



Perf Newsletter

**83rd Meeting
of the
Petroleum Environmental Research
Forum (PERF)**

Managing Environmental Risks in the Oil and Gas Industry

**Paris, France March 31 - April
1, 2011**



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Petroleum Environmental Research Forum

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Managing Environmental Risks in the Oil and Gas Industry

The 83rd PERF General Meeting will be hosted by Total in their offices in La Defense Paris, France on March 31st and April 1st, 2011. The theme of the meeting is "Managing Environmental Risks in the Oil and Gas Industry".

The management of environmental risks is currently implemented in Oil and Gas companies under evolving conditions including increasingly severe regulations, different types of oil or gas fields, and new technologies. The objectives of the meeting are to outline current and future concerns on each management step regarding environmental risk:

- Identify emerging causes of risks: hazardous substances or emissions and new technologies.
- Understand technical aspects of risk evaluation: modeling tools and new technologies of risk management.
- Share experiences on environmental risks management approaches: risk assessment methodologies and new strategies of prevention and detection technologies.
- Identify and build collaborative research projects and perspectives in these areas.

The meeting agenda, registration and logistics information are available on the PERF Web Site: www.perf.org. Please register by March 11th. For more information contact Aurelie MICHEL at aurelie.michel@external.total.com.

Logistical Information

Please note: Booking hotel accommodations and transportation is the responsibility of each participant.

Airports:

Paris Charles de Gaulle (CDG)

Paris Orly (ORY)

Ground Transportation to Total Coupole

Find an access map of La Defense on the following page.

By Taxi: Taxis are available at the airports.

Here are few suggestions (average fare 40-60 €):

TAXI G7: +33 1 41 27 66 99

Taxi a Paris: +33 6 11 17 56 00

TAXIS BLEUS : +33 891 70 10 10





Logistical Information cont.

By Public transportation:

From CDG – 45 min : Take RER line B (blue) direction “Paris Centre” , change at the stop “Chatelet les Halles” for the RER line A (red) direction “La Défense” and exit on “Grande Arche de la Defense”. Direction « Parvis-CNIT » (exit 6). Go- up the stairs/elevator to the “parvis” and follow the pedestrian walks along the parvis and the “Espalande du Général de Gaulle”. At this point follow sign “Defense 6” and “Total Coupole”.

Driving Directions and visitor parking:

Once you get to the Boulevard Circulaire in La Défense, stay on the right hand lane, leave to the totem « Défense - CNIT » then turn left following the sign « Parking Coupole – Renault ». Park your car in the « Coupole visitors” area. Cost: 24 €/day.

Hotels:

Special rate rooms for the meeting are limited, so please make your reservations at your earliest convenience . Booking forms for special rates are available at www.perf.org. Each attendee has to send back a form to the hotel he chooses to get these rates. The following properties are within walking distance to the Total building (less than 700 m). Information on the hotel, including maps and directions, may be obtained by clicking onto any of the attached links.

- Sofitel Paris La Defense (5 stars hotel) – Special Night rate: 194 € all taxes included(continental breakfast : 26 € extra)

33 voie des sculpteurs 92800 Puteaux - (+33)1/47764443

<http://www.sofitel.com/gb/hotel-0912-sofitel-paris-la-defense/index.shtml>

- Mercure Paris La Defense (3 stars hotel) – Special Night rate: 138 € all taxes (continental breakfast : 17 € extra)

18-30 rue Baudin Place Charras 92400 Courbevoie - (+33)1/49047500

<http://www.mercure.com/gb/hotel-1546-mercure-paris-la-defense-5/index.shtml>

There is a large choice of hotels in La Defense area, feel free to contact us for more options.

The history of Paris, France, spans over 2,500 years, during which time the city grew from a small Gallic settlement to the multicultural capital of a modern European state, and one of the world's major global cities. The Paris metropolitan area has a population of 11,836,970 and is one of the most populated metropolitan areas in Europe. Source:Wikipedia

Paris Weather in March

Avg. high 53.2°f – 11.8°c

Avg. low 41.2°f – 5.1°c

Avg. rain 1.9 in. – 48.5 mm





New Projects and Project Proposals

PERF 2010-07: Understanding Biodiesel in Total Petroleum Hydrocarbon (TPH). Proposal by Chevron

This proposed PERF project will be the first approach to understanding the impact of biodiesel to EPA analytical methods for TPH-D measurement. This project will evaluate different extraction and chromatographic techniques to determine suitable modification on method 8015B. The project will work closely with commercial labs for the method development as well as all interested petroleum industrial parties. To date, ExxonMobil, Shell, BP, TestAmerica(USA) and Petrobras have expressed interest in joining the project, along with Chevron, the project sponsor. The project proposes to submit a modified analytical method to EPA under 40CFR136.4 and 40CFR210.21 to share findings with Federal Agency. The first project kick off meeting was held on Sept. 22, 2010. The work contract was sent out on Dec. 13th with a request for comments to be returned by Jan. 28th, 2011. A contract agreement conference call will follow in February and the project work will start afterwards. To join the discussion, please contact Chevron's Deyuan (Kitty) Kong at deyk@chevron.com for details.

PROJECT PROPOSAL 2010-06: Air Emissions Cooperative

Proposed by BP

Air Emissions Cooperative

The objective of this proposed project is to improve emission factors and emissions inventory data by initiating a gap analysis for petroleum refinery VOCs and air toxics and subsequent determination of the best approaches to fill gaps identified. The project will commence shortly but is currently open to new participants. It will be conducted in several phases. Phase I would include: comparing data from SARA 313 reports to identify inconsistencies, areas for improvement, existence of emission factor data, quality of emission factor data, and coordination with ongoing API and CONCAWE workgroups on emission factors. Specific sources for investigation: crude tanks - flashing losses, wastewater treatment plants, delayed coker unit emissions, combustion emissions, fugitive emissions, startup/shutdown/malfunction (SSM) emissions, and air toxics. Phase II - rank order the gaps for developing estimating procedures and determine the best approach to fill gaps in the emission factors and emission inventory database. For more information contact Dave Fashimpaur (dave.fashimpaur@bp.com)





New Projects and Project Proposals

PROJECT PROPOSAL 2010-05: Sensor System for Detection and Prediction of Floating Roof Failure in Petroleum Storage Tanks

Proposed by BP

To increase the safety of floating - roof tanks, the project aims to develop and test a wireless sensor system that can be installed permanently on the floating roof of an open top AST to alert the tank operator when accident warning signs are detected. This system will be comprised of intelligent distributed sensors that will simultaneously report data from various points on a roof thereby creating an overall representation of the structure and its behaviour. Because the sensor will be operating on a remote, constantly moving structure, the device will communicate wirelessly. For more information contact

Dave Fashimpaur

dave.fashimpaur@bp.com



PERF project 2010-03: “Drilling waste best practice/guidance

Proposal by Saudi Aramco

Following PERF meeting which took place in London on April, 2010, (15) PERF members and consultants have shown interest in participating in the proposed PERF project 2010-03 “Drilling waste best practice/guidance”. The objective of the project is to develop comprehensive guidelines, helpful to all international drilling operators, for the management of Drilling and Workover wastes. These guidelines should build upon existing guidance documents from API, UNEP, etc.

A power point presentation describing the project idea, type, objective and scope was prepared and emailed to potential project members. After consolidating all of the members’ comments, a conference call was conducted on September 20th, 2010. The level of interest and the type of contribution whether cost, information or hybrid were discussed through several emails. A second conference call will follow once the type of contribution of all interested companies is determined. Other interested companies should contact [Ramzi Hejazi, Saudi Aramco](mailto:ramzi.hejazi@aramco.com)
ramzi.hejazi@aramco.com



New Projects and Project Updates

PERF 2009-01: Performance Evaluation of In Situ Chemical Oxidation of Petroleum Impacts in Soil and Groundwater, Proposal by ExxonMobil.

The ISCO work group initiative has gained momentum in 2010, with laboratory/field studies under way at selected pilot sites. ISCO field injections with activated persulfate and hydrogen peroxide have been completed at Shell and BP pilot sites, and field data collection as part of the research project are ongoing. Chevron's PERF contribution is a subset of a larger research project with ASU, and the tank scale treatability studies are in progress. Paul Johnson and his team at ASU are evaluating case study data from ISCO applications at Petroleum Hydrocarbon sites (supported by Aquifer Solutions, Chevron, ExxonMobil, and GES). The team is in the process to initiate a matrix for empirical data analysis. The next team call is scheduled for the 25th of January, and the next group meeting is scheduled for April 2011 in Tempe at ASU. Other interested companies should contact Scott Bushroe

scott.bushroe@exxonmobil.com

2007-5 Membrane Bioreactor Demonstration, proposal by ExxonMobil

Membrane Bioreactor Demonstration (#2007-05) Update

Nine PERF Members took part in the PERF Membrane Bioreactor (MBR) Demonstration Project. ExxonMobil coordinated the project, which had participation from BP, Chevron, ConocoPhillips, Petrobras, Repsol, Saudi Aramco, Shell, and Total. The project began in December 2009 and Was completed in August 2010.



The project evaluated a commercial membrane module and tested its performance on a refinery wastewater stream. In addition to regular wastewater treatment, a series of tests were performed, increasing the loading to the system to see how it would respond to upset conditions. The effluent of the MBR system was processed with a reverse osmosis unit to see if the effluent quality would affect the RO membranes. The results of the project indicate the technology can be applied successfully for treating refinery wastewater, and can handle various contaminants at increased loading. The final report is in the progress of being completed. For more information contact: James M. Phelan (703-846-3611). james.m.phelan@exxonmobil.com

For a complete listing of proposals and projects, go to www.perf.org



Recent Events

82nd PERF Meeting: Marine Oil Spill Response Environmental Research Needs

The fall 2010 PERF meeting was hosted by Chevron in its downtown Houston offices during November to generate joint industry research projects to address marine environmental oil spill response needs. The meeting was quite a success: well-attended and fast-paced, with high-quality, well-respected speakers, high technical content and engaged discussion. The meeting was attended by almost one hundred oil spill professionals from academia, national laboratories, government agencies, consultancies and industry.

The first two days of the meeting were spent reviewing the current state of marine oil spill response and learnings from the Deepwater Horizon incident and associated current research efforts and agreeing on areas of common interest for future oil spill response. The final day consisted of break-out sessions to brainstorm and prioritize research opportunities. Of the 12 brainstormed project ideas identified as highest priority, PERF member companies subsequently expressed a high level of interest in further discussion on projects numbered 1, 2, 11 and 12 in the list below. In the first quarter of 2011, conference calls will be held to further scope out potential collaborative

projects. If interested in participating in these calls, reach out to the contacts below.

1. Sensor Development to determine thickness and extent of oil - Wolfgang J. Konkel, ExxonMobil, wolfgang.j.konkel@exxonmobil.com
2. Sub-Sea Dispersant Injection - Arden Ahnell (Arden.Ahnell@bp.com)
3. Outreach/Communications/Compilation of Existing OSR Information
4. Modeling of Deepwater Releases
5. Gel Dispersants
6. Data Management
7. Field Trials for Technology Validation, including integration of technologies
8. Ephemeral Data Collection
9. Measures of Success for Different Response Approaches
10. R&D Spatial Inventory
11. In-Situ Burning - Ali Mohssen, Saudi Aramco, ALI.MOHSEN@ARAMCO.COM
12. Persistence of Oil at Sea – Will Gala, Chevron, wgala@chevron.com

The agenda and all meeting presentations are posted to PERF website: www.perf.org for PERF member company access.





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Vice Chair:	Chad Shockley
	chad.e.shockley@exxonmobil.com
	+1 (703)-846-7378
Teamwork	Together we achieve the extraordinary!

The Petroleum Environmental Research Forum (PERF)* is a research and development joint venture, formed to provide a stimulus to and forum for the collection, exchange, and analysis of research information relating to the development of technology for health, environment & safety, waste reduction and system security in the petroleum industry. PERF is a non-profit organization of Members which are corporations engaged in the petroleum industry that recognize the importance of a clean, healthy environment and are committed to support cooperative research and development. PERF does not itself participate in research projects but provides a forum for Members to collect, exchange, and research information relating to practical and theoretical science and technology concerning the petroleum industry and a mechanism to establish joint research projects in the field.

**The name Petroleum Environmental Research Forum and its acronym PERF are registered service marks*

PERF External Group Liaisons

PERF encourages external groups such as trade associations, national laboratories, and research institutions to join as liaison members. PERF values the partnerships that we have with these external groups and they frequently join PERF projects and contribute valuable research

Liaison members appoint Representatives that have the right to attend and participate in meetings of PERF and its committees, but they do not have the right to vote or to serve as an officer of PERF. Liaisons are not required to pay the fee paid by Members

American Petroleum Institute (API)
 Department of Energy (USDOE)
 Gas and Technology Institute (GTI)
 Lawrence Berkley National Laboratory (LBNL)
 Water Environmental Research Foundation (WERF)
 Argonne National Laboratory (ANL)
 Electronic Power Research Institute (EPRI)
 International Association of Oil and Gas Producers (OGP)
 Oak Ridge National Laboratory (ORNL)
 University of Manchester Institute of Science and Technology (UMIST)
 Energy & Environmental Research Center (EERC)
 VITO - Flemish institute for technological research

Member Companies & Representatives

Amerada Hess Co.	Gerry Bresnick
Saudi Aramco	Ramzi F. Hejazi
BP	Dave Fashimpaur
Chevron	Veronica R. Blackwell
ConocoPhillips	Kenneth G. Huntley
ExxonMobil	Jill Kerr
INA-Naftaplin	Domagoj Zelic
Petro-Canada	Doug Evans
Petrobras	Paulo Negrals Seabra
Repsol YPF	Marta García Ariza
Shell	Karen G. Haynes
Statoil	Stale Johnsen
Suncor	Anthony Congram
Total	Frederic Perie

Associate Members & Representatives

Canadian Petroleum Products Institute (CPPI)	Adolfo Silva
Champion Technologies, Inc.	Ashley Dunham
Questor	Wilson McGarel
Veolia Water	Karim Essemiani