



The JPMA Environment & Safety Committee is endeavoring, by sharing information on environmental conservation and occupational safety and health, to improve member companies' consciousness and the dissemination of environmental and safety technology by own way of

pharmaceutical company. The accuracy and timeliness of information are also crucial factors. The Environment & Safety Committee is working hard to provide timely information that is easy to read and understand about the state of activities and the outcomes.

● Questionnaire Survey

The Environment & Safety Committee creates an annual business plan for the FY and evaluates the outcomes. An expert from each group distributes various questionnaires to monitor the progress of the plan and report the results back to member companies. The

results show the state of activity within the pharmaceutical industry and help member companies to set benchmarks.

Questionnaire & report	Date of report	Summary of survey items
On results of the questionnaire about the environment / occupational safety & health management system introduction and business vehicle accidents	Nov.2005	<ul style="list-style-type: none"> ● Results of state of environment management system introduction survey ● Results of state of occupational safety & health management system introduction survey ● Result of survey on business vehicle accidents
Report of result of FY 2005 investigation on environment-related reports	Dec.2005	State of report publication and investigation of contents through reading
Energy saving / global warming control efforts by pharmaceutical firms survey report	Dec.2005	Trend in energy use and CO ₂ emission by FY, energy saving measures, related data collection, and analyses
Report of pharmaceutical firms' waste discharge and its reduction	Dec.2005	Changes in waste generation and final output, reduction, recycling, related data collection and analyses
Report of FY 2006 PRTR survey results	Oct.2006	<ul style="list-style-type: none"> ● State of PRTR Class One chemical substance handling and emission quantities ● Atmospheric emission of voluntarily managed harmful air pollutants

(Note: Surveys were conducted during the period from April 2005 till November 2006. The latest reports on the results at the end of November 2006 are described below.)

● Publication of "Environment News"

PRAISE-NET is accessible to JPMA member companies and has databases called "Pharmaceutical Government Notices" (information issued from authorities) and "Oshirase information" (internal information from the industry), other contents for members, committee information, etc.

The Environment & Safety Committee issues "Environment News" that includes timely information on schedules and summaries of the upcoming AGM, Environment & Safety Seminars, and Technical Training Courses. The Environment News can be uploaded on PRAISE-NET.



● "Achievement Reports" Publication

The status and outcomes of the Environment & Safety Committee's activities are immediately reported in the "Environment News" and survey reports so that each member company can utilize the information. Such reporting of achievement is created in electronic form and, as well as uploaded on PRAISE-NET, distributed to the committee and expert committee members via email. Such annual achievement and the resources from technical training courses and seminars, as well as other visual resources, are collated together

onto a CD-ROM and distributed to member companies.

The resources from seminars and Technical Training Courses are collected with the understanding and permission of the presenters and speakers for the Environment & Safety Committee-hosted Seminar for distribution on the CD-ROM.

FY 2005 Achievement Reports were published in December 2005.



● Hosting Environment Seminar / Technical Training Courses

An Environment Seminar is an occasion to acquire the latest knowledge on domestic policies, overseas trends, and the advancement of CSR through presentations by outside speakers. This seminar is held twice a year so as to provide the executives in charge of environment and safety of each member company with useful information. Technical Training Courses are hosted by the

respective technical group in an effort to share environmental technology-related information by inviting outside speakers with various specialties and scopes to share their knowledge, as well as to promote information exchange between the member companies through case study presentation and study visits to factories.

The 12th Environment & Safety Seminar (February 10, 2006)		
Structure of the industrial outlaws and selection of good contractors - Method of utilization of improvement promotion project public data -	Inaba Regional Development Center, Chiba Prefecture Mr. Masayoshi Ishiwata	 As one of the IW G-men at the Industrial Waste Section of Chiba Prefecture Environment Living Department, based on his considerable achievement in prevention of illegal dumping, Mr. Ishiwata explains the structure of illegal dumping and the countermeasures.
Assessment of environmental influence of pharmaceuticals	National Institute for Environmental Studies Dr. Taizo Iwane	 Description of examination of guidelines on assessment of environmental influence of pharmaceuticals, from environmental researcher's perspectives & drug manufacturers' viewpoints.
The 30th Environment Lectures (April 21, 2006)		
Building a Safe Culture in realization of the Zero Incident	Japan Institute of Human Factors Mr. Akira Ishibashi	 Advanced technology may bring added convenience, but it also causes friction between the system and the people using it. A new human interface-related issue is growing. Systematic responses are required.
Technical Training Course (July 28, 2006)		
Investigation into scientific knowledge base of Sustainability	Nihon University, College of Bioresource Sciences Professor Hiroshi Mizutani	 The current base of scientific knowledge for potential sustainability has been consolidated through efforts and voluntary collaboration by over 170 frontline experts from various specialties and scopes.
Designing engagement - CSR management through stakeholder participation -	IIHOE (International Institute for Human, Organization and the Earth), President Mr. Hideto Kawakita	 Position and meaning of corporate's efforts in building a firm relationship with internal and external stakeholders and gaining trust and achieving continuous collaboration. Description & commentary.
The 10th Energy Saving/Global Warming Prevention Technology Training Course (October 17-18, 2006)		
The latest GMP-related information	JPMA GMP Committee Mr. Tetsuhito Takarada	 This is the second year since the revised GMP came into force. Cases of how the revised GMP is handled at the company are described and explained. Also, as recent topics, situations with The ICH Q9 Quality Risk Management & Q10 Pharmaceutical Quality System and future trends are reported.
Energy Saving/Global Warming Prevention Technology in designing a pharmaceutical plant	JGC Corporation Mr. Koichi Ito	 <ul style="list-style-type: none"> ●Describe Current state of CO₂ emissions. ●Describe methodologies for energy saving & CO₂ emission reduction from the perspective of heat source, air conditioning, and utility designs. ●Present the idea and necessity of commissioning (of performance testing) and introducing BEMS (the Building Energy Management System) to confirm the realization of designing intention and improvement.
How a pharmaceutical company utilizes emission rights trading	The Japan Research Institute Ltd. Mr. Yutaka Miki	 Beginning of the first pledged period under the Kyoto Protocol is only two years away, and we must also be aware of the target year for the Keidanren Voluntary Environment Action Plan, the FY 2010. Actual CO ₂ emissions from the pharmaceutical industry in FY 2004 in comparison to FY 1990 increased by 37.2%. Despite the small scale of total discharge, CO ₂ emission itself has largely increased. Efficacy, safety, and quality are of highest priority in the pharmaceuticals; therefore, reducing the energy consumption is more difficult than in other industries. Although the pharmaceutical industry must still reduce CO ₂ emissions, it has never utilized emission rights trading actively, CDM, etc., as the scale of emission at each company basis is not large. What efforts should the pharmaceutical firms make for the future prevention of global warming in this situation? This lecture centers on utilization of emission rights trading.
Current status and future of environmental safety actions at the Astellas Group	Astellas Pharma Inc. Mr. Masayuki Takenawa	 Present the current status of Astellas Pharma's CSR management, started at the time of amalgamation. Describe Astellas's action plan for the environment and safety & health, current state or energy saving activities, future projection, ideas for energy saving costs, and economic effects, etc.
Commentary on Revised Energy Saving Law and future energy saving policies	Ministry of Economy, Trade and Industry Agency for Natural Resources and Energy Mr. Kohei Abe	 The "Revised Energy Saving Law" came into force in April of this year. Commentary on the newly added content about regulations to the goods holders and other revisions and newly added schemes. Explains future energy saving policies.
Greenhouse gas estimate / disclosure scheme and future anti-global warming measures	Ministry of Environment Global Environment Bureau Mr. Hideaki Onodera	 The "estimate / report / disclosure scheme" based on the Law concerning the Promotion of the Measures to Cope with Global Warming came into force on April 1, 2006. From a business point of view, the hope is to provide an easy to understand description covering an overview of the scheme and method of estimation of reporting. An especially detailed explanation on the method of estimating CO ₂ emissions from energy sources such as electricity.