Jun 2012.  
*Working visit to Shell MDS Bintulu, Sarawak, on 15 June 2012.*



Lawatan kerja ke Institut Keselamatan dan Kesihatan Pekerjaan, Bandar Baru Bangi pada 19 Jun 2012.  
*Working visit to the National Institute of Occupational Safety and Health, Bandar Baru Bangi, on 19 June 2012.*





Pemantauan Perkhidmatan Kesihatan Pekerjaan Asas di World Trend Garden Furniture Sdn Bhd, Sabah pada 10 Mei 2012.  
*Basic occupational health service monitoring in World Trend Garden Furniture Sdn Bhd, Sabah, on 10 May 2012.*



Pemantauan Perkhidmatan Kesihatan Pekerjaan Asas di Kilang Topec Etal Engineering Sdn Bhd, Selangor pada 16 April 2012.  
*Basic occupational health service monitoring in Kilang Topec Etal Engineering Sdn Bhd, Selangor, on 16 April 2012.*



Majlis Penyerahan Polisi Menghindari Dadah dan AIDS oleh Felda Global Ventures Berhad di Dewan Merak Kayangan, Felda pada 25 September 2012.  
*Launching and handing over of Stay Away from Drugs and AIDS Policy by Felda Global Ventures Berhad in Dewan Merak Kayangan, Felda, on 25 September 2012.*



Program Sehari Bersama Pengamal Perubatan di Auditorium, Hospital Jantung, Samarahan pada 11 September 2012.  
*One Day with Medical Practitioners programme in the Auditorium, Heart Hospital, in Kota Samarahan, on 11 September 2012.*







Seminar Kesedaran Kesihatan di Dewan Seri Cempaka, NIOSH pada 19 September 2012.  
*Occupational Health Awareness Seminar in Dewan Seri Cempaka, NIOSH, on 19 September 2012.*



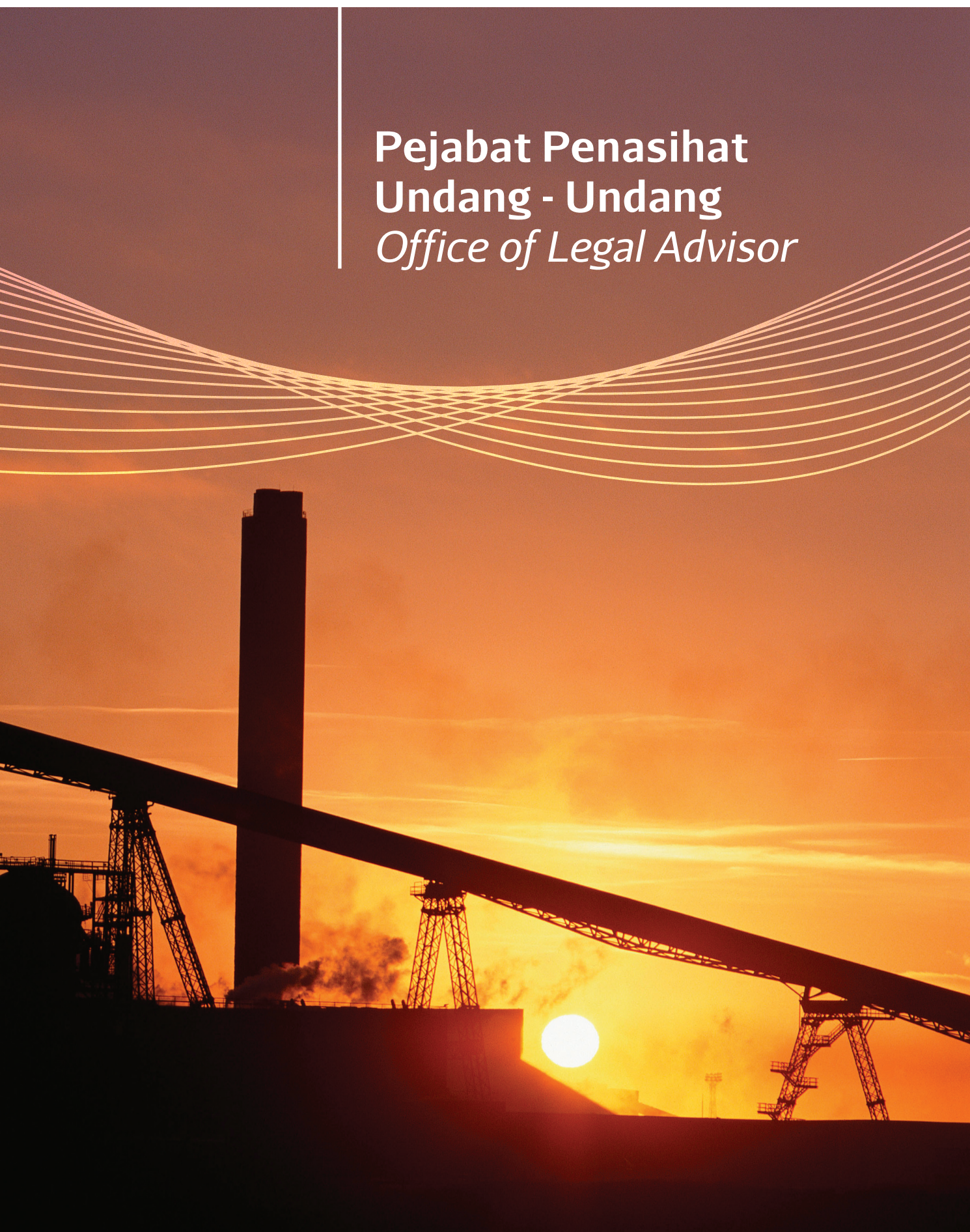
Seminar Kesihatan Pekerjaan Kebangsaan 2012 di Auditorium Utama, Hospital Kuala Lumpur pada 11 dan 12 Oktober 2012.  
*The 2012 National Level Occupational Health Seminar in Auditorium Utama, Kuala Lumpur General Hospital, on 11 – 12 October 2012.*







# Pejabat Penasihat Undang - Undang *Office of Legal Advisor*





# Pejabat Penasihat Undang-Undang

## Office of Legal Adviser

### Pengenalan

Pejabat Penasihat Undang-undang memainkan peranan penting untuk menasihati Jabatan dalam perkara yang melibatkan isu perundangan dan merangkumi skop kerja yang berikut:

- Memberikan nasihat perundangan berkaitan isu keselamatan dan kesihatan pekerjaan kepada Jabatan selaras dengan peruntukan Perlembagaan Persekutuan dan undang-undang bertulis yang berkaitan;
- Menyemak dokumen perjanjian dan memorandum persefahaman yang akan dimeterai oleh Jabatan serta apa-apa instrument lain yang mengandungi elemen perundangan untuk memastikan semua dokumen teratur dari segi undang-undang;
- Memantau, menguruskan, menyelia, dan menyelaraskan kes pendakwaan dan kompaun seluruh Negara yang melibatkan Jabatan;
- Menjalankan litigasi sivil untuk kes saman yang melibatkan Jabatan dan mengeluarkan notis tuntutan ke atas pihak yang bertanggung atas bayaran pendaftaran tempat kerja atau jentera yang tertunggak;
- Membuat pewartaan bagi pelantikan pegawai Jabatan, perintah pengecualian, atau apa-apa perintah atau peraturan yang dibuat oleh Jabatan;
- Menyemak cadangan pindaan ke atas akta, perintah, dan peraturan serta penggubalan perintah dan peraturan yang baharu, dan
- Bekerjasama dengan bahagian lain untuk memberikan latihan dan nasihat berkaitan perundangan.

### Aktiviti Utama

- Menghadiri mesyuarat peringkat Jabatan dan Kementerian berkenaan isu yang melibatkan perundangan.
- Mengadakan perbincangan dengan pejabat negeri berkaitan kertas siasat tentang apa-apa ketidakpatuhan oleh syarikat atau individu di bawah mana-mana akta atau perundangan subsidiar.
- Memberikan izin untuk mendakwa atau izin untuk mengkompaun sesuatu ketidak patuhan yang telah dilakukan.
- Mengadakan sesi latihan atau ceramah berkaitan hal perundangan.
- Memberikan nasihat berkenaan isu keselamatan dan kesihatan pekerjaan secara bertulis atau lisan kepada Jabatan dan orang awam.
- Mengemukakan laporan harian kepada Jabatan Peguam Negara berkenaan dengan aktiviti di Jabatan.

### Introduction

*The Office of Legal Advisor plays an important role in advising the Department on matters relating to legal issues within the following scopes:*

- *To provide legal advice to the Department on occupational safety and health issues in accordance with the provisions of the Federal Constitution and the relevant laws that have been passed.*
- *To vet agreement documents and memoranda of understanding to be executed by the Department and any other instruments which contain legal elements to ensure that all documents are in conformance with the law;*
- *To observe, manage, supervise and regulate judicial proceedings and compound cases throughout the country involving the Department;*
- *To conduct civil litigation cases for summons involving the Department and to issue letters of demand to liable parties for overdue payments of workplace or machine registration;*
- *To gazette appointments of Department officers, exemption orders, and any other orders or regulations made by the Department;*
- *To vet proposals for the amendment of acts, orders and regulations and to draft new orders and regulations; and*
- *To co-operate with other divisions to provide legal training and advice;*

### Main Activities

- *To attend meeting on legal issues at the Departmental and Ministerial levels.*
- *To conduct discussions with State offices regarding investigation papers for any non-compliance with any act or subsidiary legislations by companies or individuals.*
- *To give consent to prosecute or to compound any of non-compliance that has been committed.*
- *To conduct training or briefing sessions on legal matters.*
- *To provide written or verbal advice on occupational safety and health issues to the Department and the public.*
- *To submit daily reports to the Attorney General's Chamber on activities of the Department.*



## Tindakan Undang-Undang

Tindakan dengan hasrat Jabatan untuk memastikan industri mematuhi kehendak perundangan seperti yang diperuntukan di bawah undang-undang, Pejabat ini telah mengeluarkan lebih banyak sanksi untuk mendakwa dan kompaun berbanding dengan tahun-tahun yang lalu. Lebih banyak tindakan undang-undang di bawah Akta Keselamatan dan Kesihatan Pekerjaan 1994 dan perundangan di bawahnya telah diambil.

## Legal Actions

*In line with the objective of the Department to ensure compliance with the requirement of the law by industries, this office issued more sanctions in 2012 than any previous year for the purpose of prosecuting and compounding various non-compliance with the law. It was observed that more legal actions under the Occupational Safety and Health Act 1994 and laws hereunder were taken in 2012 than previously.*

Izin Mendakwa & Kompaun Tahun 2012 <i>Consent to Prosecute and Compound 2012</i>			
Jenis Tindakan <i>Type of Action</i>	Akta   Act	Kuantiti   Quantity	Jumlah   Total
Kompaun   <i>Compound</i>	Akta Keselamatan dan Kesihatan Pekerjaan 1994 <i>Occupational Safety and Health Act 1994</i>	-	-
	Perundangan Subsidiari di Bawah Akta <i>Subsidiary legislation under the Act</i>	-	-
	Akta Kilang dan Jentera 1967 <i>Factories and Machinery Act 1967</i>	180	RM549,100
	Perundangan Subsidiari di Bawah Akta <i>Subsidiary legislation under the Act</i>	42	RM34,000
Pendakwaan   <i>Prosecution</i>	Akta Kilang Keselamatan dan Kesihatan Pekerjaan 1994 <i>Occupation Safety and Health the Act 1994</i>	105	RM832,400
	Perundangan Subsidiari di bawah Akta <i>Subsidiary legislation under the Act</i>	41	RM80,100
	Akta Kilang dan Jentera 1967 <i>Factories and Machinery Act 1967</i>	34	RM112,200
	Perundangan Subsidiari di bawah Akta <i>Subsidiary legislation under the Act</i>	13	RM12,700

Pewartaan Bagi Tahun 2012 <i>Gazettes For The Year 2012</i>		
Bil.   No.	Warta   Gazette	Nombor Warta Gazette Number
1.	Perintah Kilang dan Jentera (Pengecualian kepada CCM Chemicals Sdn Bhd, Pasir Gudang, Johor) 2012 <i>Factories and Machinery (Exemption to CCM Chemicals Sdn Bhd, Pasir Gudang, Johor) Order 2012</i>	P. U. (A) 441/2012
2.	Perintah Kilang dan Jentera (Pengecualian kepada Petronas Penapisan (Melaka) Sdn Bhd, Sungai Udang, Melaka) 2012 <i>Factories and Machinery (Exemption to Petronas Penapisan (Melaka) Sdn Bhd, Sungai Udang, Melaka) Order 2012</i>	P. U. (A) 437/2012
3.	Perintah Kilang dan Jentera (Pengecualian kepada W. R. Grace Specialty Chemicals (M) Sdn Bhd, Kuantan, Pahang) 2012 <i>Factories and Machinery (Exemption to W. R. Grace Specialty Chemicals (M) Sdn Bhd, Kuantan, Pahang) Order 2012</i>	P. U. (A) 378/2012

Bil.   No.	Warta   Gazette	Nombor Warta Gazette Number
4.	Perintah Kilang dan Jentera (Pengecualian kepada Petronas Gas Berhad, Export Terminal, Kemaman, Terengganu) 2012 <i>Factories and Machinery (Exemption to Petronas Gas Berhad, Export Terminal, Kemaman, Terengganu) Order 2012</i>	P. U. (A) 372/2012
5.	Perintah Kilang dan Jentera (Pengecualian kepada Kaneka Paste Polymers Sdn Bhd) 2012 <i>Factories and Machinery (Exemption to Kaneka Paste Polymers Sdn Bhd) Order 2012</i>	P. U. (A) 341/2012
6.	Perintah Kilang dan Jentera (Pengecualian kepada Petlin (Malaysia) Sdn Bhd, Kertih, Terengganu) 2012 <i>Factories and Machinery (Exemption to Petlin (Malaysia) Sdn Bhd, Kertih Terengganu) Order 2012</i>	P. U. (A) 333/2012
7.	Perintah Kilang dan Jentera (Pengecualian kepada Petronas Carigali Sdn Bhd, Kerteh, Terengganu) 2012 <i>Factories and Machinery (Exemption to Petronas Carigali Sdn Bhd, Kerteh, Terengganu) Order 2012</i>	P. U. (A) 331/2012
8.	Perintah Kilang dan Jentera (Pengecualian kepada FPG Oleochemicals Sdn Bhd, Kuantan, Pahang) 2012 <i>Factories and Machinery (Exemption to FPG Oleochemicals Sdn Bhd, Kuantan, Pahang) Order 2012</i>	P. U. (A) 330/2012
9.	Perintah Kilang dan Jentera (Pengecualian kepada Kertih Terminals Sdn Bhd, Kerteh, Terengganu) 2012 <i>Factories and Machinery (Exemption to Kertih Terminals Sdn Bhd, Kerteh Terengganu) Order 2012</i>	P. U. (A) 316/2012
10.	Perintah Kilang dan Jentera (Pengecualian kepada Idemitsu SM (Malaysia) Sdn Bhd, Pasir Gudang, Johor) 2012 <i>Factories and Machinery (Exemption to Idemitsu SM (Malaysia) Sdn Bhd, Pasir Gudang, Johor) Order 2012</i>	P. U. (A) 315/2012
11.	Perintah Kilang dan Jentera (Pengecualian kepada Ethylene Malaysia Sdn Bhd, Kerteh, Terengganu) 2012 <i>Factories and Machinery (Exemption to Ethylene Malaysia Sdn Bhd Kerteh, Terengganu) Order 2012</i>	P. U. (A) 314/2012
12.	Perintah Kilang dan Jentera (Pengecualian kepada Petronas Chemicals Fertiliser Kedah Sdn Bhd, Gurun, Kedah) 2012 <i>Factories and Machinery (Exemption to Petronas Chemicals Fertiliser Kedah Sdn Bhd, Gurun, Kedah) Order 2012</i>	P. U. (A) 308/2012
13.	Perintah Kilang dan Jentera (Pengecualian kepada Petronas Gas Berhad, Kerteh, Terengganu) 2012 <i>Factories and Machinery (Exemption to Petronas Gas Berhad, Kerteh, Terengganu) Order 2012</i>	P. U. (A) 224/2012
14.	Perintah Kilang dan Jentera (Pengecualian kepada Polyethylene Malaysia Sdn Bhd, Kerteh, Terengganu) 2012 <i>Factories and Machinery (Exemption to Polyethylene Malaysia Sdn Bhd, Kerteh, Terengganu) Order 2012</i>	P. U. (A) 171/2012
15.	Perintah Kilang dan Jentera (Pengecualian kepada Petrochemicals (M) Sdn Bhd, Pasir Gudang, Johor) 2012 <i>Factories and Machinery (Exemption to Petrochemicals (M) Sdn Bhd, Pasir Gudang, Johor) Order 2012</i>	P. U. (A) 131/2012



# Pejabat-pejabat Negeri

## *State Offices*





# Pejabat-pejabat Negeri

## State Offices

### Profil Pejabat Negeri

Aktiviti di pejabat negeri lebih tertumpu kepada penguatkuasaan tiga akta utama Jabatan, iaitu Akta Kilang dan Jentera 1967 (Akta 139), Akta Keselamatan dan Kesihatan Pekerjaan 1994 (Akta 514), dan Akta Petroleum (Langkah-langkah Keselamatan) 1984 (Akta 302). Berikut adalah aktiviti yang dijalankan di pejabat negeri:

- Pemeriksaan Berkanun di bawah Akta Kilang dan Jentera 1967 (Akta 139).
- Penguatkuasaan di bawah Akta Kilang dan Jentera 1967 (Akta 139).
- Penguatkuasaan di bawah Akta Keselamatan dan Kesihatan Pekerjaan 1994 (Akta 514).
- Siasatan kemalangan, kejadian berbahaya, aduan KKP, penyakit pekerjaan, dan keracunan pekerjaan.
- Audit dan pemeriksaan keselamatan dan kesihatan pekerjaan di sektor lain.
- Audit keselamatan dan kesihatan pekerjaan dalam industri kecil dan sederhana (IKS).
- Pemeriksaan tapak bina.
- Tindakan punitif.
- Promosi KKP
- Aktiviti lain (ujian hidrostatik, peperiksaan drebar enjin dan operator kren serta pendaftaran pengendali perancah).

### State Office Profile

The activities of the State offices are geared more towards the enforcement of three key acts, namely, the Factory Machinery Act 1967 (Act 139), the Occupational Safety and Health Act 1994 (Act 514), and the Petroleum (Safety Measures) Act 1984 (Act 302). The activities carried out are listed below:

- Statutory inspection under the Factories and Machinery Act 1967 (Act 139).
- Law enforcement under the Factories and Machinery Act 1967 (Act 139).
- Law enforcement under the Occupational Safety and Health Act 1994 (Act 514).
- Investigation of accidents, dangerous occurrences, complaints, occupational diseases and occupational poisonings.
- Occupational safety and health audit and inspection in other sectors.
- Occupational safety and health audit programmes in small and medium enterprises (SMEs).
- Inspections of construction sites.
- Punitive actions.
- OSH promotion.
- Other activities (hydrostatic tests, engine driver and crane operator examinations, and registration of scaffolders).

Jadual 1: Pencapaian aktiviti pejabat negeri bagi tahun 2012.

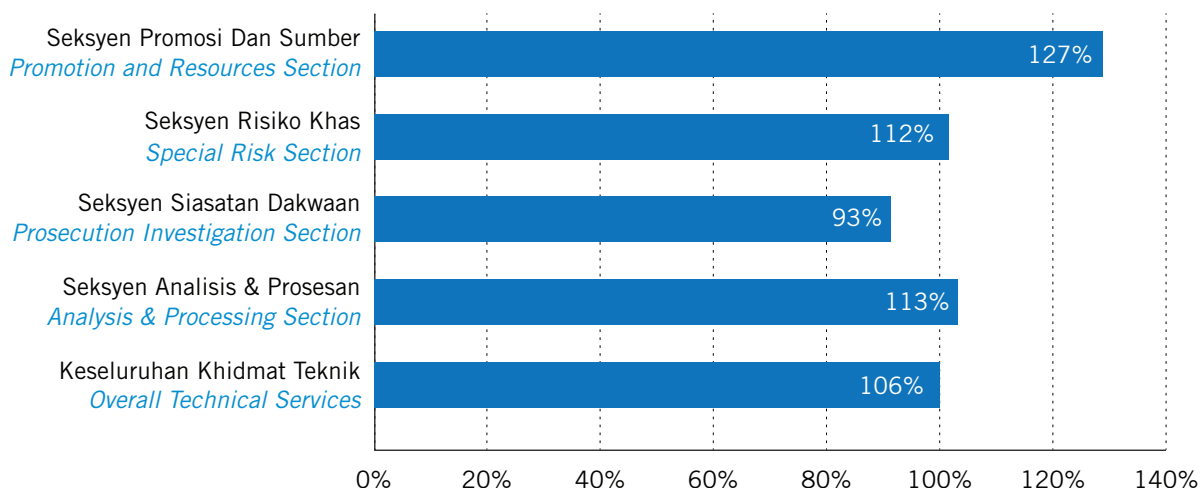
Table 1: Achievements of the state offices in 2012.

Khidmat Teknik   Technical Service		Pencapaian 2012 Achievement 2012
A	Seksyen Analisis & Prosesan   Analysis & Processing Section	
1.	PTI - Kilang baharu   <i>PTI – New factory</i>	1,961
2.	PTI - Jentera tambahan   <i>PTI – Additional machinery</i>	1,434
3.	Pemeriksaan Jentera Bersijil (baharu)   <i>Inspection of certified machinery (new)</i>	23,150
4.	Pemeriksaan dan audit pertama kilang dan pemasangan baharu <i>Inspection and first audit of new factory and installation</i>	3,782
5.	Ujian hidrostatik   <i>Hydrostatic testing</i>	21,356
6.	Kelulusan kerja baik pulih jentera   <i>Approval for machinery repair work</i>	908
7.	Surat sokongan kepada KDN   <i>Supporting letter to MoHA</i>	387
8.	Temu duga drebar enjin   <i>Interview for engine driver</i>	2,617

<b>A</b> <b>Seksyen Analisis &amp; Prosesan   <i>Analysis &amp; Processing Section</i></b>		
9.	Pendaftaran operator kren dan pengendali perancah <i>Registration of crane and scaffolding operators</i>	2,312
10.	Pembaharuan operator kren dan pengendali perancah <i>Registration renewal for crane and scaffolding operators</i>	4,525
<b>B</b> <b>Seksyen Siasatan Dakwaan   <i>Prosecution Investigation Section</i></b>		
1.	Menyediakan kertas siasatan untuk tujuan pendakwaan <i>Preparing investigation papers for prosecution</i>	751
2.	Mengendalikan kes pendakwaan   <i>Conducting prosecution cases</i>	247
<b>Tindakan Punitif   <i>Punitive Action</i></b>		
3.	i. Surat Arahan   <i>Directive Letter</i>	26,676
4.	ii. Notis AKJ   <i>FMA Notice</i>	6,337
5.	iii. Notis OSHA   <i>OSHA Notice</i>	9,254
6.	iv. Kompoun AKJ   <i>FMA Compound</i>	466
7.	Menjalankan siasatan aduan   <i>Conducting investigation on complain</i>	1,047
8.	Menjalankan siasatan kes kemalangan (JKKP6 / 7) <i>Conducting investigation on accident case (JKKP6 / 7)</i>	3,431
<b>C</b> <b>Seksyen Risiko Khas   <i>Special Risk Section</i></b>		
1.	Pendaftaran pemasangan petroleum   <i>Registration of petroleum installation</i>	319
2.	Pemeriksaan/audit sistem talian paip dan simpanan pukal <i>Inspection/audit of pipeline system and bulk storage</i>	334
3.	Verifikasi JKPP 5   <i>Verification of the DOSH 5</i>	117
4.	Pemeriksaan peralatan kecemasan mematuhi laporan ERP <i>Inspection of emergency equipment in complying with ERP report</i>	126
5.	Audit MHI (old) dan NMHI   <i>Audits of the MHI (old) and NMHI</i>	223
6.	Operasi CIMAH   <i>Operation of the CIMAH</i>	141
7.	Bilangan pemohon (Lanjutan Sijil Kelayakan/Pengecualian Pemeriksaan Dalaman) <i>Number of applications (CF extension/Internal inspection exemption)</i>	310
8.	Bilangan jentera (Lanjutan Sijil Kelayakan/Pengecualian Pemeriksaan Dalaman) <i>Number of applications (CF extension/Internal inspection exemption)</i>	14,115
9.	Menyemak Laporan EIA   <i>Review of EIA Report</i>	82
10.	Pemeriksaan premis stokis LPG   <i>Inspection of LPG stokist premises</i>	196
11.	Menilai keberkesanan latihan ERP di MHI/NMHI <i>Evaluation of the effectiveness of ERP training in the MHI/NMHI</i>	92
12.	Mengukur keberkesanan penyampaian maklumat kepada umum <i>Measuring the effectiveness of information delivery to the public</i>	55

D	Seksyen Promosi dan Sumber   <i>Promotion and Resources Section</i>	
1.	Menyampaikan ceramah   <i>Delivering talks</i>	3,136
2.	Bilangan peserta   <i>Number of participants</i>	86,484
3.	Mengendalikan pameran   <i>Organizing exhibitions</i>	1,367
4.	Promosi KKP di tempat kerja (van)   <i>Promoting OSH at workplaces (van)</i>	2,589
5.	Promosi KKP di tempat awam (van)   <i>Promoting OSH at workplaces (van)</i>	893
6.	Promosi KKP melalui media elektronik   <i>Promoting OSH through electronic media</i>	65
7.	Promosi KKP melalui media cetak   <i>Promoting OSH through print media</i>	148
8.	Dialog KKP   <i>Dialogues on OSH</i>	1,877
9.	Seminar KKP   <i>Seminars on OSH</i>	124

Graf 1: Pencapaian Bahagian Khidmat Teknik bagi tahun 2012.  
*Graph 1: Achievements of the Technical Services Division in 2012.*



Secara keseluruhan, bagi tahun 2012, Bahagian Khidmat Teknik berjaya memperoleh pencapaian purata 106%. Seksyen Promosi dan Sumber mendahului dengan 127%, 122% bagi Seksyen Risiko Khas, manakala 113% dan 93% masing-masing untuk Seksyen Analisis dan Prosesan dan Seksyen Siasatan Dakwaan.

*Overall, the performance of the Technical Services Division in 2012 stood at 106%. The Promotion and Resources Section led with 127%, followed by the Special Risks Section with 122% while the third and fourth places were the Analysis and Processing Section, and the Investigating and Prosecution Section with 113% and 93%, respectively.*



Operasi   <i>Operation</i>		Pencapaian 2012 <i>Achievement 2012</i>
A	Seksyen Pemeriksaan Statutori   <i>Statutory Inspection Section</i>	
1.	Dandang stim   <i>Steam boiler</i>	10,526
2.	Pengandung tekanan tak berapi   <i>Unfired pressure vessel</i>	80,290
3.	Lif (selain PPRT)   <i>Lift (excluding PPRT lifts)</i>	32,117
4.	Lift di PPRT diperiksa   <i>PPRT lifts (visited)</i>	590
5.	Lift di PPRT diperiksa semula   <i>PPRT lifts (revisited)</i>	462
6.	Kren bergerak   <i>Mobile crane</i>	7,282
7.	Mesin angkat lain   <i>Other hoisting machines</i>	38,733
8.	Pemeriksaan/audit kilang   <i>Factory inspection/audit</i>	11,619
9.	Pemasangan am   <i>General installation</i>	16,778
10.	Keselamatan tangan – penekan kuasa   <i>Hand safety – Power Press</i>	1,078
B	Seksyen Industri Kecil Dan Sederhana   <i>Small and Medium Industry Section</i>	
1.	Projek perintis (pintu ke pintu)   <i>Pilot project (door to door)</i>	
	a) Bilangan IKS terlibat   <i>Number of SME involved</i>	1,512
	b) Bilangan lawatan   <i>Number of visit</i>	3,912
2.	Promosi bergerak CAT van   <i>Mobile campaign with CAT van</i>	614
3.	Projek payung   <i>Umbrella project</i>	216
4.	Pendaftaran berterusan (10% dari jumlah IKS sedia ada) <i>Continous registration (10% of total existing SME)</i>	6,131
C	Seksyen Penguatkuasaan   <i>Enforcement Section</i>	
Pengilangan   <i>Manufacturing</i>		
13.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	1,717
14.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	1,695
15.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	2,400
16.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	445

C	Seksyen Penguatkuasaan   <i>Enforcement Section</i>	
Borong Runcit   <i>Wholesale/Retail Trades</i>		
17.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	879
18.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	1,591
19.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	351
20.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	137
Pengangkutan dll.   <i>Transportation etc.</i>		
21.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	595
22.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	397
23.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	260
24.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	100
Perhotelan & Restoran   <i>Hotels &amp; Restaurants</i>		
26.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	712
27.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	1,022
28.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	342
29.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	163
Perbankan (Kewangan)   <i>Banking (Finance)</i>		
30.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	502
31.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	559
32.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee - audited (check list)</i>	270
33.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee - attending meetings</i>	101
Perkhidmatan Awam   <i>Public Services</i>		
34.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	696
35.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	760
36.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	432
37.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	93

C	Seksyen Penguatkuasaan   <i>Enforcement Section</i>	
Pertanian   <i>Agriculture</i>		
38.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	1,746
39.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	573
40.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	949
41.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	319
Perhutanan   <i>Forestry</i>		
42.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	123
43.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	230
44.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	30
45.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	16
Perlombongan dan Pengkuarian   <i>Mining and Quarrying</i>		
47.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	234
48.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	78
49.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	132
50.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	41
Veterinar   <i>Veterinary</i>		
51.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	543
52.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	374
53.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	75
54.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	25
Perikanan   <i>Fishery</i>		
55.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	531
56.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	487
57.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	36
58.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	17

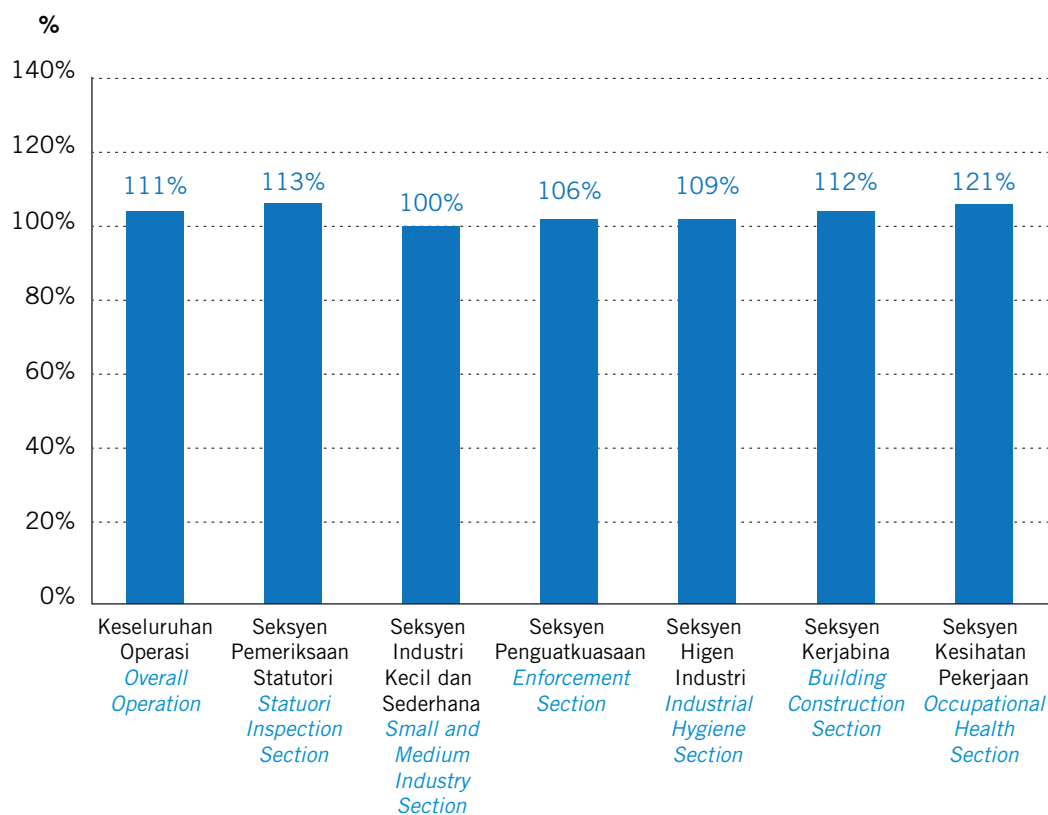


C	Seksyen Penguatkuasaan   <i>Enforcement Section</i>	
Kemudahan   <i>Utilities</i>		
59.	Pemeriksaan/audit ulangan   <i>Repeat inspection/audit</i>	280
60.	Pemeriksaan/audit baharu   <i>New inspection/audit</i>	341
61.	JK Keselamatan – diaudit (senarai semak)   <i>Safety Committee – audited (check list)</i>	196
62.	JK Keselamatan – turut serta mesyuarat   <i>Safety Committee – attending meetings</i>	78
D	Seksyen Higen Industri   <i>Industrial Hygiene Section</i>	
1.	Pemeriksaan ergonomik   <i>Ergonomic inspection</i>	594
2.	Pemeriksaan higien industri   <i>Industrial hygiene inspection</i>	1,533
3.	Permonitoran bunyi bising   <i>Noise monitoring</i>	124
4.	Permonitoran kimia   <i>Chemical monitoring</i>	70
5.	Penaksiran pencahayaan   <i>Lighting assessment</i>	386
6.	Penaksiran tegasan haba   <i>Heat stress assessment</i>	115
7.	Pemantauan peralatan kawalan (LEV/pengalihudaraan am, semburan air) <i>Control equipment monitoring (LEV, general ventilation, water spray)</i>	116
8.	Penguatkuasaan bunyi bising   <i>Noise enforcement</i>	1,477
9.	Penguatkuasaan timah hitam/habuk galian/asbestos <i>Lead/mineral dust/asbestos enforcement</i>	234
10.	Penguatkuasaan/operasi USECHH   <i>USECHH enforcement/operation</i>	2,079
11.	Penguatkuasaan CPL /CLASS   <i>CPL/CLASS enforcement</i>	234
12.	Audit ruang terkurung   <i>Confined space audit</i>	867
13.	Pemeriksaan/audit IAQ   <i>IAQ inspection/audit</i>	112
14.	Penaksiran CHRA   <i>CHRA assessment</i>	57
15.	Memantau kerja OYK/OYB   <i>OYK/OYB work monitoring</i>	680
16.	Penyediaan kertas siasatan higien industri <i>Preparing industrial hygiene investigation papers</i>	36

E Seksyen Kerjabina   <i>Building Construction Section</i>		
1.	Mendaftarkan tapak bina   <i>Construction site registration</i>	3,115
2.	Menjalankan pemeriksaan/audit di tapak bina <i>Conducting inspection/audit at construction site</i>	6,554
F Seksyen Kesihatan Pekerjaan   <i>Occupational Health Section</i>		
1.	Menjalankan siasatan: <i>Conducting investigation:</i>	
	a. Aduan   <i>Complaint</i>	127
	b. Penyakit dan keracunan   <i>Diseases and poisonings</i>	1,317
2.	Membuat pemantauan ke atas laporan: <i>Monitoring reports:</i>	
	i. USECHH 4,5i,5ii (keputusan abnormal)   <i>USECHH 4,5i,5ii (abn.result)</i>	193
	ii. Laporan audiometrik   <i>Audiometric report</i>	306
	iii. CHRA   <i>CHRA</i>	289
3.	Membimbing dan memantau program: <i>Guiding and monitoring programme:</i>	
	i. HIV/AIDS   <i>HIV/AIDS</i>	11
	ii. Dadah dan alkohol   <i>Drugs and alcohol</i>	13
4.	Perkhidmatan kesihatan pekerjaan asas (IKS)   <i>Basic Occupational Health Services (SMI)</i>	1,045

**Graf 2: Pencapaian Bahagian Operasi bagi tahun 2012.**

*Graph 2: Achievement of Operational Division in 2012.*



Secara keseluruhan, bagi tahun 2012, Bahagian Operasi berjaya memperoleh pencapaian purata 111% dan melepasi sasaran 100% untuk setiap seksyen di pejabat negeri. Seksyen Kesihatan Pekerjaan mendahului dengan 121% dan diikuti oleh Seksyen Statutori dengan 113%.

*Overall, the performance of the Operational Division in 2012 successfully achieved an average of 111% dan exceeded the 100% target set for each section in the state office. Occupational Health Section led with 121%, followed by Statutory Section with 113%.*





# Majlis Negara Bagi Keselamatan dan Kesihatan Pekerjaan *National Council For Occupational Safety and Health*



## Majlis Negara Bagi Keselamatan dan Kesihatan Pekerjaan *National Council For Occupational Safety and Health*

Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKKP) di bawah Kementerian Sumber Manusia adalah sebuah badan tertinggi yang bertanggungjawab menentukan hala tuju dan dasar negara berhubung dengan keselamatan dan kesihatan pekerjaan di Malaysia. Ia ditubuhkan pada tahun 1995 mengikut kehendak Seksyen 8, Akta Keselamatan dan Kesihatan Pekerjaan 1994 (Akta 514).

Penubuhan MNKKP merupakan usaha berterusan pihak Kerajaan bagi memastikan keselamatan, kesihatan, dan kebajikan pekerja di tempat kerja terjamin. Sehubungan itu, MNKKP yang telah menjangkau usia 18 tahun penubuhannya semakin matang dan sentiasa giat berusaha untuk meningkatkan tahap keselamatan dan kesihatan pekerjaan dalam usaha membudayakan amalan kerja selamat dan sihat dalam kalangan rakyat Malaysia. Usaha ini dilaksanakan dengan berlandaskan proses tripatisme.

### Fungsi

MNKKP menjalankan fungsinya yang selaras dengan peruntukan Akta 514 dalam hal yang berkaitan dengan yang berikut:

- Perubahan yang dianggap wajar bagi perundangan keselamatan dan kesihatan pekerjaan.
- Pemajuan pentadbiran dan penguatkuasaan keselamatan dan kesihatan pekerjaan.
- Penggalakan hubungan kerjasama perundangan antara pihak pengurusan dengan buruh tentang keselamatan, kesihatan, dan kebajikan orang lain dalam masyarakat.
- Pembangunan kaedah kawalan yang mencukupi bagi kimia industri di tempat kerja.
- Penganalisisan statistik tentang kematian dan kecederaan yang berhubung dengan pekerjaan.
- Penyediaan kemudahan penjagaan kesihatan di tempat kerja.
- Penggalakan pembangunan dan penerimaan, melalui undang-undang dan tataamalan industri yang berhubung dengan keselamatan, kesihatan, dan kebajikan pekerjaan.
- Pembangunan rancangan dan kemudahan pemulihan untuk membantu orang yang cedera di tempat kerja.

MNKKP juga berfungsi sebagai badan rayuan tentang mana-mana isu orang terkilan yang membuat rayuan terhadap sesuatu yang dikeluarkan oleh Ketua Pengarah JKKP.

### Keanggotaan MNKKP

Timbalan Menteri Sumber Manusia telah dilantik sebagai Pengerusi MNKKP, manakala sekretariatnya terdiri daripada Pegawai Kanan Jabatan Keselamatan dan Kesihatan Pekerjaan (JKKP). Ahli MNKKP kini terdiri daripada wakil pihak kerajaan (lima orang), majikan (tiga orang), pekerja (tiga orang), badan profesional dan sukarela (4 orang termasuk seorang wanita), dan pemerhati (5 orang).

*The National Council for Occupational Safety and Health (NCOSH) under the Ministry of Human Resource serves as the highest governing body responsible for determining the direction and national policy on occupational safety and health in Malaysia. It was established in 1995 in accordance with Section 8 of the Occupational Health and Safety Act 1994 (Act 514).*

*The establishment of the NCOSH is intended as a continuing effort by the Government to ensure the safety, health, and welfare of employees at the workplace. Accordingly, over the span of 18 years since its inception, the NCOSH has continued to mature and to strive towards improving the standards of occupational health and safety in its effort to inculcate a safe and healthy work culture among Malaysians. The effort to cultivate this practice is based on the process of tripatism.*

### Functions

*The Council shall carry out its functions in accordance with the provisions of the Act 514 with regard to:*

- *Changes it considers desirable to occupational safety and health legislation.*
- *The improvement of the administration and enforcement of occupational safety and health legislation.*
- *The fostering of a co-operative consultative relationship between management and labour on the safety, health, and welfare of other groups in the community.*
- *The establishment of adequate methods of control of industrial chemicals at the workplace.*
- *The statistical analysis of job-related deaths and injuries.*
- *The provision of healthcare facilities at the workplace.*
- *The fostering of the development and adoption of industrial codes of practice related to occupational safety, health, and welfare.*
- *The development of rehabilitation plans and facilities to assist persons injured at the workplace.*





*The Council also serves as a reviewing body which allows a person aggrieved by an order issued by the Director-General of DOSH to lodge an appeal to the Council.*

### Members of the NCOSH


*Currently, the Deputy Minister of Human Resource is appointed as the Chairman of the NCOSH, while the secretariat is composed of Senior Occupational Safety and Health Officers. The current Council is composed of representatives from the Government (five), employers (three), employees (three), Non-Government Organization (four, including woman representative), and observers (five).*

## Keanggotaan Majlis Negara Bagi Keselamatan Dan Kesihatan Pekerjaan (Kementerian Sumber Manusia)

### Members Of The National Council For Occupational Safety And Health (Ministry Of Human Resources)

Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
A. Pengerusi dan Timbalan Pengerusi   <i>Chairman and Vice Chairman</i>		
1.	 <p>YB Senator Dato' Maznah Mazlan Pengerusi   <i>Chairman</i></p>	<p>Timbalan Menteri Sumber Manusia, Aras 9, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya. <i>Deputy Minister of Human Resources, Level 9, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya.</i></p>
2.	 <p>YBhg Dato' Seri Zainal Rahim bin Seman Timbalan Pengerusi   <i>Vice Chairman</i></p>	<p>Ketua Setiausaha, Kementerian Sumber Manusia, Aras 9, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya. <i>Secretary-General, Ministry of Human Resources, Level 9, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya.</i></p>
B. Wakil Kerajaan   <i>Government Representatives</i>		
3.	 <p>YBhg Datuk Dr. Lokman Hakim bin Sulaiman</p>	<p>Timbalan Ketua Pengarah (Kesihatan Awam), Kementerian Kesihatan Malaysia, Aras 12, Blok E7, Kompleks E, Pusat Pentadbiran Kerajaan Persekutuan, 62590 Wilayah Persekutuan Putrajaya. <i>Deputy Director-General (Public Health) Ministry of Health Malaysia, Level 12, Blok E7, Kompleks E, Pusat Pentadbiran Kerajaan Persekutuan, 62590 Wilayah Persekutuan Putrajaya.</i></p>
4.	 <p>YBhg Dato' Wan Khazanah binti Ismail</p>	<p>Timbalan Ketua Setiausaha (Pengurusan), Kementerian Pelajaran Malaysia (KPM), Tingkat 6, Blok E8, Kompleks E, Pusat Pentadbiran Kerajaan Persekutuan, 62604 Wilayah Persekutuan Putrajaya. <i>Deputy Secretary-General (Management), Ministry of Education Malaysia (MoE), Level 6, Blok E8, Kompleks E, Pusat Pentadbiran Kerajaan Persekutuan, 62604 Wilayah Persekutuan Putrajaya.</i></p>






Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
5.	 Puan Rohana binti Ramly	Timbalan Ketua Pegawai Operasi, SME Corp Malaysia, Level 6, SME 1, Blok B, Lot E, Jalan Stesen Sentral 2, Kuala Lumpur Sentral, 50470 Kuala Lumpur. <i>Deputy Chief Operational Officer,            SME Corp Malaysia,            Level 6, SME 1, Blok B,            Lot E, Jalan Stesen Sentral 2,            Kuala Lumpur Sentral,            50470 Kuala Lumpur.</i>


C. Wakil Majikan | *Employer Representatives*

6.	 YBhg Datuk Jeffery Ong Cheng Lock	Pengerusi, Persekutuan Pekilang-pekilang Malaysia (FMM) Cawangan Melaka, D3-4, Plaza Jayamuda, Jalan Pelanduk Putih, Off Jalan Ong Kim Wee, 75300 Melaka. <i>Chairman,            Federation Malaysia Manufacturer (FMM)            Melaka Branch,            D3-4, Plaza Jayamuda,            Jalan Pelanduk Putih,            Off Jalan Ong Kim Wee,            75300 Melaka.</i>
7.	 En. Foo Chek Lee	Timbalan Presiden, Persatuan Pemborong Binaan Malaysia (MBAM), 2-1 Jalan 2/109E, Desa Business Park, Taman Desa, Off Jalan Klang Lama, 58100 Kuala Lumpur. <i>Vice President,            Master Builders Association Malaysia (MBAM),            2-1 Jalan 2/109E,            Desa Business Park, Taman Desa,            Off Jalan Klang Lama,            58100 Kuala Lumpur.</i>
8.	 Lt. Kol (K) Dr. Sam Quah Sin Chye	Ahli Majlis, Persekutuan Majikan-majikan Malaysia, 3A06 – 3A07, Blok A, Pusat Dagangan Phileo Damansara 11, No. 15, Jalan 16/11, Off Jalan Damansara, 46350 Petaling Jaya, Selangor. <i>Member of Malaysian Employers Federation,            3A06 – 3A07, Blok A, Pusat Dagangan Phileo            Damansara 11,            No. 15, Jalan 16/11, Off Jalan Damansara,            46350 Petaling Jaya,            Selangor.</i>

Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
D. Wakil Pekerja   <i>Workers' Representatives</i>		
9.	 <p>YBhg Dato' Haji Omar bin Osman</p>	<p>Presiden, Kongress Kesatuan Pekerja-Pekerja di dalam Perkhidmatan Awam (CUEPACS), Wisma CUEPACS, 34A, Jalan Gajah, Off Jalan Yew, Pudu, 55100 Kuala Lumpur.</p> <p><i>President, The Congress of Unions of Employees in the Public and Civil Services (CUEPACS), Wisma CUEPACS, 34A, Jalan Gajah Off Jalan Yew, Pudu, 55100 Kuala Lumpur.</i></p>
10.	 <p>En. Mohammad Hamdan bin H. Dorhalim</p>	<p>Timbalan Pengerusi, Kongres Kesatuan Sekerja Malaysia (MTUC), Wisma MTUC, 10-5, Jalan USJ 9/5T, 47620 Subang Jaya, Selangor.</p> <p><i>Vice Chairman, Malaysian Trades Union Congress (MTUC) Wisma MTUC, 10-5, Jalan USJ 9/5T, 47620 Subang Jaya, Selangor.</i></p>
11.	 <p>Pn. Minah binti Ramli</p>	<p>Setiausaha, Kongres Kesatuan Sekerja Malaysia (MTUC), Wisma MTUC, 10-5, Jalan USJ 9/5T, 47620 Subang Jaya, Selangor. (Kesatuan Kakitangan Am Universiti Malaya)</p> <p><i>Secretary, Malaysian Trades Union Congress (MTUC) Wisma MTUC, 10-5, Jalan USJ 9/5T, 47620 Subang Jaya, Selangor. (General Workers' Union, University of Malaya)</i></p>
E. Pertubuhan Bukan Kerajaan   <i>Non-Government Organization</i>		
12.	 <p>En. Chua Tiam Wee</p>	<p>Presiden, Persatuan Perusahaan Kecil dan Sederhana Malaysia, 5-5, Jalan USJ9/5Q, Subang Business Centre, 47620 Subang Jaya, Selangor.</p> <p><i>President, Small and Medium Enterprises Association (SAMENTA) Malaysia 5-5, Jalan USJ9/5Q, Subang Business Centre, 47620 Subang Jaya, Selangor.</i></p>

Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
13.	 <p>Hajjah Rosmawati binti Haji Lasuki</p>	<p>Pengerusi, Persatuan Pekerja Wanita Kumpulan Yayasan Sabah, Aras 21, Menara Tun Mustapha, Telok Likas, 88817 Kota Kinabalu, Sabah. <i>Chairman, Persatuan Pekerja Wanita Kumpulan Yayasan Sabah, 21 Floor, Menara Tun Mustapha, Telok Likas, 88817 Kota Kinabalu, Sabah.</i></p>
14.	 <p>Ir. Fuad bin Abas</p>	<p>Presiden, Persatuan Keselamatan dan Kesihatan Pekerjaan Malaysia (MSOSH), Aras 4, Wisma PERKESO, Lot 141, Jalan Selangor, Seksyen 6, 46990 Petaling Jaya, Selangor. <i>President, Malaysian Society of Occupational Safety and Health (MSOSH) Level 4, Wisma PERKESO, Lot 141, Jalan Selangor, Seksyen 6, 46990 Petaling Jaya, Selangor.</i></p>
15.	 <p>Puan Lok Yim Pheng</p>	<p>Setiausaha Agung, Kesatuan Perkhidmatan Perguruan Kebangsaan Malaysia, Wisma NUTP, No. 13B, Jalan Murai Dua, Off Jalan Ipoh, 51100 Kuala Lumpur. <i>General-Secretary, National Union of the Teaching Profession, Wisma NUTP, No. 13B, Jalan Murai Dua, Off Jalan Ipoh, 51100 Kuala Lumpur.</i></p>

#### F. Pemerhati | Observers

1.	 <p>YBhg Dato' Ir. Dr. Johari bin Basri</p>	<p>Ketua Pengarah, Jabatan Keselamatan dan Kesihatan Pekerjaan, Aras 2, 3, &amp; 4, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya. <i>Director-General, Department of Occupational Safety and Health, Level 2, 3 &amp; 4, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya.</i></p>
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Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
2.	 <p>YBhg Datuk K. Selvarajah</p>	<p>Ketua Eksekutif, Pertubuhan Keselamatan Sosial (PERKESO), 281, Menara PERKESO, Jalan Ampang, 50538 Kuala Lumpur. <i>Chief Executive, Social Security Organization of Malaysia (SOCSO), 281, Menara PERKESO, Jalan Ampang, 50538 Kuala Lumpur.</i></p>
3.	 <p>Ir. Haji Rosli bin Hussin</p>	<p>Pengarah Eksekutif, Institut Keselamatan dan Kesihatan Pekerjaan Negara (NIOSH), Lot 1, Jalan 15/1, Seksyen 15, 43650 Bandar Baru Bangi, Selangor. <i>Executive Director, National Institute of Occupational Safety and Health (NIOSH), Lot 1, Jalan 15/1, Seksyen 15, 43650 Bandar Baru Bangi, Selangor.</i></p>
4.	 <p>En. Razali bin Ab. Malik</p>	<p>Pegawai Tadbir dan Diplomatik, Kementerian Perusahaan Perladangan dan Komoditi Malaysia (KPPK), No. 15, Aras 6-13, Persiaran Perdana, Presint 2, Pusat Pentadbiran Kerajaan Persekutuan, 62654 Wilayah Persekutuan Putrajaya. <i>Administrative and Diplomatic Officer, Malaysian Ministry of Plantation Industries and Commodities, No. 15, Level 6 – 13, Persiaran Perdana, Presint 2, Pusat Pentadbiran Kerajaan Persekutuan, 62654 Putrajaya.</i></p>
5.	 <p>YBhg Profesor Datuk Dr. Omar bin Shawkataly</p>	<p>Ketua, Unit Keselamatan dan Kesihatan Pekerjaan, Universiti Sains Malaysia, 11800 Minden, Pulau Pinang. <i>Head, Occupational Safety and Health Unit, Universiti Sains Malaysia, 11800 Minden, Pulau Pinang.</i></p>

Bil. No.	Nama   Name	Jawatan & Organisasi Designation & Organisation
G. Setiausaha   <i>Secretary</i>		
	 En. Azman bin Hussain @ Hussin	Setiausaha, Majlis Negara Bagi Keselamatan dan Kesihatan Pekerjaan, Aras 4, Blok D3, Kompleks D, Pusat Pentadbiran Kerajaan Persekutuan, 62530 Wilayah Persekutuan Putrajaya. <i>Secretary,            National Council for Occupational Safety and Health,            Level 4, Blok D3, Kompleks D,            Pusat Pentadbiran Kerajaan Persekutuan,            62530 Putrajaya.</i>

## Mesyuarat Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKKP) 2012

Mesyuarat MNKKP diadakan mengikut kehendak Akta Keselamatan dan Kesihatan Pekerjaan 1994 seperti yang dinyatakan dalam Jadual Kedua yang menyatakan, Menteri hendaklah memanggil mesyuarat pertama Majlis, dan selepas itu Majlis hendaklah bermesyuarat tidak kurang daripada tiga bulan sekali di tempat yang ditetapkan oleh Pengerusi MNKKP. Berikut adalah mesyuarat MNKKP yang diadakan sepanjang 2012:

## *Meetings of the National Council for Occupational Safety and Health (NCOSH) in 2012*

*Meetings of NCOSH were held in accordance with the requirements of the Occupation Safety and Health Act 1994 as set forth in the Second Schedule which stipulates that the Minister should call the first meeting of the Council and thereafter, the Council shall meet not less than once every three months at a venue decided by the Chairman of NCOSH. The list below shows NCOSH meetings held throughout 2012:*

Bil. No.	Tarikh   Date	Tempat Mesyuarat   Meeting Venue
1.	9 April 2012 <i>9 April 2012</i>	Bilik Urusetia 2, Bangunan Parlimen Malaysia, Kuala Lumpur <i>Room 2, Secretariat, Malaysian Parliament Building, Kuala Lumpur</i>
2.	2 Julai 2012 <i>2 July 2012</i>	Hotel Grand Riverview, Kota Bahru, Kelantan <i>Grand Riverview Hotel, Kota Bahru, Kelantan</i>
3.	22 Oktober 2012 <i>22 October 2012</i>	Bilik Mesyuarat Perbadanan Tabung Pembangunan Kemahiran (PTPK), Kuala Lumpur <i>Conference Room, Skills Development Fund Corporation (SDFC), Kuala Lumpur</i>
4.	27 Disember 2012 <i>27 December 2012</i>	Pendang Lake Resort, Kedah <i>Pendang Lake Resort, Kedah</i>



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia mempengerusikan Mesyuarat Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan Bil1/2012 di Bilik Urusetia, Bangunan Parlimen, Kuala Lumpur.  
*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, chairing the National Council for Occupational Safety and Health Meeting No. 1/2012 at the Parliament Building, Kuala Lumpur.*

## Lawatan Kerja MNKKP dalam Negara

Sepanjang tahun 2012, ahli MNKKP telah mengadakan beberapa siri lawatan kerja. Lawatan kerja tersebut bertujuan memberikan pendedahan dan mempertingkatkan pengetahuan dalam keselamatan dan kesihatan pekerjaan. Dalam lawatan tersebut, ahli MNKKP didedahkan kepada isu keselamatan dan kesihatan pekerjaan. Berikut adalah lokasi lawatan yang dilawati oleh ahli MNKKP seperti yang disetujui dalam mesyuarat.

## Working Visits of NCOSH within the Country

*Throughout 2012, members of NCOSH took part in a few series of working visits. The working visits exposed the members to, and enhanced their knowledge of, occupational safety and health. From these visits, members of the NCOSH were exposed to issues relating to occupational safety and health. The following list shows the locations visited by members of the NCOSH as approved in the meetings:*

Bil. No.	Tarikh   Date	Aktiviti   Activity
1.	17 Januari 2012 <i>17 Jan. 2012</i>	Lawatan Pengerusi Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKKP) ke Pusat Latihan Pembangunan Industri Perakayuan (WISDEC). <i>Visit of Chairman of National Council for Occupational Safety and Health (NCOSH) to the Timber Industry Development Training Centre (WISDEC).</i>
2.	10 Februari 2012 <i>10 Feb. 2012</i>	Lawatan Pengerusi Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNK-KP) ke Kilang Kualiti Kitar Alam UEM Environment Sdn Bhd. <i>Visit of Chairman of National Council for Occupational Safety and Health (NCOSH) to Kilang Kualiti Kitar Alam UEM Environment Sdn Bhd.</i>
3.	27 Disember 2012 <i>27 Dec. 2012</i>	Lawatan ahli Majlis Negara bagi Keselamatan dan Kesihatan Pekerjaan (MNKKP) ke Petronas Fertilizer Kedah Sdn Bhd. <i>Visit of members of National Council for Occupational Safety and Health (NCOSH) to Petronas Fertilizer Kedah Sdn Bhd.</i>





YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia bersama pegawai JKKP Negeri Sembilan dan kakitangan Kualiti Alam Sekitar, Negeri Sembilan ketika melawat Kilang Kualiti Alam Sekitar Sdn Bhd Bukit Nanas, Negeri Sembilan.  
*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, with officers of the DOSH Negeri Sembilan and staff of the Kualiti Alam Sekitar, Negeri Sembilan, during visit to Kilang Kualiti Alam Sekitar Sdn Bhd Bukit Nanas, Negeri Sembilan.*

## Penganjuran Majlis:

Sepanjang tahun 2012, MNKKP turut terlibat dalam penganjuran majlis seperti dalam jadual di bawah.

## Events Organised by the Council:

*Throughout 2012, the NCOSH was involved in the organisation of events shown in the table below:*

Bil. No.	Tarikh   Date	Aktiviti/Program Activity/Programme	Tempat   Venue	Perasmi   Officiating Officer
1	19 Mac 2012 19 March 2012	Malam Menteri Sumber Manusia Bersama Media Sempena Pelancaran Garis Panduan <i>Safework Practices for Media Professionals</i> <i>The Minister of Human Resources with the Media Night on the occasion of the launching of the Safe Work Practices for Media Professional Guidelines.</i>	Hotel Seri Pacific, Kuala Lumpur <i>Seri Pacific Hotel, Kuala Lumpur</i>	YB Datuk Seri S. Subramaniam Menteri Sumber Manusia <i>Minister of Human Resources</i>
2	28 April 2012 28 April 2012	Sambutan Hari Sedunia bagi Keselamatan dan Kesihatan di Tempat Kerja 2012 <i>Celebrating Safety and Health in the Workplace World Day 2012.</i>	Pekarangan Dewan Orang Ramai Muadzam Shah, Muadzam Shah, Pahang <i>Concourse of Dewan Orang Ramai Muadzam Shah, Muadzam Shah, Pahang</i>	YB Datuk Seri S. Subramaniam Menteri Sumber Manusia <i>Minister of Human Resources</i>

Bil. No.	Tarikh   Date	Aktiviti/Program Activity/Programme	Tempat   Venue	Perasmi   Officiating Officer
3	14 Mei 2012 14 May 2012	Majlis Pelancaran Garis Panduan Pengurusan Merkuri dalam Industri Minyak dan Gas <i>Reception for the launching of the Guidelines for Mercury Management in the Oil and Gas Industry.</i>	Awana Kijal Resort, Kerteh, Terengganu <i>Awana Kijal Resort, Kerteh, Terengganu</i>	YB Senator Dato' Maznah Mazlan Timbalan Menteri Sumber Manusia <i>Deputy Minister of Human Resources</i>
4	8 Julai 2012 8 July 2012	Program Kesedaran Keselamatan dan Kesihatan di Sekolah Peringkat Negeri Terengganu 2012 <i>2012 Terengganu State Level Safety and Health Awareness Programme for Schools</i>	Sekolah Menengah Teknik Kuala Terengganu, Terengganu <i>Sekolah Menengah Teknik Kuala Terengganu, Terengganu</i>	YB Senator Dato' Maznah Mazlan Timbalan Menteri Sumber Manusia <i>Deputy Minister of Human Resources</i>
5	9 Julai 2012 9 July 2012	Majlis Pelancaran Minggu Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 <i>Reception for the launching of the 2012 National Occupational Safety and Health Week</i>	Pusat Maritim Putrajaya <i>Maritime Centre, Putrajaya</i>	YB Datuk Seri S. Subramaniam Menteri Sumber Manusia <i>Minister of Human Resources</i>
6	12 Julai 2012 12 July 2012	Program Kesedaran Keselamatan dan Kesihatan di Sekolah Peringkat Negeri Melaka 2012 <i>2012 Melaka State Level Safety and Health Awareness Programme for Schools</i>	Sekolah Menengah Teknik Bukit Katil, Melaka <i>Sekolah Menengah Teknik Bukit Katil, Melaka</i>	YB Senator Dato' Maznah Mazlan Timbalan Menteri Sumber Manusia <i>Deputy Minister of Human Resources</i>
7	14 Julai 2012 14 July 2012	Karnival Keselamatan dan Kesihatan Pekerjaan dalam Sektor Pertanian Peringkat Zon Selatan 2012 <i>2012 Carnival of Occupational Safety and Health in the Agricultural Sector, Southern Zone</i>	Pusat Latihan FELCRA, Tebing Tinggi, Segamat, Johor <i>Pusat Latihan FELCRA, Tebing Tinggi, Segamat, Johor</i>	YB Datuk Seri S. Subramaniam Menteri Sumber Manusia <i>Minister of Human Resources</i>
8	17 Julai 2012 17 July 2012	Karnival Keselamatan dan Kesihatan Pekerjaan dalam Sektor Pertanian Peringkat Zon Utara 2012 <i>2012 Carnival of Occupational Safety and Health in the Agricultural Sector, Northern Zone</i>	Hotel Seri Malaysia, Kangar, Perlis <i>Seri Malaysia Hotel, Kangar, Perlis</i>	YB Tuan Haji Sabry bin Ahmad, EXCO Pertanian dan Asas Tani Negeri Perlis <i>State Executive Council Member for Agriculture and Agro-based Industries, Perlis</i>
9	19 Julai 2012 19 July 2012	Program Kesedaran Keselamatan dan Kesihatan di Sekolah Peringkat Wilayah Persekutuan Kuala Lumpur 2012 <i>2012 Kuala Lumpur Federal Territory Level Safety and Health Awareness Programme for Schools</i>	Sekolah Menengah Padang Tembak, Kuala Lumpur <i>Sekolah Menengah Padang Tembak, Kuala Lumpur</i>	YB Senator Dato' Maznah Mazlan Timbalan Menteri Sumber Manusia <i>Deputy Minister of Human Resources</i>

Bil. No.	Tarikh   Date	Aktiviti/Program Activity/Programme	Tempat   Venue	Perasmi   Officiating Officer
10	30 Oktober 2012 <i>30 October 2012</i>	Majlis Anugerah Cemerlang Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 <i>Reception for 2012 National Occupational Safety and Health Excellence Awards</i>	Pusat Konvensyen Antarabangsa Putrajaya (PICC) <i>Putrajaya International Convention Centre (PICC)</i>	YB Datuk Seri S. Subramaniam Menteri Sumber Manusia <i>Minister of Human Resources</i>
11	6 Disember 2012 <i>6 December 2012</i>	Seminar Keselamatan dan Kesihatan Pekerjaan di Tapak Bina 2012 <i>2012 Occupational Safety and Health in Construction Site Seminar</i>	Pusat Konvensyen Shah Alam (SACC) <i>Shah Alam Convention Centre (SACC)</i>	YB Senator Dato' Maznah Mazlan Timbalan Menteri Sumber Manusia <i>Deputy Minister of Human Resources</i>

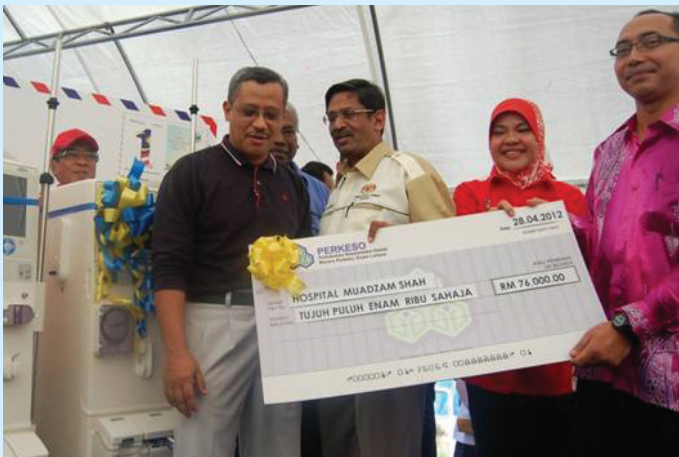


YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia menyempurnakan gimik pelancaran garis panduan *Safework Practices for Media Professionals* di Hotel Seri Pacific, Kuala Lumpur pada 19 Mac 2012  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, launching the Guidelines entitled Safe Work Practices for Media Professional at Seri Pacific Hotel, Kuala Lumpur on 19 March 2012.*



YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia bersama YB Senator Dato' Maznah Mazlan, Pengerusi MNKKP ketika pelancaran setem KKP semasa majlis sambutan Hari Sedunia Bagi Keselamatan dan Kesihatan di Tempat Kerja 2012 di Muadzam Shah, Pahang pada 28 April 2012.  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, with Senator Dato' Maznah Mazlan, Chairman of NCOSH, when launching OSH stamps in a reception celebrating the 2012 World Day for Safety and Health at the Work Place at Muadzam Shah, Pahang on 28 April 2012.*





YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia menyerahkan bantuan mesin dialisis kepada wakil Hospital Muadzam Shah dalam majlis sambutan Hari Sedunia Bagi Keselamatan dan Kesihatan di Tempat Kerja 2012 di Muadzam Shah, Pahang pada 28 April 2012.  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, handing over dialysis machine aid to a representative of Hospital Muadzam Shah in an event celebrating 2012 World Day for Safety and Health at the Work Place at Muadzam Shah, Pahang on 28 April 2012.*



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyempurnakan gimik pelancaran Garis Panduan Pengurusan Merkuri dalam Industri Minyak dan Gas di Awana Kijal Resort, Kerteh, Terengganu pada 14 Mei 2012.  
*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, completing the launching gimmick of Guidelines for Mercury Management in Oil and Gas Industry at Awana Kijal Resort, Kerteh, Terengganu on 14 May 2012.*



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyempurnakan gimik pelancaran Program Kesedaran Keselamatan dan Kesihatan Pekerjaan di Sekolah Peringkat Negeri Terengganu 2012 di Sekolah Menengah Teknik Kuala Terengganu, Terengganu pada 8 Julai 2012.  
*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, completing the launching gimmick of the 2012 Occupational Safety and Health Awareness Programme for Schools in Terengganu at Sekolah Menengah Teknik Kuala Terengganu, Terengganu On 8 July 2012.*



YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia bersama YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia merasmikan sambutan Minggu Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 di Pusat Maritim Putrajaya pada 9 Julai 2012.  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, with Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, officiating the 2012 National Level Celebration of Occupational Safety and Health at the Maritime Centre, Putrajaya on 9 July 2012.*



YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia, bersama YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyampaikan topi keledar dan jaket keselamatan kepada pekerja yang terpilih dalam majlis sambutan Minggu Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 di Pusat Maritim Putrajaya pada 9 Julai 2012.  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, with Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, presenting safety helmets and jackets to selected workers in a event for 2012 National Level Celebration of Occupational Safety and Health Week, at the Maritime Centre, Putrajaya on 9 July 2012.*



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyempurnakan Majlis Perasmian Program Kesedaran Keselamatan dan Kesihatan Pekerjaan di Sekolah 2012 peringkat negeri Melaka di Sekolah Menengah Teknik Bukit Katil, Melaka pada 12 Julai 2012.  
*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, officiating the launching of the 2012 Melaka Occupational Safety and Health Awareness Programme at Sekolah Menengah Teknik Bukit Katil, Melaka on 12 July 2012.*



YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia bersama YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyempurnakan gimik perasmian Karnival Keselamatan dan Kesihatan Pekerjaan dalam Sektor Pertanian 2012, Zon Selatan, di Pusat Latihan FELCRA, Tebing Tinggi, Segamat, Johor pada 14 Julai 2012.  
*Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, with Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, completing the launching gimmick for 2012 Southern Zone Carnival of Occupational Safety and Health in the Agricultural Sector, at Pusat Latihan FELCRA, Tebing Tinggi, Segamat, Johor on 14 July 2012.*



YB Tuan Haji Sabry bin Ahmad, EXCO Pertanian dan Asas Tani Negeri Perlis bersama En. Idris bin Abdul Rahman, Pengarah JKPP Negeri Perlis menyempurnakan perasmian Karnival Keselamatan dan Kesihatan Pekerjaan dalam Sektor Pertanian, Zon Utara, di Hotel Seri Malaysia, Kangar, Perlis pada 17 Julai 2012.  
*Mr. Sabry bin Ahmad, Perlis State Executive Councilor for Agriculture and Agro-based Industries, with Mr. Idris bin Abdul Rahman, Perlis State Director of DOOSH, officiating the 2012 Northern Zone Carnival of Occupational Safety and Health in the Agricultural Sector, at Hotel Seri Malaysia, Kangar, Perlis on 17 July 2012.*





YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyaksikan majlis menandatangani perjanjian persefahaman (MoU) antara Petronas Dagangan Berhad dengan Sekolah Menengah Padang Tembak, Kuala Lumpur semasa Program Kesedaran Keselamatan dan Kesihatan Pekerjaan di Sekolah 2012, peringkat Wilayah Persekutuan pada 19 Julai 2012. *Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, witnessing the signing of a Memorandum of Understanding (MoU) between Petronas Dagangan Berhad and Sekolah Menengah Padang Tembak, Kuala Lumpur, during the 2012 Federal Territory School Level Occupational Safety and Health Awareness Programme on 19 July 2012.*



Para pemenang Anugerah Cemerlang Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 bergambar bersama YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia dan orang kenamaan lain di Pusat Konvensyen Antarabangsa Putrajaya pada 30 Oktober 2012. *Winners of the 2012 National Occupational Safety and Health Awards in a photo session with Datuk Seri Dr. S. Subramaniam, Minister of Human Resources, and other VIPs at the Putrajaya International Convention Centre (PICC) on 30 October 2012.*



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia menyempurnakan gimik perasmian Seminar Keselamatan dan Kesihatan Pekerjaan dalam Sektor Pembinaan 2012 sambil disaksikan oleh YBhg Dato' Ir. Dr. Johari Basri, Ketua Pengarah JKKP Malaysia dan En. Foo Chek Lee, ahli MNKKP di Pusat Konvensyen Shah Alam (SACC) pada 6 Disember 2012. *Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, completing the launching gimmick of 2012 Seminar of Occupational Safety and Health in the Construction Sector, witnessed by Dato' Ir. Dr. Johari Basri, Director-General of DOSH Malaysia, and Mr. Foo Chek Lee, Member of the NCOSH, at the Shah Alam Convention Centre (SACC) on 6 December 2012.*



YB Datuk Seri Dr. S. Subramaniam, Menteri Sumber Manusia bersama-sama YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia, YBhg Dato' Seri Zainal Rahim bin Senin, Ketua Setiausaha Kementerian Sumber Manusia dan YBhg Dato' Ir. Dr. Johari Basri, Ketua Pengarah JKKP Malaysia menyempurnakan gimik perasmian Majlis Anugerah Cemerlang Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 di Pusat Konvensyen Antarabangsa Putrajaya pada 30 Oktober 2012. *YB Datuk Seri Dr. S. Subramaniam, Minister of Human Resources along with YB Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, YBhg Dato' Seri Zainal Rahim bin Senin, Secretary-General of the Ministry of Human Resources and Dato' Ir. Dr. Johari Basri, Director-General of DOSH Malaysia complete opening ceremony of Excellence Awards National Occupational Safety and Health 2012 at the Putrajaya International Convention Centre on October 30, 2012.*



## Program Publisiti

Sepanjang tahun 2012, MNKKP telah menjalankan publisiti melalui pelbagai medium komunikasi seperti media cetak, media elektronik, dan laman sesawang. Melalui media cetak, MNKKP giat mempromosi program seminar, kempen, dan Anugerah Cemerlang Keselamatan dan Kesihatan Pekerjaan Kebangsaan dalam akhbar utama seperti Berita Harian dan The News Straits Times dan akhbar lain. Program sebegini adalah amat penting untuk memastikan orang awam dapat mengetahui betapa pentingnya aspek keselamatan dan kesihatan dalam aktiviti pekerjaan mereka sehari-hari.

## Publicity Programme

Throughout 2012, the NCOSH conducted publicity activities through various communication media such as the print media, electronic media and the Internet. Through the print media, the NCOSH actively promoted seminar programmes, campaign and the National Occupational Safety and Health Excellence Awards in major newspapers such as Berita Harian and the New Straits Times and others. Such programmes were very important in ensuring the public understands the importance of safety and health aspects in their daily work routines.



Ir. Mohtar Musri, Timbalan Ketua Pengarah (Operasi) JKKP Malaysia diwawancara pada rancangan Selamat Pagi Malaysia sempena sambutan Minggu Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 di Angkasapuri, Kuala Lumpur.

*Ir. Mohtar Musri, Deputy Director-General (Operations) of the DOSH, being interviewed in the Selamat Pagi Malaysia in conjunction with the 2012 National Occupational Safety and Health Week celebration, at the Angkasapuri, Kuala Lumpur.*



YB Senator Dato' Maznah Mazlan, Timbalan Menteri Sumber Manusia ketika sidang media Program Kesedaran Keselamatan dan Kesihatan Pekerjaan di Sekolah 2012 peringkat negeri Terengganu di Sekolah Menengah Teknik Terengganu.

*Senator Dato' Maznah Mazlan, Deputy Minister of Human Resources, in a media conference for Terengganu Occupational Safety and Health Awareness Programme in Schools 2012, at Sekolah Menengah Teknik, Terengganu.*



YB Datuk Seri Dr. S. Subramaniam ketika sidang media Majlis Pelancaran Minggu Keselamatan dan Kesihatan Pekerjaan Kebangsaan 2012 di Pusat Maritim Putrajaya.

*Datuk Seri Dr. S. Subramaniam in a media conference held in conjunction with the launching of the 2012 National Occupational Safety and Health Week, at the Maritime Centre, Putrajaya.*



# Sorotan 2012

## *2012 Highlight*

























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