



2014 IPLOCA Environmental Statistics Report

Message from the HSE Committee

Since the HSE Committee started collecting environmental data statistics five years ago, the submission rate remains between 70% and 80%, without any sign of increasing. The IPLOCA HSE Committee wants to provide better value to members and will continue to work on ways to improve this rate.

The review of the data received shows an encouraging increase in the number of members using an EMS, with a large predominance of the use of ISO 14001. This is a very promising trend that shows the growing commitment of our industry in adopting efficient measures to protect our environment.

At the same time, however, we see an increasing frequency rate of reported liquid releases, while rates for other types of environmental incidents are decreasing. This trend has been noticed during the last four years, and is a major subject of concern for the IPLOCA HSE Committee. Our industry cannot be satisfied with such results, therefore we urge the management of all IPLOCA members to focus on this particular type of damage to the environment and adopt specific measures to significantly reduce them in the future.

Introduction

With members in more than 40 countries, IPLOCA is proud to represent some 240 of the key players in the onshore and offshore pipeline construction industry worldwide.

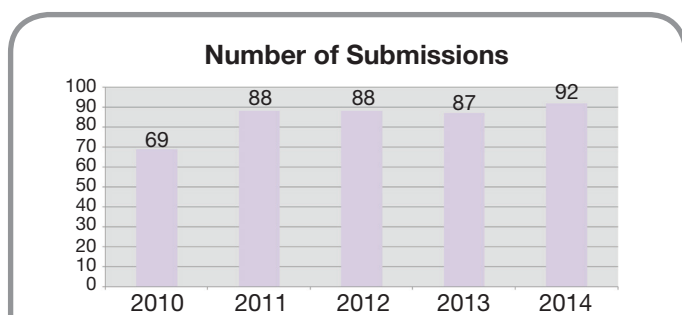
IPLOCA recognises the pipeline industry's responsibility to the community regarding social and environmental protection and is committed to actively promoting the adoption of all practicable measures to ensure that pipeline planning, engineering and construction are conducted efficiently in a sustainable, social and environmentally responsible manner.

IPLOCA is always looking at new initiatives and established the Environmental Statistics Return Form in 2010.

The goal of this form is to respond to growing worldwide trends in environmental accountability. IPLOCA's hope is that this form will serve members who are already active in the environmental assessment domain, and serve as an example to those who have yet to undertake any such action.

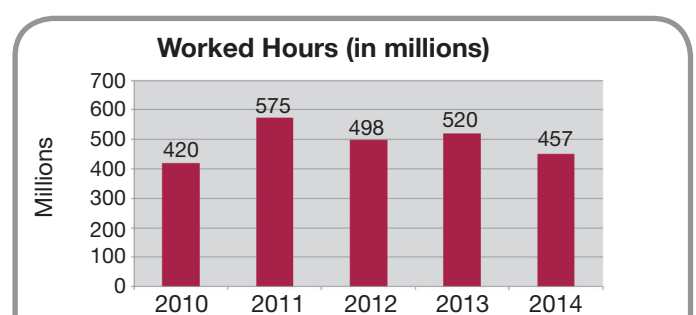
We strongly encourage all Regular Members and Associate Members who have field construction activities to provide this information so that the entire membership can benefit from the aggregated information.

Number of Submissions



The 2014 IPLOCA Environmental statistics were derived from data provided by 84 Regular Members (77% of total Regular Membership), and 8 Associate Members.

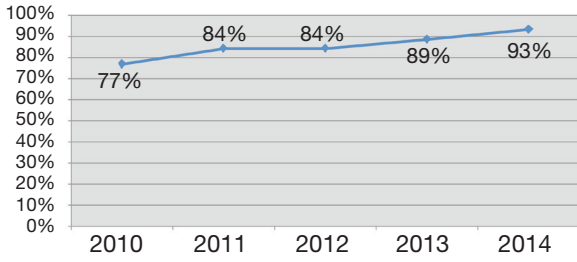
Worked Hours (inclusive of overtime)



The number of hours worked during which the employee is present in the work environment as a condition of his or her employment, plus the extra hours put in as overtime.

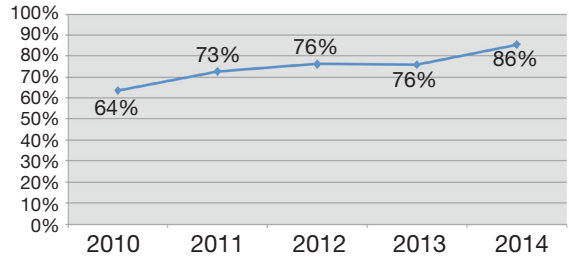
Environmental Management Systems

Application of an EMS by IPLOCA Members



A high adoption rate of EMS's exists within the IPLOCA membership.

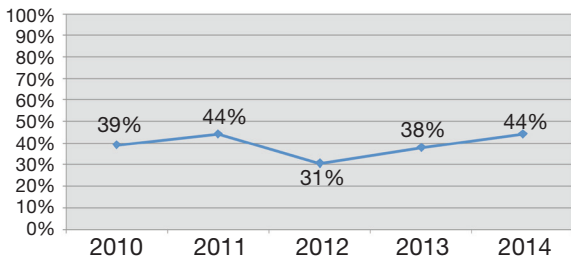
ISO 14001 certified IPLOCA Members



The ISO 14001 environmental management system certification has a 86% adoption rate - clearly a leading certification in the pipeline industry.

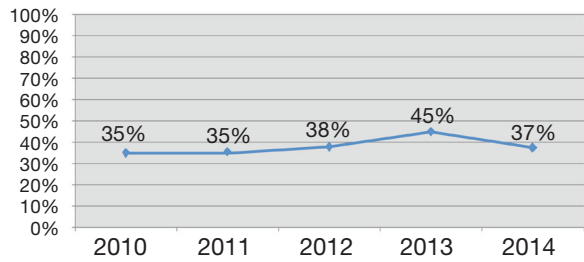
CO₂ Emissions

Calculation of CO₂ Emissions



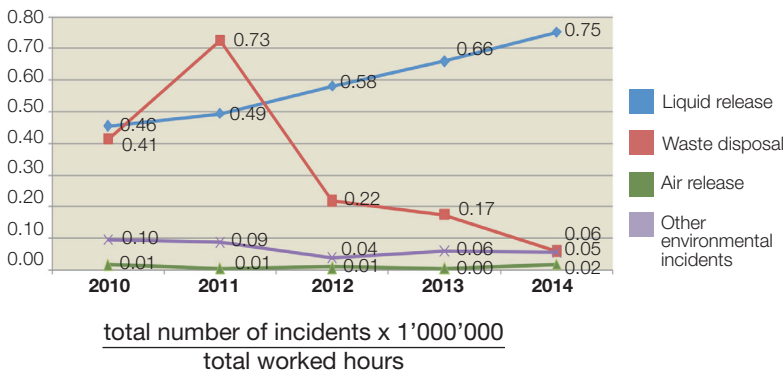
44% of the members chose to use CO₂ emissions as an indicator of their environmental performance, and 37% apply a carbon emission reduction policy.

Application of a Carbon Emission Reduction Policy

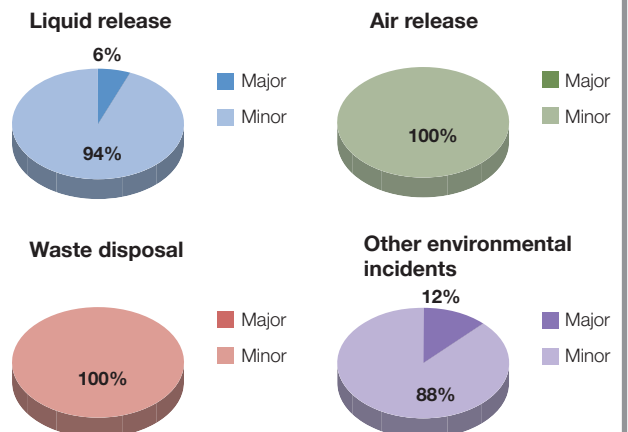


Environmental Incidents

Environmental Incident Frequency Rates (per million worked hours)



Major vs. Minor Incidents



For complete details on classification of incidents, please visit our website: www.iploca.com/environmentalstatistics

Mitigation & Enhancement Methods

Below is an extract of various initiatives carried out by our members to mitigate, offset and enhance environmental incidents.

Waste Reduction

- ‘Sewage water treatment plant on site’
- ‘Preparation and implementation of waste recycling policy / waste reduction plans’
- ‘Recycling waste oil and lead acid batteries’
- ‘Use of secondary raw materials’
- ‘Selection of recyclable and reusable office and construction materials & components’
- ‘Waste stream for recycling options prior to disposal’
- ‘Implementation of environment-friendly e-waste management procedures’
- ‘Reduction of paper printing / paper use in favour of electronic communication/ documentation and duplex printing’
- ‘Paper Management Program’
- ‘Differentiated waste collection for paper/cardboard, plastics, toners, electronics, glass, batteries, etc.’
- ‘Work with professional and approved waste management firms’
- ‘Reuse of plastic bottles to build walls’
- ‘Reused tires for creating flower pots’
- ‘Reuse of building wood fences in order to define green spaces’
- ‘Reuse of unpacking boxes for making furniture’

Energy Efficiency

- ‘Shipboard Energy Efficiency Management Plan (SEEMP)’
- ‘Machinery & equipment preventive maintenance system to reduce energy consumptions’
- ‘Solar panels in construction buildings’
- ‘Reduction of electricity consumption by upgrading the lightening system’
- ‘Selection of energy efficient purchase items’

‘CLEAN operation program to reduce fuel consumption from vessel operations’

‘CLEANERGIE Project to save 15% of energy in 2015’

‘Energy reduction program in place for top 10 worldwide offices’

‘Use of weather routing programs to reduce fuel consumption’

‘Trainings with regards to minimization of fuel consumption’

‘Gas consumption reduction in the prefabrication shop by installing rapid action doors’

‘Assessment and selection of new machinery with priority to low fuel consumption’

‘Promoting and implementing efficient energy use within the company premises’

‘Monitoring electricity, fuel and water consumption’

Habitat Preservation & Social Initiatives

‘Environmental awareness campaigns & employee trainings’

‘Environmental impact assessments’

‘Outreach program for local communities, schools and universities’

‘Tree plantation in construction & camp areas’

‘Nature research program’

‘Fish breeding and subsequent release to waters’

‘Environmental monitoring at pre-construction, construction and post-construction phases’

‘Erosion control measures on construction areas’

Management Initiatives

- Establishment of a shared value by understanding the environmental and social needs of customers
- Accommodation in Green Star rated offices
- Environmental policies and training programs for awareness
- Selection of environment-friendly purchase items
- Involving the supply chain to participate in sustainable practices
- Creation of 6 Pillars - Emissions, Energy, Water, Waste, Materials and Biodiversity
- Induction/In-house trainings about cultural resources, environmental concerns
- Regular audits as per 14001 Environmental Management System

Air Releases

- Use of particle filters on machines
- Use of treated water for dust suppression

Noise Reduction

- Use of sound absorption technologies
- Periodical noise monitoring & reduction measures

Liquid Releases

- Spill kits & drip trays against oil spillage, trainings & drills
- Management of drilling fluids via centrifugation
- Zero spills on site initiatives

Carbon Reduction

- Carbon footprint reduction
- Best Practices Manual for reduction of GHG emissions
- Use of bio-diesel in machines
- Reduction of single transports in favour of collective transports
- Minimising business travel
- Promotion of cycle to work schemes
- Use of local suppliers for deliveries directly to sites to reduce the mileage

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