Annex 3 Evaluation Grid

Achievement of Project

<table>
<tr><th>Items</th><th>Evaluation Items</th><th>Confirmation Items (or Indicators)</th><th>Results</th><th>Page of the Report</th></tr>
<tr><td>Confirmation of Achievement

(Progress of Each Evaluation Item will be surveyed)</td><td>Overall Goal:

Trend of occupational accidents and diseases in industries is decreased.</td><td>1. Decrease of occupational accidents rates
2. Decrease of occupational diseases rates</td><td>
• Compared with in 1995, the reported number of death and injured by occupational accidents has been decreased as well as the occupational death and injured rates per 10,000 employee.
No. of Accident Reported
<table>
<tr><th></th><th>1995</th><th>1996</th><th>1997</th><th>1998</th><th>1999</th></tr>
<tr><td>Total Accidents Reported</td><td>114,134</td><td>106,508</td><td>86,589</td><td>85,338</td><td>92,074</td></tr>
<tr><td>Total Accidents per 10,000 employees</td><td>295</td><td>260</td><td>207</td><td>197</td><td>200</td></tr>
<tr><th></th><th>2000</th><th>2001</th><th>2002</th><th>2003</th><th>2004</th></tr>
<tr><td>Total Accidents Reported</td><td>95,006</td><td>85,926</td><td>81,810</td><td>73,858</td><td>69,117</td></tr>
<tr><td>Total Accidents per 10,000 employees</td><td>194</td><td>211</td><td>201</td><td>167</td><td>n.a.</td></tr>
</table>
(Source: Project Report, prepared based on SOCSO report)

• According to the statistics available, the incidence of occupational disease has been downward, even though there is a doubt whether those figures reflect the actual situation.
Number of cases reported
<table>
<tr><td>Occupational Disease</td><td>1995</td><td>1996</td><td>1997</td><td>1998</td><td>1999</td></tr>
<tr><td></td><td>1,248</td><td>1,089</td><td>832</td><td>178</td><td>192</td></tr>
<tr><td>Occupational Disease</td><td>2000</td><td>2001</td><td>2002</td><td>2003</td><td>2004</td></tr>
<tr><td></td><td>278</td><td>204</td><td>216</td><td>189</td><td>N.A.</td></tr>
</table>
(Source: Project Report, ,made based on SOCSO report)

• In terms of identification and reporting the incidence of occupational diseases, to increase awareness of doctors and nurses is one of important issue. For this, NIOSH has conducted courses to occupational health doctors and nurses. The number of participants has also increased as follows.
</td><td>P4,5

P7, 8</td></tr>
</table>

[1] " Data for the Final Evaluation of the Project for 'The Capacity Building of National Institute of Occupational Safety and Health".(Prepared by the Project, on 15th Sep., 2005)
Abbreviations: **IH Division**: Industrial Hygiene. Division; **OH Division**: Occupational Health Division; **ICT Unit** : Information Service, Communication & Technology, Unit; **Training Division**: High Education& Training Development Division; Training Division; **OS Division**: Occupational Safety Division.

Items	Evaluation Items	Confirmation Items (or Indicators)	Results	Page of the Report

Number of Participants at Courses for OHS Practitioners

	2002	2003	2004	2005	Total
Occupational Health Doctor (OHD)	87	72	85	248	492
Workshop on introduction to Occupational Health	-	-	454	-	-
Occupational Health Nurse	68	54	29	51	202
Hearing Loss Prevention & Audiometric Testing Programme	37	21	27	62	147

(Source: Project Report)

- At the same time, it produced increasing number of competent persons on occupational hygiene as below.

Number of Participants to Competency Courses

	2001	2002	2003	2004	2005	Total
Chemical Health Risk Assessor	250	106	92	166	72	686
Hygiene Technician for Chemical Exposure Monitoring	24	124	73	46	24	291
Hygiene Technician for Testing Of Ventilation System	0	128	96	61	24	309
Competent Person for Noise Exposure Monitoring	35	49	26	29	19	158

(Source: Project Report)

- DOSH now intends to reinforce its enforcement activities for OSH.
- The number of competent person registered at DOSH has increased.

Type of Registration (Industrial Health)

	2000	2001	2002	2003
Noise Monitoring	23	26	30	40
Lead Monitoring	2	6	16	Replaced in Hygiene Technician I
Mineral Dust Monitoring	7	8	8	
Asbestos Monitoring	3	3	4	
LEV Inspection & Testing	3	3	3	Hygiene Technician II
Occupational Health Doctor	12	117	235	346
Assessor	6	35	123	169
Hygiene Technician I	4	12	16	47
Hygiene Technician II	4	12	16	20

(Source: DOSH Annual Report 2003)

<table>
<tr><th>Items</th><th>Evaluation Items</th><th>Confirmation Items (or Indicators)</th><th>Results</th><th>Page of the Report</th></tr>
<tr><td></td><td></td><td></td><td>• According to interviews to two companies which sent staffs to NIOSH's training course for Safety and Health Officer, actions after the course have been taken and a department in charge of OSH was established. Thus, through training given by NIOSH, the awareness and actions for OSH has been expanded.</td><td></td></tr>
<tr><td></td><td>Project Purpose:

Capacity (technical support, human resource development, collection and dissemination of information) of National Institute of Occupational Safety and Health (NIOSH) is upgraded.</td><td>Capacity of NIOSH (Technical Support)
1. Number of handbooks and guidelines on OSH management prepared directly or in cooperation with other organizations</td><td>1. With assistance of JICA, 4 handbooks, such as 'Organic Solvent and Occupational Health' (February, 2003), 'Practical Hints for the Workplace Checklist (June, 2005)' 'Personal Protective Equipment, Quick Reference for Right Selection, Maintenance and Handling (English, Malaysian)(June 2005) were developed.
• Number of Guideline published by DOSH has increased recently in comparison with before the start of the Project. Since its initial publication of Guideline in 1994, it published 15 guidelines until 2000, while it produced 22 guidelines between 2001 and 2005.</td><td>P11, 12, 13</td></tr>
<tr><td></td><td></td><td>2. Number of health check and measurement on working environment conducted by NIOSH.</td><td>2. During the Project implementation, the Occupational Medicine Center was established in June 2002. The number of Company and Participants visited the center have been as below.
No. of Medical Surveillance
<table>
<tr><th></th><th>2002</th><th>2003</th><th>2004</th><th>2005</th><th>Total</th></tr>
<tr><td>Companies</td><td>11</td><td>30</td><td>25</td><td>30</td><td>96</td></tr>
<tr><td>Participants</td><td>412</td><td>758</td><td>628</td><td>1,261</td><td>3,059</td></tr>
</table>
(Source: Project Report)
Also Mobile clinic service was initiated during 2003 by utilizing the vehicle provided by JICA, the number of participants were 148 in two years of 2003 and 2004, and 928 in 2005. (as of August 2005)
• Measurement of working environment has been implemented in several fields of specialties, such as Organic Solvent, Metal, Dust, Asbestos, Other Chemical, Biological Monitoring, Noise, and LEV system.
• In particular, the number of firms was prominent in the organic solvent and the ventilation sectors: during the period between 2001 and 2005, 29 firms and 35 firms, respectively. One of the factors which increased the demand for the measuring in Performance of LEV system was the new enforcement of OSH (Use and Standards of Exposure of Chemical Hazardous to Health Regulation, 2000).</td><td>P15

P16</td></tr>
</table>

Items	Evaluation Items	Confirmation Items (or Indicators)	Results	Page of the Report
		8. Number of research and development projects conducted by JICA-NIOSH Project	8. The following 6 researches were jointly conducted by NIOSH and the Project. Ergonomics Division ・ Research on "Musculo-skeletal disorders among visual display terminal users"(2001) ・ Study on "Whole body vibration and hand-arm vibration at the job among railway workers"(2003) ・ Study for Ergonomic Improvement at a Car-seat Manufacturing Factory (2004) OH Division / IH Division ・ Making a handbook "Organic solvent and Occupational Health" (2003) IH Division ・ Study on "Exposure, Environment and Biological Monitoring in a battery factory"(2003) ・ Report on Quarry Factories(2004)	P41
		Capacity of NIOSH(Collection and Dissemination of Information) 6. Improvement on quality of information on the occupational accidents and diseases, and number of access.	・ By utilizing the 5 equipment provided by JICA, the computer system was strengthened. The Unit produced 13 OSH videos on topics, such as OSH in Logging, Office work environment, Ergonomics, Contractor Safety Passport System(CSPS), First aid, Motorcycle riding, and OSH song. ・ By storing digital contents of OSH materials in the Juke Box provided by JICA, NIOSH is able to provide branches with a lot of OSH materials on demand. At present, NIOSH has the biggest number of OSH books in Malaysia including 79 books provided by JICA. ・ NIOSH also has focused on OSH information through internet. The contents are updated daily and it has received around 35,000 hits a month. NIOSH developed web-based 'OSH Forum', which is open to public without charge, with current subscribers of 1,523. ・ In addition to static exhibition center in NIOSH which is visited by 3 to 5 groups every week, NIOSH also provides mobile exhibition services to industries.	P29、 P36 P37、74

Items	Evaluation Items	Confirmation Items (or Indicators)	Results	Page of the Report
		7. Evaluation of employers and employees for NIOSH.	7. As for the quality of the lecture of NIOSH, according to the participants of training courses, 116 trainers out of 130 are evaluated as above satisfactory level.	• P39
	<u>Capacity of technical support</u> Output 1: Methods on working environment control are acquired.	1-1. Number of NIOSH staff who has acquired technical skills and degree of their acquirement. 1-2. Conditions of preparation on standard procedure 1-3. Provision of facilities and equipment in NIOSH	1 According to the assessment report produced by each division and interviews to C/Ps, the objective of 'Methods on working environment control are acquired' was achieved. C/Ps acquired knowledge and technical skills from Japanese experts to a considerable extent and gained confidences in performing their activities. In some cases, there is a gap between the extent to which C/Ps utilizes the equipment and the extent to which equipment can be fully utilized. 2 SOPs in document to be shared among staffs are now under preparation. 3 34 equipment were provided.	1 P43 - 46 2 P48 3 P50 -51 (P68-71)
	Output 2: Preventive measures on occupational and work related diseases are developed.	2-1. Number of NIOSH staff who has acquired technical skills and degree of their acquirement. 2-2. Conditions of preparation on standard procedure 2-3. Provision of facilities and equipment in NIOSH	1. According to the assessment report conducted by each division and interviews to C/Ps, the objective of 'Prevention measures on occupational and work related diseases are developed' was achieved. C/Ps gained confidence in performing their activities. 2. Most of equipment has manuals. SOPs in document to be shared among staffs are now under preparation. 3. 16 equipment were provided.	1 P53- 54 2 P56 3 P58 (P68-71)
	Output 3: The system for work control from ergonomic viewpoint is improved.	3-1. Number of NIOSH staff who has acquired technical skills and degree of their acquirement. 3-2. Conditions of preparation on standard procedure 3-3. Provision of facilities and equipment in NIOSH	1 According to the assessment report conducted by each division and interviews to C/Ps, the objective of 'The system for work control from ergonomics viewpoint is improved' was achieved. C/Ps gained confidences in performing their activities. 2 For the 4 equipment, SOPs are developed. 3 15 equipment were provided.	1 P60-62 2 P64-65 3 P67 (P68-71)
	<u>Capacity of human resources</u> Output 4: Occupational Safety and Health (OSH) training programs and research and development activities are improved.	4-1.Condition of preparation of curricula 4-2. Sorts of educational training conducted by NIOSH and number of attendance 4-3. Number of JICA-NIOSH joint research and their reports	4-1 Training modules has been developed by the Training Division of NIOSH. By the change of NIOSH management policy, task of preparation of training modules has been shifted to each Division from this year. 4-2 Refer to the indicator 5 for the Project Purpose. 4-3 Refer to the indicator 8 for the Project Purpose	3 P77-78 4 P80-81 P82-83 5 P85

Items	Evaluation Items	Confirmation Items (or Indicators)	Results	Page of the Report
	Capacity of public information Output 5: Function of collection and dissemination of information for raising of awareness on safety and health are improved.	5-1. Number of seminars and etc. 5-2. Conditions of preparation on information system and number of access	5-1 ・To the present from 2001, joint seminars were held by NIOSH and JICA. The aggregate number of participants for the seminar is 1,930. In 2003, NIOSH held 10 seminars and road shows conducted by NIOSH the aggregate number of participants was 1,275. ・Since August 2003, joint seminars were held jointly with Society of Occupational and Environmental Medicine(SOEM) and JICA. The aggregate number of participants, doctors and paramedical for the seminar was 472. 5-2 ・To the present, 16 NIOSH-JICA newsletters were published. One more newsletter will be published until the end of the Project. ・4 handbooks were published. (Refer to the indicator 1 for the Project Purpose)	3 P88-90 4 P93-94
	Output 6: Function for providing necessary information for policy development is strengthened.	6. Number of information offered to MOHR.	・When short-term experts were dispatched from Japan, they visited the Director General of DOSH under the MOHR. In total 39 times of meeting have been held in order to report the Project activities to DOSH. ・A Japanese expert lectured on prevention of Minamata disease at the seminar held by DOSH.	・P96 -99
	Input (Japan) Expert C/P Training Provision of Equipment Project Local Cost	Differences of planned input and actual input.	・Long –term expert : 9 persons ・Sort –term expert: 37 persons ・Amount of Equipment provided by JICA: 163 Mil. Yen ・C/P Training in Japan: Individual Training 21 persons Group Training 9 persons	・Short Tern Expert (P107-110) ・C/P Training P111-112)
	Input (Malaysia) Building, Facilities C/P Cost for running the project	Ditto	・JICA project office was established at NIOSH ・The relevant divisions for the technical transfer were IH Division, OH Division, and Ergonomics Division. To ICT Unit, JICA provided equipment. Staff members from other division were not excluded from the JICA activities, as a lot of issues overlap among divisions. ・The number of C/Ps were 10 from OH Division, 13 from IH Division, 5 from Training Division, 7 from Ergonomics Division, 7 from OS Division, 15 from IT Division, and Executive Director of NIOSH, and 2 from DOSH. In total, number of C/Ps was 60 persons.	ADD INFO No,3

Items	Evaluation Items	Confirmation Items (or Indicators)	Results	Page of the Report
			(Staff except clerks and secretary) The Cost spent by NIOSH is as below. (RM)	

	2001	2002	2003	2004	2005		2006
					Jan.-Jul.	Aug.-Dec.	
Running Cost	15,000	20,000	25,000	30,000	20,500	14,500	40,000
Equipment Maintenance Cost	35,000	40,000	45,000	50,000	32,000	23,000	60,000
Total Cost	50,000	60,000	70,000	80,000	52,500	37,500	100,000

Progress of Activities

Items	Activities Confirmation Items	Results
Confirmation of Achievement (Progress of Each Activity will be surveyed)	1-1 To study the actual conditions of use and handling, etc. of chemical substances and etc. in enterprises and to determine necessary technical method and scope. 1-2 To acquire the method and technical skill on the identification, sampling, measurement, and evaluation of chemical substances and etc. 1-3 To acquire the evaluation method of exposure level to workers in working environment. 1-4 To acquire the method and technology for the improvement of working environment such as local exhaust ventilation system.	• Implemented as planned. Following techniques were transferred. • Before Mid-term Evaluation • Sampling • "Gas chromatography (Organic Solvents)" • "High performance Liquid Chromatography (Organic Solvents, Biological Monitoring)" • "X-ray diffract-meter (Silica in Dust, Asbestos)" • "Mass analysis(Mineral Dust)" • "Fiber-Counting Method with Phase Microscope (Asbestos Fiber)" • Working Environment improvement with Local Ventilation System • After Mid- term Evaluation • Noise Control • "Biological Monitoring (Heavy Metals)" • "Working Environment Measurement and Evaluation (Heavy Metals)" • Personnel Protective Equipment for Occupational Health • Analytical Method of Ion Chromatography • Chemicals in Primary Industries • Benzen Metabolites Analysis • Quantitative Analysis with X-ray Diffract-meter

Items	Activities Confirmation Items	Results
	2-1 To survey and analyze the actual situation of occurrence of the occupational diseases and the practical situation of medical examination scheme. 2-2 To acquire the technical method of adequate health hazard evaluation on the identified hazardous factors. 2-3 To acquire methods for measures to be taken on the basis of the result of health hazard evaluation. 2-4 To acquire technical skills for proper use of Personal Protective Equipment (PPE) including respirators and hearing protectors.	・Implemented as planned. Following techniques were transferred. **Before Mid-term Evaluation** ・ Evaluation of Health Disorder Caused by Organic Solvent (Measuring System for Nerve Conducting Velocity, Evoked Potential) ・ Evaluation of Health Disorder Caused by Mineral Dust and Asbestos(Taking of Chest X-ray Photo) ・ Evaluation of Health Disorder Caused by Mineral Dust and Asbestos (Reading of Chest X-ray Photo)"(DOSH) ・ Evaluation Method of Health Disorder with Neurobehavioral Test (Occupational Fatigue, Organic Solvent) ・ Evaluation and Countermeasures of Mental Stress in the Workplace **After Mid-term Evaluation** ・ Diagnosis and Prevention of Health Disorder due to Heavy Metals ・ Occupational Respiratory Diseases ・ Occupational Hearing Loss ・ Smoking Control in Workplace ・ Total Health Promotion Plan
	3-1 To identify and analyze the problems in working places from ergonomic viewpoint. 3-2 To acquire technical methods of ergonomic evaluation and improvement for the identified hazardous factors. 3-3 To examine the measures for occupational health based on ergonomic consideration.	・Implemented as planned. Following techniques were transferred. **Before Mid-term Evaluation** ・ Masculo-Skeletal Disorder (Back Pain, Carpal Tunnel Syndromes) ・ Health Disorder Caused by VDT ・ Health Disorder Caused by Heat Stress **After Mid-term Evaluation** ・ Occupational Vibration ・ A comprehensive Measures to Prevent Lumbago (and Introduction of Total Health Promotion Plan) ・ Work Related Musculo-Skeletal Disorder ・ Ergonomic Improvements in Working Conditions ・ Health Disorder Caused by Ergonomic Problem
	4-1 To review existing OSH training programs. 4-2 To grasp the problem of above mentioned programs and training needs. 4-3 To improve existing curricula and develop new curricula.	4-1 to 4-3 ・Training modules have been reviewed by the Training Division. The JICA team has not been involved directly in those procedures. However, according to result of interview to C/Ps, the technical knowledge transferred by JICA has been incorporated in those modules.

Items	Activities Confirmation Items	Results
	4-4 To conduct OSH training for staff in occupational health field. 4-5 To conduct training courses and to prepare guidelines on proper use of Personal Protective Equipment (PPE) including respirators and hearing protectors. 4-6 To conduct research and development activities. 4-7 To conduct preliminary survey to determine the profile of occupational disease in Malaysia for the purpose of planning.	4-4 Implemented as planned. Furthermore, NIOSH are now planning to expand approaches to occupational practitioners. 4-5 Implemented as planned. 4-6 JICA Project has enhanced NIOSH research capability. Apart from providing 79 OSH books for references, JICA experts actively participated in NIOSH research activities. Some of the NIOSH staff members are also involved in the research projects at national level. Executive Director of NIOSH initiated the publication of NIOSH Journal in 2004 and supported in part by Japanese experts. This is one of the positive effects of the Project. 4-7 Cooperation with Malaysia Medical Association, seminars on Occupational Diseases was conducted smoothly.
	5-1 To facilitate OSH information dissemination from NIOSH. 5-2 To publish "The Project News Letters" of the project activities regularly. 5-3 To organize seminars, workshops and exhibitions.	5-1 Implemented as planned. Four handbooks, such as 'Organic Solvent and Occupational Health' (Feb. 2004), 'Practical Hints for the Workplace Checklist (June 2005)' 'Personal Protective Equipment, Quick Reference for Right Selection, Maintenance and Handling (English, Malaysian)(June 2005) were developed. Other OSH materials are prepared in the mode of VCD, etc. 5-2 The interval of JICA- NIOSH newsletter became 3 months after the mid-term evaluation of the project. 5-3 Seminars, workshops, and exhibitions were conducted often by maximizing the opportunity of visitation of Short term expert.
	6-1.To learn the OSH measures on small & medium size enterprises and the supporting system in Japan. ・6-2 To give advice on overall policy based on the Japanese experience in the field of OSH.	・Implemented as planned.

Implementation Process

Items	Confirmation Items	Sub-Item	Result
Implementation Process is reviewed	Appropriateness of Project Implementation Structure and Monitoring Structure	・Appropriateness of monitoring activities for the project progress. (Situation of Conducting of Joint Coordinating Committee, Steering Committee and etc. and Information sharing among related parties)	・JCC has been held almost regularly (twice a year). As an exception, during June 2002 to May 2004 when Dr. Johari, who had been Executive Director of NIOSH since the start of the project, was the Director General of DOSH, JCC has not often been held. This is because the Japanese experts of the Project visited at DOSH in order to report short-term experts activities at around two-month intervals. ・Steering Committee has been held monthly. It has contributed to the smooth planning and implementation of the Project.
		・Appropriateness of Decision Making Structure of NIOSH to contribute to maximizing the achievement of project purpose. (in terms of adjusting activities, organization structure, and funding)	・The management team of NIOSH implemented necessary actions based on the decisions agreed at the Steering Committee smoothly.
		・Appropriateness of revision of PDMs and PO according to the result of Monitoring	・Original PDM was reviewed, modified and agrees as PDM2, at the time of the Mid-term evaluation. No revision or changes of the PDM2 and PO has been conducted.
	Cooperation between Japanese Experts and Malaysian Counterparts	・Frequency of Communalization, Actions taken based on discussion between them ・(and Malaysian government, and Assignment of C/Ps etc.)	・C/Ps requested advices from the long-term experts when needs arise. Sometimes Japanese experts and C/Ps visited clients together and shared the knowledge of Japanese experts aiming at technical transfer. Both Japanese experts and C/Ps evaluate the communication between them were appropriate. ・Miscommunication which occasionally happened because of language and culture gap were considered as not serious.
	Ownership of Malaysian Government	・Project Cost (Assistance from DOSH) ・Appropriateness of assignment of C/Ps ・Utilization(Plan & Actual) of outputs of project	・NIOSH, self-supporting government linked company, has to gain earnings for its sustainability. NIOSH recently has focused on providing trainings and consultancy services to industries, through which it can earn roughly 60 % and 10% of total income respectively. Sometimes, it was difficulties for C/P to attend the JICA project activities because they have to follow their own projects' schedule. ・NIOSH assigned the best available staff as C/Ps. The C/Ps were very enthusiastic to learn from Japanese experts. After Japanese experts left Malaysia, C/Ps have still communicated with them through e-mails and asked for their advices when it is necessary.
	Other measures taken for smooth project implementation	・	・In order to assure technical transfer to C/Ps of NIOSH, the manager of each division specified at least one or two C/Ps who must acquire knowledge by attending all courses of the short –term expert. . ・Project utilized many opportunity for OSH information dissemination. For example, project provides lectures at Conference and Exhibition on OSH (COSH). Also it assisted activities of SOEM and organized seminars jointly.

Evaluation Grid (Five Evaluation Criteria)

Five Evaluation	Evaluation Questions: Item	Sub-Item	Source of Information	Results
Relevance	Consistency of Overall Goal "Trend of Occupational accidents and diseases in industries is decreased." And development policy of Malaysia.		National Development Plan, National Policy for Occupational Health and Safety,	• Chapter 17 'Health' of 'the 8th Malaysian Plan 2001-2005' mentions the importance of OSH at workplace and introduces OSH programs as one of the strategies for improving safety and health. To date, there has been no policy change.
	Consistency of Project Purpose "Capacity of NIOSH is upgraded" and needs of industries of Malaysia		National Policy for Occupational Health and Safety,	• While DOSH has roles of formulation of standards, enforcement, promotion and communication for OSH, NIOSH has responsibility as the national center under MOHR to conduct training programs, consultancy services, information dissemination, and research and development. There has been no policy change. • The demands from industry have varieties and all of them can not be covered by the Project. However the number of consultancy service and measurement of working environment provided by NIOSH has increased in response to the needs of industries. The activities of the project are consistent with the needs of the industries.
			Consistency of Activities of NIOSH and contents of the Project and Rules and regulations stipulated by DOSH	• The laws and regulations stipulated by DOSH include ideas of those of U.K., U.S.A and Japan, etc. Some parts do not necessary accord to ideas of the technical transfer from Japan. However under the project, NIOSH has learnt basic technical knowledge, which is universal and applicable anywhere, and learnt how to apply Japanese good practices into Malaysian OSH practices. Therefore the activities of the Project and NIOSH are consistent with the laws and regulations stipulated by DOSH.
	Consistency of Project Purpose and Japanese ODA Policy		JICA's Country Assistance Plan for Malaysia	• The activities of the Project are consistent with JICA's development assistance policy for Malaysia. 'Development of Human Resources in OSH field' is stated under 'Human Resources Development' of JICA Assistance Plan for Malaysia.
	Appropriateness of Selection of Target Group (as staffs of NIOSH) in terms of achievement of overall goal of the Project.		Stipulation of the organization of NIOSH Roles of NIOSH regulated under National Policy	• In Malaysia, NIOSH is a central training institute linked to MOHR in the field of OSH. Therefore the target of the Project is relevant.
	Appropriateness of the Plan or Approach of the Project		Progress report of the Project Opinion of parties and persons concerned.	• The approach of the Project which includes dispatch of Japanese experts and C/Ps training in Japan were recognized very effective. In Malaysia, C/Ps were able to lean the basic idea of the contents of technical transfer and were able to apply those techniques in

Five Evaluation	Evaluation Questions: Item	Sub-Item	Source of Information	Results
				Malaysia. On the other hand, in Japan they were able to be exposed to the practical OSH application.
	Japan's Technological Advantage		Progress report of the Project Opinion of parties and persons concerned.	・Japan succeeded in reducing frequency of occupational diseases markedly during the rapid economic growth after the World War II. One of the effective Japanese approaches was the implementation of 'Working Environment Control' in addition to 'Personal Control'. Malaysia now encounters similar problems as it rapidly industrializes itself. Therefore, this Japanese approach is proven to be useful for Malaysia. ・Malaysia now encounters similar problems as it rapidly industrializes herself. Therefore, Japanese technology is appropriate for Malaysia to introduce.
Effectiveness	Achievement of Output (Details are described in the Achievement of Project)		・Forecast of the achievement of the each Project Output	・C/Ps acquired knowledge and technical skills from Japanese experts to a considerable extent and gained confidences in performing their activities. Those knowledge and skills are utilized by C/Ps in their daily work, i.e. providing training, consultancy services, information dissemination, research and development, and providing useful information for policy development to DOSH. ・In some cases, vacancies of some positions have not filled up for some period and some techniques are not readily available.
	Achievement of Project Purpose (Details are described in the Achievement of Project)	Clear recognitions of Project purpose among entities and staffs concerned,	Progress report of the Project Opinion of parties and persons concerned.	・Most of C/Ps shared the common understanding about the purpose of the Project.
		1. Capacity of Technical Support	Progress report of the Project Opinion of parties and persons concerned.	・NIOSH published four handbooks. One of them, 'The Organic Solvent and Occupational Health (2003)' was evaluated to be very useful among the staffs of Industrial Hygiene and Occupational Health Divisions. Another, 'Personal Protective Equipment, Quick Reference for Right Selection, Maintenance and Handling' (June, 2005) was also highly appreciated and used as an easy reference for staffs and also for distribution to companies. Those handbooks and others are effectively used in companies whose employees attended NIOSH training courses or seminars. ・NIOSH has initiated the 'Occupational Medicine Mobile Services', by utilizing the vehicle provided by JICA. It is the first in Malaysia. ・NIOSH extended consultancy services. According to C/Ps, NIOSH has gained feedback of satisfaction and better reputation from industries.
		2. Capacity of Human Resource Development	Progress report of the Project Opinion of parties and persons concerned.	・With technical knowledge acquired, NIOSH expanded the variety of training courses, and revised some training modules. Those resulted in increase of number of participants. ・Quality of training has been assessed by the Training Division of NIOSH and it is reported

Five Evaluation	Evaluation Questions: Item	Sub-Item	Source of Information	Results
				that most of participants are satisfied with the quality of the lecturer. However, there may be some rooms for improvement as is mentioned in a interview to participants at the training course for Safety and Health officers by the final evaluation team. One example of the suggestion was to conduct more participatory training in order to share experiences of participants. ・JICA Project has enhanced NIOSH research capability. Apart from providing 79 OSH books for references, JICA experts actively participated in NIOSH research activities. Some of the NIOSH staff members are also involved in the research projects at national level. Executive Director of NIOSH initiated the publication of NIOSH Journal in 2004 and supported in part by Japanese experts. This is one of the positive effects of the Project.
		3. Capacity of Public Information (Collection and Dissemination of information)	Progress report of the Project Opinion of parties and persons concerned.	・With the establishment of good computer system and introduction of Quality Managements System in NIOSH, NIOSH is able to monitor the quality of services provided by NIOSH through the feedbacks from those who had attended or received NIOSH services. ・The effectiveness of the provision of equipment is prominent. ・By utilizing the 5 equipment provided by JICA, the computer system was strengthened. The Unit produced 13 OSH videos on topics, such as OSH in Logging, Office Work Environment, Ergonomics, Contractor Safety Passport System(CSPS), First Aid, Motorcycle riding, and OSH song. ・By storing digital contents of OSH materials in the Juke Box provided by JICA, NIOSH is able to provide branches with a lot of OSH materials on demand. At present, NIOSH has the biggest number of OSH books in Malaysia including 79 books provided by JICA. ・NIOSH also has focused on OSH information through internet. The contents are updated daily and it has received around 35,000 hits a month. NIOSH developed web-based 'OSH Forum', which is open to public without charge, with current subscribers of 1,523. ・In addition to static exhibition center in NIOSH which is visited by 3 to 5 groups every week, NIOSH also provides mobile exhibition services to industries.
	Factors (positive/negative) to affect achievement of the Project purpose except outputs		Progress report of the Project Opinion of parties and persons concerned.	・Resignation of C/Ps has been pointed out as a negative factor which deteriorates the effectiveness of the Project. After Mid-term Evaluation, a 'Training Bond' to C/P who were trained in Japan was introduced. ・During the Project period, in total 8 C/Ps out of 60 resigned from NIOSH. The breakdown of the resigned C/Ps is 3 from IH Division, 2 from OH Division, 2 from Ergonomics Division, 1 from ICT Division.

Five Evaluation	Evaluation Questions: Item	Sub-Item	Source of Information	Results
Efficiency	Appropriateness of Input in terms of quantity, quality and timing, compared to the achieved Output	Japanese side (①Japanese Expert ②C/P Training in Japan ③Provision of Equipment ④Project Local Cost)	Progress report of the Project Opinion of parties and persons concerned. Comparison with Project cost of other similar Project, if available	・According to interviews with C/Ps, Inputs from Japanese side are considered very appropriate. ・As for the dispatches of short-term experts, the selection and sequence of topics for technical transfer are highly appraised. The definite and clear objective of courses provided by short-term experts fulfilled the needs of C/Ps. There are big demands for extending their terms. ・C/P training courses carried out in Japan are evaluated as very useful. It increases not only the understanding of technical knowledge and skills but also their applicability in Malaysia. It also helps C/Ps to understand Japanese work culture related to OSH in Japanese industries. That further strengthened the collaboration between C/Ps and Japanese experts in many ways. ・Most of inputs are utilized efficiently. As is indicated in the attachment of this report, most equipment are regularly used. However the frequency of usage of equipment depends on how much demand arise from industry. Since NIOSH is a National Center for OSH field, which is supposed to be ready to meet any future demands, even less frequently used equipment was introduced to NIOSH.
		Malaysian side (①Land, Building, Facilities, ②Assignment of C/P, Stability of C/P, ③Project Management Cost for NIOSH)	Ditto	・All inputs from Malaysian side are allocated without any delay. C/P selection is also conducted by selecting the best staffs available. However the resignation of C/P is a factor which hinders efficiency of the Project.
	Effectiveness of utilization of Input (Personnel, Equipment, and Fund)		Progress report of the Project Opinion of parties and persons concerned.	・Most of inputs are maximized efficiently. As is indicated in the attachment of this report, most equipment are regularly used. However the frequency of usage of equipment depends on how much demand arise from industry. Since NIOSH is a National Center for OSH field, which is supposed to be ready to meet any future demands, even less frequently used equipment was introduced to NIOSH.
	Linkage with other donor Project in terms of maximizing the achievement of the Project Purpose		Progress report of the Project Opinion of parties and persons concerned. Documents of donor Project, if available	・There has been no assistance to NIOSH. ・At the outset of the Project in 2000, there were two donor-assisted Projects. One is 'OSH Institutional Capacity Building' assisted by UNDP (in collaboration with ILO) to DOSH from 2000 to 2003, and 'OSH Programme for Malaysian Workers in Electronic and Construction Industries' to Malaysia Labor's Association' by Danish Cooperation for Environment and Development (DANCED) from 2000 to 2003. During the implementation periods, the Project coordinated with those institutions. After those projects' completion, there has been no donor-assisted project to DOSH.

Five Evaluation	Evaluation Questions: Item	Sub-Item	Source of Information	Results
Impact (Expected)	Prospects of the achievement of Overall Goal		Updated information regarding the Overall Goal. Linkage between the achievement of the Project Purpose and the achievement of Overall Goal	・There is noticeable decrease of occupational accidents and diseases trend during the cooperation period of the Project. ・Various factors existing for effecting the achievement of overall goal make it difficult to extract exact impact of the Project. However most C/Ps agreed, through provision of training and consultancy services to industries, the Project has produced positive effects.
	Factors affecting the achievement of the Overall Goal		Trend of National Policy etc. Trend of Industry	・There are a lot of factors which affect the achievement of the Overall Goal, such as economy of Malaysia, composition of industries, existence of foreign workers, awareness of industries, and etc.
	Prospects of other positive and negative impacts caused by the Project		Impacts to National Policy etc, Impacts to Social and Cultural Impact, Impacts to Technology Others	・Number of guideline published by DOSH has increased. ・Number of participants to SOEM increased.
Sustainability (Expected)	Sustainability of Effects of the Project by achieving Project Purpose	Policy level	Roles of NIOSH Initiative of DOSH Progress report of the Project Opinion of parties and persons concerned.	・Promulgation of new regulations and issuing series of guidelines by DOSH indicate the commitment of the government policy towards OSH at work place. Also DOSH has focused more on strict enforcement of Acts and Regulations. Therefore NIOSH will remain to be the leading institute for OSH in Malaysia.
		Institution (Assignment of personnel, Process of decision making, Ownership of Malaysian Government)	Roles of NIOSH Initiative of DOSH Progress report of the Project Opinion of parties and persons concerned.	・NIOSH has extended its services at various branches and is going to open new OSH campus in Johor, whose construction has already started. ・Some of NIOSH staff are positively collaborate with Universities in terms of research and development. Thus, the technical knowledge and reputation as research and development institution will be sustained.
		Finance (System securing sufficient annual budget)	Roles of NIOSH Initiative of DOSH Progress report of the Project Opinion of parties and persons concerned.	・To date, NIOSH has spent sufficient amount of operating cost and equipment maintenance cost for the Project. The financial operation of NIOSH has been positive in balance since 2001. At the closure of the Project, NIOSH agrees to ensure the necessary cost in the future. ・Income for NIOSH is expected to increase in 2005 compared to the previous year, because the number of participants to training courses and consultancy services has increased. The accumulated income at the end of August is 30 % higher than those of 2004 and 49 % higher than those of 2003. Even though it is difficult to forecast in following years, efforts such as promoting SMEs' participations at training by halving the tuition fee with SOCSO subsidy schemes, etc. have been taken.

Five Evaluation	Evaluation Questions		Source of Information	Results
	Item	Sub-Item		
		Technology (①Maintenance of provided equipment ②Capacity of Maintenance and Development of Transferred Technology Transfer at NIOSH)	Progress report of the Project Opinion of parties and persons concerned.	・According to the assessment on the level of technology acquired by the C/Ps, the technical knowledge and know-how exceed satisfactory level and this has increased their confidences in conducting OSH activities. Therefore the techniques and know-how will be sustained.
	Factors affecting the sustainability of the Project		Progress report of the Project Opinion of parties and persons concerned.	・Nothing Particular.

添付 5-1

NIOSH-JICA Joint Seminars

No	date	Title	speakers	venue	participants
1	2001-8-11	OSH Management System and the improvement of Working Environment	Mr. Isao Komori (JCSHA) Mr. Ken-ichi Yamada (JISHA) Dr. Naomi Hisanaga (Project)	Penang, Vista Hotel	150
2	2001-9-13	Improvement of Working Environment	Mr. Ken-ichi Yamada (JISHA) Dr. Naomi Hisanaga (Project)	NIOSH Theatrette	50
3	2002-1-13	Realization of better place to work	Dr. Toshio Kawai (JISHA) Dr. Hiroshi Udo (Occupational Physician)	Shah Alam (Htl. Blue Wave)	200
4	2002-2-19	A new approach of occupational health management	Mr. Anuar Mohtar (DOSH) Dr. Jalaluddin Dahalan (NIOSH) Dr. Sharkawi Jaya (Petronas) Dr. Mamoru Hirata (NIIH) Dr. Naomi Hisanaga (Project) Dr. Shigeki Koda (Kochi Medical Collage) Mr. Akira Kikuchi (BSH Institute)	Shah Alam (Htl. Blue Wave)	230
5	2002-5-3	Nerve effects to lead workers caused by organic solvent	Dr. Shun-ichi Arai (President, NIIH)	Bangi, Htl. Equatorial	60
6	2002-6-27	Safe and healthy workplaces	Dr. Naomi Hisanaga (Project) Ir. Irbahim Md. Dol (DOSH) Mr. Hiroichi Ono (JISHA) Dr. Takeshi Iwasaki (Koken Co.) Mr. Fadzil Osman (NIOSH) Mr. Yutaka Matsuno (Project)	Kuching, Sarawak Crown Plaza Htl.	100
7	2002-7-6	Occupational Pneumoconiosis	Dr. Toshio Shida (Keihai Rosai Hospital) Prof. Dr. Krisna Gopal Rampal (UKM) Dr. Ong (Occupational Doctor) Dr. Roslan (UKM) De. Naomi Hisanaga (Project) Dr. Sia Ahamad (MOH) Dr. Abu Hasan (SOEM)	NIOSH Theatrette	60
8	2003-1-13	Mental and physical stress at work and their management	Prof. Dr. Reiko Kishi (Hokkaido Univ.) Dr. Takashi Haratani (NIIH) Prof. Dr. Rusli Nordin (USM) Prof. Dr. Hussain Habil (UM) Dr. Jalaluddin Dahalam (Ergo Consultant) Mr. Fadzil Osman (NIOSH) Dr. Agus Salim (NIOSH)	Shah Alam (Htl. Blue Wave)	230

9	2003-1-27	Practical knowledge for workplace improvement	Dr. Takashi Haratani (NIIH) Prof. Dr. Hiroshi Jonai (Nihon Univ.) Mr. Yutaka Matsuno (Project) Dr. Jalaluddin Dahalam (Ergo Consultant.) Dr. Mat Rebi Abdul Rani (NIOSH) Dr. Hj. Zainul Abidin (DOSH)	Johor Baru (Pan Pacific Htl.)	150
10	2004-1-12	Occupational Safety and health management = current and the future scenario=	Dr. Setsuo Maeda (NIIH) Mr. Koji Shimamura (JISHA) Mr. Keng Cheng Liew (Exxonmobil) Prof. Dr. Mohamad Hussain Habil (UM) Mr. Saifullah Idris (Huntsman-Toxide) Ir. Mohtar Musri (DOSH)	Shah Alam (Concorde Htl.)	200
11	2004-1-15	Occupational Safety and health management = current and the future scenario=	Dr. Setsuo Maeda (NIIH) Mr. Koji Shimamura (JISHA) Mr. Keng Cheng Liew (Exxonmobil) Prof. Dr. Mohamad Hatta Shaharom (UKM) Mr. Saifullah Idris (Huntsman-Toxide) Ir. Mohtar Musri (DOSH)	Sabah Kota Kinabaru (Hyatt Regency Htl.)	100
12	2004-5-11	Japanese Respiratory Protective Devices	Mr. Toshiki Hashimoto (SHIGEMATSU Works Co.)	Mint Hotel	60
13	2004-7-22	Preventing Measure of Lumbago, Total Health Promotion Plan	Mr. Kensei MIYANAGA (JISHA)	NIOSH Theatrette Exhibition Hall	70
14	2005-3-22	Ergonomics in the Workplace: Standards, Regulations and the Best Practices	Dr. Kazuaki Kogi (former ILO HQs director) Ir. Mohtar Musri (DOSH Selangor) Dr. Evelyn Tan Guat Lin (USM) Mr. Hamiraj Fahry Abdul Hamid (Environmental Resources Management) Mr. Mohamad Husain Sajahan (BASF Petronas Chemicals) Tuan Ibrahim Tuan Mat (SPANSION)	Concorde Hotel Shah Alam	170
15	2005-5-26	Technical Seminar - Current Japanese Situation -	Mr. Richard Tan (IH) Mr. Umar Abd Aziz (IH) Mr. Hanif Yahya (OH) Ms. Roshada Daud (Erg.) Mr. Mohd Azlan Jaafar (OS) Mr. Raemy Md Zein (Erg.) Tn. Hj Mohd Esa Baruji (OS)	NIOSH Theathrette	100

Speeches at the Outside Seminars

No	date	Seminar	Speaker	venue	participants
1	2003-5-12	Reproductive Health (DOSH)	Dr. Kido (Minamata Diseases)	Hotel Sheraton	200
2	2003-9-1,2,3	APOSHO Conference (Asia and Pacific Occupational Safety and Health Association)	Mr. Higuchi (participant) Mr. Saito (participant)	Istana Hotel	200
3	2004-2-14	National Seminar on Occupational Health (MMA)	Dr. Kido (Organic Solvent)	Renaissance Hotel in Maraca	150
4	2004-2-17	JICA-MARDI Project final seminar (JICA-MARDI)	Mr. Higuchi (participant) Mr. Masuda (participant)	Prince Hotel	150
5	2004-2-24	DOSH-UNDP Project Meeting	Mr. Higuchi (participant, Reporting on the Achievement of DOSH-NIOSH Project)	DOSH Meeting Room	15
6	2004-3-1	Seminar on OSHMS (NIOSH)	Mr. Kano and Mr. Fujiwara (Japan Construction Safety and Health Association)	Mint Hotel	200
7	2004-3-17	Gathering of Japanese Subsidiary Companies around Shah Alam	Mr. Higuchi (Occupational Safety and Health Act of Malaysia)	Concord Hotel in Shah Alam	50
8	2004-5-25, 26, 27	DOSH-UNDP Project Working Seminar	Mr. Higuchi (participant, Review of the Fruits of the Achievement of DOSH-NIOSH Project)	Palm Garden Hotel	100
9	2004-6-8	Gathering of managing Directors of Japanese Companies in Kulang Valley	Mr. Higuchi (Occupational Safety and Health Act of Malaysia)	Kuala Lumpur	15
10	2004-11-18	Senior Volunteer meeting (JICA)	Mr. Higuchi (Current Situation of occupational Accidents in Malaysia. Occupational Safety and Health Act of	Renaissance Hotel in KL	50
11	2004-11-22	Sector meeting of The Japanese Chamber of Trade & Industry, Malaysia (JACTIM)	Mr. Higuchi (Current Situation of occupational Accidents in Malaysia. Occupational Safety and Health Act of Malaysia)	Meeting Room in JACTIM	12
12	2005-1-15	COSH of Panasonic Group	Mr. Higuchi (Patterns of Occupational Accidents. Self Management of OSH)	The group's Gymnasium	300
13	2005-4-12	NIOSH Road Show in Sabah (NIOSH)	Mr. Higuchi (Patterns of Occupational Accidents. For preventing Further Similar Accidents)	Sabah Hotel	200
14	2005-4-16	Regional Seminar on Occupational Health (MMA)	Dr. Momota (Medical Surveillance System in Japan)	Crown Plaza Hotel	300
-	合計		-	-	1,942

SOEM-JICA Joint Seminars

No	date	NIOSH-Related Speakers	Theme	venue	participants
1	2003-08-30	Prof. Hideki Igisu (UOEH)	Health Disorder caused by Heavy Metals	Grand Seasons Hotel	74
2	2003-10-11	Dr. Mohmmed Azman (SOCSO)	Hearing Loss caused by Noise	Legend Hotel	66
3	2004-01-10	Dr. Agus (NIOSH) - representative Dr. Mahzan (ex-NIOSH) Dr. Zainul (DOSH)	Occupational Asthma Workers on Rigs Organic Solvents	Legend Hotel	52
4	2004-06-26	None (Occupational Doctors, case studies)		Grand Maya Hotel	60
5	2004-09-11	Dr. Victor (UM)	Risk-Management of Chemical Substances	Grand Maya Hotel	50
6	2005-01-29	Dr. Setsuo Maeda (NIIH)	Occupational Vibration	Dynasty Hotel	±80
7	2005-06-25	None (Occupational Doctors, case studies)		Crown princess Hotel	90
8	to be decided				

MEASUREMENT OF WORKING ENVIRONMENT

	Date of	Company name	Measurement
1	27-Mar-01	Perak Hanjoong Cement, Kuala Kangsar	Ventilation system
2	28-Mar-01	Malex Manufacturing, Petaling Jaya	Ventilation system
3	23-Aug-01	Toyota Assembly	Organic Solvent
4	23-Aug-01	Shin-Etsu Polymer (Malaysia) Sdn. Bhd	Organic Solvent
5	26-Sep-01	Proton (M) Sdn. Bhd.	Organic Solvent
6	1-Nov-01	Sime Coating Sdn. Bhd	Organic Solvent
7	4-Dec-01	Okumura Metal (Malaysia) Sdn. Bhd	Biological monitoring
8	5-Dec-01	Proton (M) Sdn. Bhd.	Biological monitoring
9	21-May-02	Ueda Plating	Ventilation system
10	21-Jun-02	Perak Hanjoong Cement, Kuala Kangsar	Ventilation system
11	21-Jun-02	Tasek Cement	Ventilation system
12	24-Jun-02	Sanyu Jushi	Ventilation system
13	2-Jul-02	Toplink Technologies Sdn. Bhd.	Toluene
14	5-Aug-02	ICI Paint, Nilai	Organic Solvent
15	15-Aug-02	Goden Hope, Pulau Carey	Organic Solvent
16	27-Aug-02	Federal Paint Factory Sdn. Bhd	Organic Solvent
17	25-Sep-02	PPG Coating	Organic Solvent
18	7-Oct-02	TNK Autopart, Shah Alam	Noise
19	9-Oct-02	Li Foong Brass	Cooper
20	10-Oct-02	PDRM Helicopter Service	Noise
21	16-Oct-02	Accot Technologies	Organic Solvent
22	22-Oct-02	Kulitkraf (M) Sdn. Bhd	Organic Solvent
23	7-Nov-02	Okumura Metal (Malaysia) Sdn. Bhd	Cooper
24	4-Feb-03	Golden Plus Granite, Ampang	Dust and Silica
25	6-Feb-03	Negeri Sembilan Cement	Dust and Silica
26	3-Apr-03	Petronas Methanol(Labuan) Sdn Bhd	other chemical
27	25-Jul-03	Fujitsu Microelectronic, Shah Alam	Ventilation system
28	13-Aug-03	Petronas Bulk Depot, Melaka	Benzene
29	22-Aug-03	Petronas Bulk Depot, Kertih	Benzene
30	27-Aug-03	Petronas Service Station, Semenyih	Benzene
31		Kuang Rock	Crytalline Silica
32	22-Sep-03	Hitachi Electronic Products (M) Sdn Bhd	Ventilation system
33	13-Oct-03	FASL (Kuala Lumpur) Sdn Bhd	Ventilation system
34	22-Dec-03	Panglima Power Sdn Bhd	Ventilation system
35	24-Apr-04	Pioneer Technology, Muar	Ventilation system

36	19-May-04	Proton casting	Dust
37	2-Jun-04	Idemitsu	Ventilation system
38	9-Jun-04	Dawama	Noise
39	10-Jun-04	Universal nutribeverage	Noise
40	14-Jun-04	Johnson Control	Ventilation system
41	23-Jun-04	MFS Technology	Ventilation system
42	25-Jun-04	Enkei (M) Sdn Bhd	Oil Mist
43	1-Jul-04	Proton	Noise
44	6-Jul-04	Maica Wood, Kulim	other chemical
45	14-Jul-04	Petronas Research (PRSS)	Noise
46	26-Jul-04	Westin Hotel, KL	Organic Solvent
47	27-Jul-04	Perhebat	Dust
48	29-Jun-04	Petronas Research	Ventilation system
49	6-Sep-04	Tsuritani (M) Sdn. Bhd, Melaka	Methanol, Oil Mist
50	9-Sep-04	Chemara Laboratories Sdn Bhd	Ventilation system
51	28-Sep-04	Matsushita Electronic Device (M) Sdn Bhd	Ventilation system
52	5-Oct-04	Petronas Motorsports Technical Centre	Ventilation system
53	11-Oct-04	Hitachi Chemical (Johor) Sdn Bhd	Ventilation system
54	19-Oct-04	Sungai Harmoni	Chlorine
55	25-Oct-04	Tsuritani (M) Sdn. Bhd, Melaka	Dichloromethane
56	4-Nov-04	Petronas Service Station, Kota Damansara	Benzene
57	8-Nov-04	Bank Negara	Organic Solvent
58	9-Nov-04	Omron	Noise
59	25-Nov-04	Surface Specialties (M) Sdn Bhd	Ventilation system
60	7-Dec-04	Shell Offshore Platform	Asbestos
61	28-Dec-04	EON	Organic Solvent
62	29-Dec-04	Panglima Power Sdn Bhd	Ventilation system
63	13-Jan-05	Locko Ruber Industries Sdn Bhd	Toluene, Xylene,
64	17-Jan-05	PRSS-Miri Crude Oil Terminal	Ventilation system
65	27-Jan-05	Hitachi Chemical (Johor) Sdn Bhd	Ventilation system

66	27-Jan-05	Petronas Research (PRSS)	Organic Solvent
67	6-Feb-05	Unilever Bestfood	Acetic Acid,
68	15-Feb-05	EON	Organic Solvent
69	2-Mar-05	Hitachi Air Conditioning Products (M) Sdn Bhd	Ventilation system
70	8-Mar-05	Nichia (M) Sdn. Bhd	Organic Solvent
71	22-Mar-05	Cooper Cameron (M) Sdn Bhd	Ventilation system
72	4-Apr-05	Hitachi Electronic Products (M) Sdn Bhd	Ventilation system
73	12-Apr-05	Nichia (Malaysia) Sdn Bhd	Ventilation system
74	18-Apr-05	Colgate Palmolive (M) Sdn Bhd	Ventilation system
75	17-May-05	Sungai Harmoni Sdn Bhd	Ventilation system
76	31-May-05	Cooper Cameron M Sdn Bhd	Organic Solvent
77	8-Jun-05	Idemitsu SM (M) Sdn Bhd	Ventilation system
78	6-Jul-05	Petronas Gas Processing Plant 4, Kertih	Mercury, Benzene
79	25-Jul-05	Petronas Bulk Depot, Kertih	Benzene
80	26-Jul-05	MIMOS Berhad	Ventilation system
81	8-Aug-05	Petronas Bulk Depot, Melaka	Benzene
82	9-Aug-05	Petronas Methanol, Labuan	Ventilation system
83	15-Aug-05	Petronas Bulk Depot, Perai	Benzene
84	23-Aug-05	Petronas Bulk Depot, Kota Kinabalu	Benzene
85	23-Aug-05	Asean Bintulu Fertilizer, Buntulu	Ventilation system
86	29-Aug-05	SMK Electronic	Ventilation system

Technical Talks

division	No	title	name	date	participants
Eecutive Director	1	Measures for SME in Japan	Ir. Dr. Johari Basri	26 Mar., 2005	100
Industrial Hygiene	1	Push-Pull Ventilation System	Ms. Norhamimi binti Mohd. Yusof	30 May, 2003	12
	2	Outline of Biological Monitoring and Evaluated Value	Ms. Nor Hafizalena binti Osman	4 July, 2003	20
	3	Working Environment Measurement Standard Malaysia and Japan	Ms. Suhaily binti Amran	25 July, 2003	6
	4	Control of Asbestos	Mr. Mohd. Suhaimi b. Mohd. Moktar	19 Sep., 2003	11
	5	Sick Building Syndrome-Japan Overview	Mr. Hazizul Azlin bin Razali	26 Sep., 2003	14
	6	Outline of Local Ventilation System	Ms. Norhamimi binti Mohd. Yusof	20 Feb., 2004	13
	7	Petroleum (Safety measure) Act 1984	Mr. Umar Ab Aziz	23 Apr., 2004	10
	8	Occupational Exposure of Hydrogen Flouride	Mr. Richard Tan	26 May, 2005	100
	9	Testing and Classification of Respiratory Protection	Mr. Umar Ab Aziz	26 May, 2005	100
Occupational Health	1	Mental Stress-Japanese Experience	Dr. Mahazan b. Haron	11 July, 2003	10
	2	Asbestos Related Disease	Tn. Hj. Dr. Agus Salim Mohd Banon	15 Aug., 2003	20
	3	Technical Service Provided by the Occupational Health Organizations	Mr. Yuzainie b. Yusof	27 Feb., 2004	15
	4	Heavy metal poisoning	Dr. Azrul Rozaiman Dato' Hj. Abdullah	19 Mar., 2004	14
	5	Heavy metal poisoning II	Dr. Azrul Rozaiman Dato' Hj. Abdullah	26 Mar., 2004	9
	6	Total Health Promotion Plan and Rehabilitation	Mr. Haniff Yahaya	26 Mar., 2005	100
Ergonomics	1	Introduction to Heat Stress	Mr. Norazman b. Bakrun	12 Mar., 2004	16
	2	Ergonomics Overview in Japan	Mr. Yunus Ripin	9 April, 2004	10
	3	Occupational Hand Arm and Whole Body Vibration	Me. Roshada Daud,	26 Mar., 2005	100
	4	Postual Stress Evaluation Methods in The Industry	Mr. Raemy Md Zein	26 Mar., 2005	100
Other Divisions	1	Creative Trainer	Ms. Suhaila Abdul Hamid (Training Div.)	7 May, 2004	12
	1	Ergonomics in the Workplace	Mr. Mohd Azlan Jaafar (Occupational Safety)	26 Mar., 2005	100
	1	Comparison Study Between Malaysia and Japan for Noise Exposure Regulation	Tn. Hj Mohd Esa Baruji (Occupational Safety)	26 Mar., 2005	100