

### ISCO NEWSLETTER

The Newsletter of the International Spill Response Community Issue 342, 9 July 2012

info@spillcontrol.org http://www.spillcontrol.org

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ISCO aims to raise worldwide preparedness and co-operation in response to oil and chemical spills, to promote technical development and professional competency, and to provide a focus for making the knowledge and experience of spill control professionals available to IMO, UNEP, EC and other organisations.

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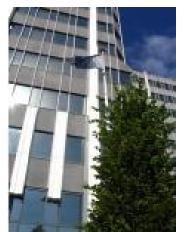
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### News

### EUROPEAN MARITIME SAFETY AGENCY REACHES 10 YEAR MILESTONE



Ten years ago on 27 June 2002, Regulation (EC) No 1406/2002 was adopted and published in the Official Journal, thereby laying the legal groundwork for the creation of the European Maritime Safety Agency.



EMSA's first premises in Rue de Genève, Brussels

This nine-page document, signed by EU Parliament and Council presidents of the time Pat Cox and Miguel Arias Cañete, spoke of the need to enhance safety and prevent pollution in maritime transport.

The creation of an agency with this capability was strongly backed by those who suffered from the Erika oil spill and by Commission Vice-President in charge of energy and transport, Loyola de Palacio. The legal provisions of what was known as the Erika II package also included Directive 2002/59/EC on vessel traffic monitoring.

The Administrative Board which would oversee the work of the Agency met together for the first time on 4 December 2002 to put in place rules of procedure - the first among many building blocks leading to EMSA as we know it today. EMSA Newsletter Read more

### US COURT ABSOLVES UNION CARBIDE IN BHOPAL GAS TRAGEDY

June 29 - A US federal court has ruled that neither Union Carbide Corporation (UCC) nor its former chairman Warren Anderson were liable for any environmental remediation or pollution-related claims made by the victims of the 1984 Bhopal gas tragedy.

In one of the world's worst disasters at the Bhopal plant, formerly owned and operated by Union Carbide India Limited, an entity once owned by UCC, leaked poisonous gases killed an estimated 22,000 people in the December 1984 accident.

In his ruling Wednesday, US district Court Judge John F. Keenan concluded that -- even when viewing the evidence in the most favourable light for the plaintiffs -- UCC is not directly liable, nor liable as an agent of Union Carbide India Limited (UCIL), nor liable under a veil-piercing analysis.

The court concluded that "It is beyond dispute that Union Carbide India Limited" - and not UCC -- "generated and disposed of the waste which allegedly polluted

### **News** (continued)

plaintiffs' drinking water". Additionally, the court found that UCC did not direct remediation efforts that occurred after the Bhopal plant was closed by the Indian government. Daily News Read more

### **USA: ENBRIDGE PIPELINE SPILL UPDATES**

#### Enbridge faces \$3.7 million fine for 2010 oil spill

July 3 - The pipeline regulator on Monday issued a \$3.7 million civil penalty against Enbridge Inc for a July 2010 crude oil spill, the largest fine ever proposed by the agency.

The Transportation Department's Pipeline and Hazardous Materials Safety Administration (PHMSA) said its probe uncovered two dozen regulation violations related to the leak on Enbridge's Line 6B near Marshall, Michigan.

"We will hold pipeline operators accountable if they do not follow proper safety procedures to protect the environment and local communities," U.S. Transportation Secretary Ray LaHood said in a statement. Reuters Read more

#### Disorganized control room to blame for Enbridge U.S. pipeline spill: records



On July 13, 2011, a crew of oil spill clean-up workers repairs an oil collection boom along the Kalamazoo River near the Ceresco Dam in Michigan, a natural deposition for submerged oil from an Enbridge pipeline that burst a year earlier, on July 26, 2010.

July 4 - A disorganized control room and bullying of inexperienced staff are allegedly to blame for a three-million litre oil spill in a Michigan River from a pipeline operated by Alberta-based Enbridge, says newly released records among hundreds of pages of evidence from a U.S. government investigation.

The evidence includes testimony from a senior Enbridge employee who suggests the energy company, now promoting new projects in Canada such as the multibillion dollar Northern Gateway pipeline from Edmonton to the British Columbia coast, is years away from achieving "world-class" safety standards.

The environmental disaster in July 2010 triggered cleanup operations that Enbridge estimates will cost it more than \$700 million. The energy company is also facing a record \$3.7 million fine for 22 alleged violations related to the U.S. spill that continues to leave traces of oil in the Kalamazoo River. *Canada.com* Read more

### USA: OIL SPILL SETTLEMENT PROCESS HAS BEEN A MAJOR ECONOMIC ENGINE FOR LOUISIANA, LAFAYETTE LAWYER SAYS

John McCusker, The Times-Picayune Patrick Juneau is administrator of the Deepwater Horizon Claims Settlement office.

June 29 - After less than a month at the helm of **Gulf of Mexico oil spill settlement claims**, Lafayette lawyer Patrick Juneau surveyed his huge operation and had an epiphany. He realized his Deepwater Horizon Claims Settlement office wasn't just doling out billions of dollars of **BP** money to those with legitimate spill damage, he was also overseeing Louisiana's biggest economic engine. "We're going to be paying big-time revenues to people and they'll be spending that money here, but there are also huge benefits for Louisiana and in particular New Orleans," he said.

"We didn't need one grant, not one tax exemption to set this up. This plant is here. It's been spending money and it's gonna continue spending money. It's the single biggest thing we got going in our state."

For starters, the claims facility headquarters in downtown New Orleans, intake and call center in Hammond and six site centers across the state employ more than 1,000 full-time workers, Juneau

said. That's more than the biggest "win" Louisiana Economic Development has celebrated in the past two years, the 800 new jobs at Centurylink in Monroe. The Times Picayune Read more



#### RUSSIA: OIL SPILL THREATENS SIBERIAN RIVER

A section of the Angara River near the town of Listvyanka, about 70 kilometers south of Irkutsk.

June 29 - Authorities in the Irkutsk region are scrambling to deal with an oil spill on the Angara River, the second to strike the Siberian waterway in as many months.

A 4-kilometer oil slick was discovered near the right bank of the Siberian waterway late Wednesday evening, local authorities said.

Emergency Situations Ministry officials said Thursday morning that the spill had been contained using booms, and presented no threat to the environment or the local population, Interfax reported.

Officials have not yet confirmed the cause of the spill, but it was earlier reported that the oil may have leaked from a barge that had been gathering gravel on the river.



It is the second oil spill this year to strike the Angara, which is the only river to flow out of Lake Baikal and is the headwater tributary of the Yenesei River. The Moscow Times Read more

### CHINA: CHINESE FISHERMEN SUE CONOCOPHILLIPS OVER SPILLS

July 2 - A group of 30 Chinese fishermen sued ConocoPhillips in U.S. federal court on Monday, claiming their livelihoods have been greatly impacted by two oil spills last year from the company's offshore drilling operations in northeastern China.

Attorneys for the fishermen said the lawsuit was filed in U.S. District Court in Houston, where the company is based, because courts in China have blocked their efforts to file a similar suit. Tom Bilek, one of the fishermen's lawyers, noted that the company has already publically taken responsibility for the spills that released more than 30,000 gallons of oil into the Bohai Sea.

"The Chinese court system is not providing any kind of relief for these people. ConocoPhillips assumed responsibility and we are just trying to make them responsible," said Bilek, who is based in Houston. Fox News Read more

### CANADA: BIOLOGISTS CALL FOR ACTION TO STOP MULTIPLE OIL AND MUD SPILLS OFF NEWFOUNDLAND

July 4 - More than 34,000 litres of oil and drilling mud that spilled off Newfoundland last year are a threat to wildlife that highlights a need for more offshore oversight, say biologists.

Incidents posted online by the federal-provincial regulator suggest there were 39 leaks in 2011 of various oils and synthetic-based mud, a dense fluid used for drilling.

Just two incidents involving about six litres of crude oil have been noted so far this year by the Canada-Newfoundland and Labrador Offshore Petroleum Board after they were reported by oil companies operating about 350 kilometres east of St. John's.

The board filed three charges that are still proceeding against Suncor Energy for the spill of 26,400 litres of synthetic mud on March 28, 2011 from the Henry Goodrich drill rig. While the heavy substance is touted by energy companies as relatively benign, environmental activists say it sinks to the ocean floor where its impact on marine life has not been widely studied. *Canada.com* Read more

### GAMBIA: NATIONAL OIL SPILL CONTINGENCY PLAN SIMULATION EXERCISE BEGINS

July 4 - A four-day national oil spill contingency plan simulation exercise commenced Tuesday at the Paradise Suites Hotel in Kololi. The simulation forum is targeting to enhance national and local resilience to the impact of hazards, particularly on oil.

It is organised by the National Disaster Management Agency (NDMA) in collaboration with the Global Initiative- for West and Central Africa and the International Petroleum Industry Environment Conservation Association.

### **News** (continued)

The exercise followed the endorsement of the Gambia Multi-Hazard National Contingency Plan in 2011, which is a document that seeks to reduce the sufferings of communities affected by disaster by addressing their immediate and life-saving needs.

The document is also designed to facilitate coordinated and harmonised responses to national disasters through the NDMA in collaboration with other partners, as well as serve as an effective tool to guide the mobilisation and use of available resources for effective disaster risk reduction. allAfrica.com Read more

### SHELL MAY BE READY FOR THE ARCTIC, BUT ITS OIL SPILL BARGE ISN'T

July 6 - A unique ice-class barge designed to clean up any oil spills that might result from Shell Alaska's upcoming operations in the Arctic Ocean has so far failed to acquire final U.S. Coast Guard certification. Engineers from the oil company say it's no longer appropriate to require them to meet the rigorous weather standards originally proposed.

Further, sea trials for the Arctic Challenger - a 37-year-old barge undergoing a multimillion-dollar retrofit - have been delayed in Washington state as federal inspectors insist on improvements to electrical, piping and fire protection systems, a senior Coast Guard inspector has confirmed.

The delay in certification adds another notch of uncertainty to Shell's narrow window for operations in the Arctic, which already is tight because drilling must halt by September in the Chukchi Sea and by October in the Beaufort Sea to avoid the dangerous advance of sea ice that comes with winter. Though drilling initially was scheduled to commence by mid-July,unusually heavy sea ice from the past winter has postponed that, probably until the first week of August.

The federal Bureau of Safety and Environmental Enforcement has said it will not issue final drilling permits until the Arctic Challenger receives final Coast Guard certification. *The Miami Herald* Read more [Thanks to Jeff Taylor of ISCO Corporate Member, Marine Pollution Control Corp.]

### USA: SCIENTISTS RESEARCHING EFFECT OF OIL SPILL ON ENDANGERED TURTLES

June 29 - Ninety-four tiny members of the world's most endangered sea turtle species struggled across the beach to reach the Gulf of Mexico Thursday as park rangers waved away seagulls looking for a quick meal.

Only a handful of the 3-inch Kemp's ridley turtles will avoid predators and other dangers to become adults. Another threat to the species' long climb back from near extinction over the last three decades, however, may be less obvious than predators.

Scientists in labs at the Padre Island National Seashore and Texas A&M University at Galveston are doing research to determine if the species was harmed by the 2010 BP oil spill caused by an explosion on the Deepwater Horizon platform.

The research is part of a damage assessment being done on other species – including oysters, marine mammals and birds – but no other species is so linked to Texas.

The ridleys' largest nesting grounds are in Mexico, but Texas is their main U.S. nesting ground. Most nests are found on Padre Island, although an increasing number is showing up in the Galveston area. Kemp's ridleys are the only sea turtles whose primary population is found solely in the Gulf of Mexico. Fuel Fix Read more

### People in the news

### NAMEPA CHAIRMAN, INTERNATIONAL REGISTRIES MANAGING PARTNER JOINS FIGHT TO SAVE GLACIER



Clay Maitland, managing partner of International Registries LLC (which administers the Marshall Islands ship registry, the world's third largest), Founding Chairman of the North American Marine Environment Protection Association (NAMEPA), member of the United States Coast Guard Foundation board and former Chairman of the National Maritime Historical Society has been named to the board of The Glacier Society, the non-profit foundation fighting to save the historic icebreaker U.S.S./USCGC Glacier from demolition.

Maitland has joined the fight to preserve this important piece of American maritime history and relocate her to Miami's downtown "Notch", where plans are to transform her into the world's most comprehensive, interactive environmental museum. *Maritime Executive* Read more

### Cormack's Column



In this issue of the ISCO Newsletter we are printing No. 84 in a series of articles contributed by Dr Douglas Cormack.

Dr Douglas Cormack is an Honorary Member of ISCO. As the former Chief Scientist at the British Government's Marine Pollution Control Unit and head of the UK's first government agency, the Warren Spring Laboratory, Douglas is a well known and highly respected figure in the spill response community. He is the Chairman and a founder member of the International Spill Accreditation Association

#### CHAPTER 84: KNOWLEDGE OF MECHANICAL RECOVERY

Seagoing booms and skimmers and the integrated boom/skimmer which is the Weir Boom, are designed for deployment from ships of opportunity, as integral parts of dedicated craft such as the catamaran-mounted belt skimmer of the Marco V, the weir of the Oleanic and the rope/belt of the Zero Relative Velocity units, and as dormant installations on ships which normally fulfil other functions such as liquid transport or dredging.

The original Sweeping Arm System was developed from a small dedicated vessel system which had already operated for a number of years in Rotterdam Harbour. However, the sweeping arms of which there were two in the complete system, were not flexible wave-following booms. They each consist of a rigid curtain between two terminal buoyancy chambers and were angled to deflect pollutant to the forward-moving parent vessel. The chamber nearest the vessel contained a wave compensating weir and two submerged pumps for pollutant transfer to the vessel, while the arms floated independently of it. An intermediate-sized system with arms 13metres long was developed for the *RV Smal Agt* of the North Sea Directorate and later those of the dredger *Cosmos* were 20 metres in length. When not in use, the arms as stowed onboard the *Cosmos* were carried in modified lifeboat davits which rotate outwards through 90° to lower the arms to float freely with the lowering/hoisting tackles slackened-off. The arms are then positioned at 60° to the ship's centreline to provide a swath width of 55 metres.

The lack of wave following ability in the sweeping arms is compensated for by making them high and deep and the associated buoyancy as large as necessary. Again, while the floating weir in its buoyancy chamber might not follow the internal wave oscillations enough to avoid water ingress, it need only minimise such ingress, the pumping system inlets being in any case submerged in the said chamber, and some free water being necessary to enable the more viscous pollutants to be pumped. Yet again submersible pumps have the advantage of pushing rather than 'pulling' the pollutant up and over to the onboard storage tanks.

Cosmos was 113.60 metres in overall length and 20 metres in beam. Her two variable-pitch propellers each driven by a 5,200hp diesel engine gave her speed of 13.7 knots at her dredging draft of 8.35 metres, while her manoeuvrability was enhanced by a 750 hp bow-thruster. Her dredge-spoil/pollutant-recovery hopper had a capacity for 5,375m³ while her side tanks provided for a further 780m³ of liquid pollutant, giving a total capacity in excess 6,000 tonnes. The designers claimed that the *Cosmos* could sweep pollutants at speeds between 2 and 3.5 knots with an expected recovery rate of 290m³h⁻¹ per mm of pollutant layer thickness at 3knots. Be that as it may, pollutant viscosity still caused problems. For example, at the *Katina Incident*, the ships *Smal Agt, Cosmos* and *Hein* equipped with their respective sweeping arms collected only 800m³ over a period of 3 days which averages to only 90m³ per ship per day, or say, 9m³ per hour over a 10 day period (c.f. articles 74 and 76).

- 1 The Rational Trinity: Imagination, Belief and Knowledge, D.Cormack, Bright Pen 2010 available at <a href="www.authorsonline.co.uk">www.authorsonline.co.uk</a>
- 2 Response to Oil and Chemical Marine Pollution, D. Cormack, Applied Science Publishers, 1983.
- 3 Response to Marine Oil Pollution Review and Assessment, Douglas Cormack, Kluwer Academic Publishers, 1999.

### **ISCO News**

### ISCO MEMBERS SPEAKING AT MARITIME SALVAGE & CASUALTY RESPONSE CONFERENCE

Several ISCO members will be speaking at the forthcoming 3<sup>rd</sup> Maritime Salvage & Casualty Conference taking place in London over 5-6 September, 2012.

ISCO members speaking at the event include John Noble, Conference Chairman and Individual Member of ISCO, Paul Pisani (Member of ISCO Executive Committee), Simon Rickaby (Member of ISCO Executive Committee), and Andrew Nash (from ISCO Corporate Member, Desmi Ro-Clean).

The Conference will provide an in-depth look into salvage, towage and casualty response. The event will focus on the most current developments in operational response to a salvage situation, considering some of 2012's high-profile cases, and what impact these have had on the industry. Effective casualty response, as well as the latest legal and contractual issues will also be on the agenda. This year the meeting will include a discussion on the major incidents of 2012, reassessing operational approaches as well as looking at a new era of 'social reporting.'

View the Conference Programme

### **Special contribution**

### PREPAREDNESS AND OPTIMISATION OF ARRANGEMENTS FOR EMERGENCY RESPONSE TO ROAD TANKER INCIDENTS.

A Power Point Presentation received from ISCO Member, Brian O'Connor, Secretary of the Canberra and Regions Oil Industry Emergency Response Group (CROIERG) – In his presentation, Brian gives an overview of the arrangements and resources that CROIERG has put in place for emergency response to petroleum tanker incidents in this part of Australia. He goes on to address potential improvements and ways to optimize efficiency and cost-effectiveness based on the Canadian model of organizing tanker incident response.

Although Brian's presentation was created for an Australian audience, the points that he makes are relevant in every country where petroleum products are transported by road.

Your editor recommends that you watch Brian's short presentation. View the CROIERG presentation

### Contributed article

### THE NEW X150 OIL SKIMMER IS PUT TO THE TEST

Elastec/American Marine, the first place prize winner of the Wendy Schmidt Oil Cleanup X CHALLENGE competition, recently developed a new skimmer based on the winning system using their grooved disc technology. Elastec's executives and engineers tested the X150 system at Ohmsett May 14-18, 2012 to quantitatively and qualitatively evaluate its performance.

The high-volume skimmer was first unveiled in March at the Interspill 2012 conference in London, UK. The X150 is designed to be towed through the water at a speed faster than most available systems, allowing recovery boats to cover more surface area and collect oil efficiently at higher recovery rates. Additionally, its' envelop size is designed to be rapidly transported via air cargo. This requirement governed the scaling of the newly designed unit.



"The significance of oil encounter rate has to be re-learnt following the Deepwater Horizon experience," states Stewart Ellis, vice president of Sales and Marketing at Elastec. "Having a skimmer with a high recovery capacity is only part of the story, if you are not able to move faster through the water and effectively feed the skimmer with sufficient oil, the skimmer will not perform to its potential."

### Contributed article

Testing at Ohmsett allowed Elastec the opportunity to operate the new system in oil at varying settings to optimize performance for the first time. The X150 was tested in advancing mode and stationary mode. "We wanted to prove to ourselves, and the world, that we are able to scale the X Prize results and technology into a more user friendly platform. The X150 is the first in a line of grooved disc skimmers," says Ellis.

During the tank runs, the X150 was fitted with a shallow draft sweep boom and rigged between the Auxiliary Bridge and the Main Bridge. The system advanced through an oil slick of Hydrocal 300 (nominal viscosity of 200 cPs) in calm water, as well as varying wave heights. After each test run, measurements and samples were taken of the recovered fluid to determine oil recovery rate, oil recovery efficiency, and throughput efficiency.

According to Ellis, they selected the same oil that was used during the X Prize competition so they could directly compare and correlate the results of the X150. "We were very happy with what we saw. The new X150 was also able to recover this oil at extremely high rates for such a compact machine, and at towing speeds many times that of a conventional boom with very little entrainment. This is truly a big step forward in skimming technology."

To further study the X150's performance, the system was tested in the stationary mode to determine the nameplate capacity per the ASTM F-2709 Standard Test Method for Determining Nameplate Recovery Rate of Stationary Oil Skimmer Systems. The system was placed within a boomed-off area preloaded with a layer of Hydrocal test oil per ASTM F-2709. Once completed, the Hydrocal was removed and replaced with Calsol test oil (nominal viscosity of 2000 cPs) to determine the nameplate capacity with the heavier oil.

"The subsequent stationary tests were a pleasant surprise. The X150 is primarily built for high speed towing; however we wanted to explore the operational envelope with a stationary test in both light and heavier oil. We were very pleased to see the X150 continue to recover oil at high rates. It was also capable of recovering thin oil layers effectively," explains Ellis.

In addition, Ellis said they wanted to test two other skimmers already in their line-up in the stationary mode to the ASTM nameplate capacity protocol. Both the Magnum 100 and TDS 136 grooved drum skimmers were tested with Calsol. "We have known from our research with the University of California, Santa Barbara that grooved drums can double the recovery rate of a [conventional] drum skimmer. The purpose of this testing was to verify our stated recovery rates. The Magnum 100 exceeded our expectations."

This article was first published in the Ohmsett Gazette, Spring/Summer Issue, 2012.

### **Events**

### **UPCOMING IMO MEETINGS**

IMO OPRC-HNS Technical Group 14<sup>th</sup> Session – from Monday 24<sup>th</sup> September to Friday 28<sup>th</sup> September 2012

IMO Marine Environment Protection Committee 64<sup>th</sup> Session – from Monday 1<sup>st</sup> October to Friday 5<sup>th</sup> October 2012

### **UK: ARCTIC OIL SPILL CONFERENCE**

London 29-30 October 2012

This event is a must for all professionals involved with preventing and responding to oil spills in ice and ice covered waters, including: National and international oil company representatives International organisations working with and guiding industry on minimising the impact of oil & gas developments on the Arctic environment.

R&D organisations developing new technologies and solutions 
Spill contractors, consultants and manufacturers 
Regulators, legislators and government bodies.

### SINGAPORE & CHINA: MARITIME INCIDENT INVESTIGATION

03 September 2012 — 04 September 2012 → Singapore 06 September 2012 — 07 September 2012 → Hong Kong

Know how, when, and who should investigate 

Evaluate options for comprehensive maritime investigation 

Gain insights on how to prevent repeat accidents and learn from these incidents 

Examine commercial and company developed Incident Investigation 

Systems 

Understand and interpret investigation and casualty reports 

Assess company and flag state requirements on incident reporting and investigation 

Get legal, charterer and P&I viewpoints on maritime accidents 

Learn from best practices in incident investigation and lessons learnt from maritime accidents

### Events (continued)

#### MALAYSIA: OIL SPILL AND LNG TERMINAL EMERGENCY RESPONSE WORKSHOP

Kuala Lumpur 10-12 September 2012 More info: joanne.t@unistrategic.com

#### **CHINA: MARINE BIOTECHNOLOGY 2012**

Dalian 20-23 September 2012

Over 200 scientific and technological presentations from scientists, executives and decision makers on the latest developments in marine biotechnology 
Presentation of 100 posters and 30 expositions of new products and technologies 
Opportunity for round table networks to further business and market developments 
Optional tour to famous cities in China before, during or after the conference

More info

### UK & IRELAND: NEXT MEETING OF ISAA ALL-IRELAND SPILL RESPONSE ORGANISATION STEERING GROUP

The next meeting will take place at 10.30 a.m. on Tuesday 28 August 2012 at the NIEA office in Lisburn, Northern Ireland. The Notice of Meeting and Agenda will be sent out to all stakeholders on the mailing list. More info – john.mcmurtrie@spillcontrol.org

### **Publications**

### **USA: INTRODUCING WISER for iOS 3.0**

WISER for iOS 3.0, a universal app for Apple iOS devices, is <u>now available</u>. This new release adds native support for the iPad in addition to support for the iPhone and iPod touch. See below for a look at WISER as an app for the iPad. <u>Search WISER's full set of known substances</u> on the iPad. ■ Employ WISER's popular <u>Help Identify Chemical</u> capability on the iPad. ■ Use WISER's <u>protective distance mapping</u> feature on your iPad. ■ Various updates for iPhone/iPod touch devices

### Correspondence

### PERSONNEL TO TRAIN-THE-TRAINERS NEEDED - OIL SPILL CLEAN-UP & BIOREMEDIATION

From ISCO Member, Prof. Chiijoke Ikokwu

Dear Sir,

More info

My organisation needs 2 or 3 trainers to train young adults from Nigeria on Oil Spill Clean-up and Bioremediation for 2 to 3months. The trainees would get involved in clean up of Niger Delta Oil spill and environmental degradation after the course after their graduation. Do you know any freelance or contract trainers who could come to Africa or elsewhere and teach the youths in English.

Prof. Chijioke Ikokwu President, Network for Sustainable Development in Africa Ltd/Gte. P.O.Box 7750, Wuse Abuja, FCT, Nigeria.

Tel: +234 803 715 6329; eFax: +1 702 922 3611

Email: <a href="mailto:chijikokwu@yahoo.com">chijikokwu@yahoo.com</a>, <a href="mailto:chijikokwu@gmail.com">chijikokwu@gmail.com</a>

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