# SALAM ALEIKUM! GOOD MORNING!

Prepared by Dr. Jan Hedberg, January 2013

# ENVIRONMENTAL INITIATIVE AN ACTION GROUP (IN FORMATION) WORKING ACTIVELY ON SAVING LIBYA'S ENVIRONMENT

LIBYAN

# THE LIBYAN ENVIRONMENT &

### ENVIRONMENTAL PROTECTION

### IS THIS OUR EARTH?

- WELLDEFINED,
- ORDERLY,
- BEAUTIFUL,
- CONSTANT,
- UNCHANGEABLE,
- EVERLASTING,
- INDESTRUCTIBLE,
- COMFORTINGLY SOLID



OR IS THIS OUR EARTH?

- A FRAGILE, SPHERICAL ECOSYSTEM CONSISTING OF A THIN COVER OF ATMOSPHERE; < 1/200th OF THE EARTH DIAMETER
- THICK, AND A ROCK CRUST
- < 1/400 EARTH DIAMETER
- THICK, OVER LIQUID MAGMA.
- UNCHANGEABLE?? INDESTRUCTIBLE??

### WE BELIEVE:

HOLES IN THE OZONE LAYER, GLOBAL WARMING, FLOODS, DRAUGHTS, VULCANIC ASH PARALYZING AIR TRAFFIC, DEADLY EARTHQUAKES, **TSUNAMIES; ALL PROVE** THE FRAGILITY OF OUR EARTH, AND MODERN MAN'S ABILITY TO CHANGE AND DESTROY THE EARTH'S PRESENT ECOSYSTEM, AND GET DESTROYED BY IT IN RETURN

THE EARTH; THE NATURE; OUR ENVIRONMENT;

#### IT ALL DOES NOT BELONG TO US;

WE JUST SAFEGUARD IT FOR OUR CHILDREN AND CHILDREN'S CHILDREN, AND FOR ALL OTHER GOD'S CREATURES

ENVIRONMENTAL PROTECTION IS TO CLEAN, GUARD AND CAUSE NO DAMAGE TO NATURE; EARTH, WATER, AIR, FLORA, FAUNA

# SUSTAINABILITY

HUMAN ACTIVITIES THAT CAN BE SUPPORTED BY NATURE OVER A LONG PERIOD OF TIME WITHOUT ANY DETRIMENTAL EFFECTS

> SOME EXAMPLES: > HUNTING > FISHING > AGRICULTURE > GROUND WATER USEAGE > RESOURCE DEPLETION > AIR EMMISSIONS > SEA POLLUTION

## BASIC ENVIRONMENTAL PRINCIPLES

PREVENTION, MINIMATION, RECOVERY PPP (POLLUTER PAYS PRINCIPLE) PP (PROXIMITY PRINCIPLE) GENERATOR RESPONSIBILITY

# LIBYAN ENVIRONMENTAL INITIATIVE THE WASTE HIERARCHY (THE 5 R's): **REDUCE REUSE RECYCLE RECOVER REFUSE**

Dr. Jan Hedberg, April 2010

# SOLUTIONS AVAILABLE TO LIBYA: REDUCE

PURCHASE POLICY, RETURNS

WAREHOUSING COMPUTERIZED

CENTRAL SURPLUS STORAGE

PRODUCTION METHOD

# LIBYAN ENVIRONMENTAL INITIATIVE SOLUTIONS AVAILABLE TO LIBYA: REUSE >EQUIPMENT, ALSO CONTAMINATED

➤CRUDE FROM TANK WASHINGS

► RECOVERED OIL FROM SPILLS

>DEPOSIT ON BOTTLES/CANS

# LIBYAN ENVIRONMENTAL INITIATIVE **SOLUTIONS AVAILABLE TO LIBYA: RECYCLE > USED OIL COLLECTED FOR RE-REFINING >EXPORT OF USED LUBE OIL &** WASTE HYDROCARBONS

>ACID BATTERIES, TIRES, PAPER, PLASTICS, WOOD, SCRAP METALS RECYCLED LIBYA

>EXPORT DRY BATTERIES, CATALYSTS, NEON/MERCURY LIGHTS, ELECTRONIC WASTE, TONER CARTRIDGES

# SOLUTIONS AVAILABLE TO LIBYA: RECOVER

#### **RAW MATERIALS FROM WASTE**

#### >ENERGY FROM WASTE

➤COMPOST FROM WASTE

Dr. Jan Hedberg, April 2010

# SOLUTIONS AVAILABLE TO LIBYA: PREFUSE INCINERATE OR LANDFILL SEGREGATED HOUSEHOLD WASTE (NO PAPER, PLASTIC, METALS)

- LIBYA: LANDFILL EVERYTHING
- LIBYA: THROW AWAY WASTE ANYWHERE
- LIBYA: WASTE BONFIRES

# BASIC RESPONSIBILITIES OF THE LIBYAN PEOPLE

### LIBYAN ENVIRONMENTAL INITIATIVE LIBYA'S MAIN ENVIRONMENTAL CHALLENGES

#### > WASTE DEPOSITED OUTSIDE LANDFILLS

DANGERS FOR NATURE, ESPECIALLY PLASTIC BAGS

#### > OPEN AIR WASTE BURNING

RELEASES TOXINS LIKE DIOXINS AND FURANS INTO THE AIR

#### > WASTE WATER TREATMENT PLANTS

OF 63 MAJOR TREATMENT PLANTS, NON OPERATING

> UNSUSTAINABLE WATER SUPPLY
 (GREAT) DEAD MAN RIVER
 > FUEL POWERED ELECTRICITY PLANTS
 • EXPENSIVE, POLLUTING & NO SCRUBBERS

### ENVIRONMENTAL PROTECTION MEASURES

SOCIETAL DEVELOPMENT
CHILDREN'S EDUCATION
BEING AN EXAMPLE
SOCIAL RESPONSIBILITY
MORAL ISSUE
ISLAM

### IMPACT ON OUR MONEY:

IMPORT UTILITY FUEL INSTEAD OF BURNING HIGH QUALITY LIBYAN FUEL; SAVE 240 MM US\$/YR

> BURNERS WRONG OR MALFUNCTIONING

CONVERT TO NATURAL GAS OVER TIME

PROCESS IMPROVEMENTS

REFURBISH ALL WASTE WATER TREATMENT PLANTS, & CLEAN UP GARBAGE IN NATURE TO DEVELOP TURISM

### IMPACT ON OUR AIR:

> FLARING OF STRANDED GAS (80 BB\$)

> GAS LEAKS FROM PRODUCTION SYSTEMS

> FIRES; OPEN AIR BURNING OF WASTE

> HEAVY FUEL POWERED FURNISSES

REINJECT PRODUCED CO2

### IMPACT ON OUR SOIL & WATER:

> GARBAGE THROWN AWAY EVERYWHERE

> NON-WORKING WASTE WATER TREATMENT PLANTS

> PIPELINE & TANK LEAKS

> OIL IN PRODUCED WATER

> OIL SPILLS; LAND & SEA

DISCARDED OIL & SLUDGES

**>** EVAPORATION PIT SHORES

#### USED LUBRICATING OIL

1 Caller

#### OIL CHANGE "FACILITY"

A PANAL AN ANTING

2.24

THE POLICE SHOULD TAKE THE PAPERS

72

醋酸

BREATHING DIOXINS AND SOOT AT HOME ANYBODY?

OR BETTER BURN IN THE LOCAL DUMP?

#### DIOXINES & HCI GALORE

#### AND THE SMOG GOES BACK TO THE VILLAGE & HOMES

#### BURNT OUT ASH AND SCRAP REMAINS

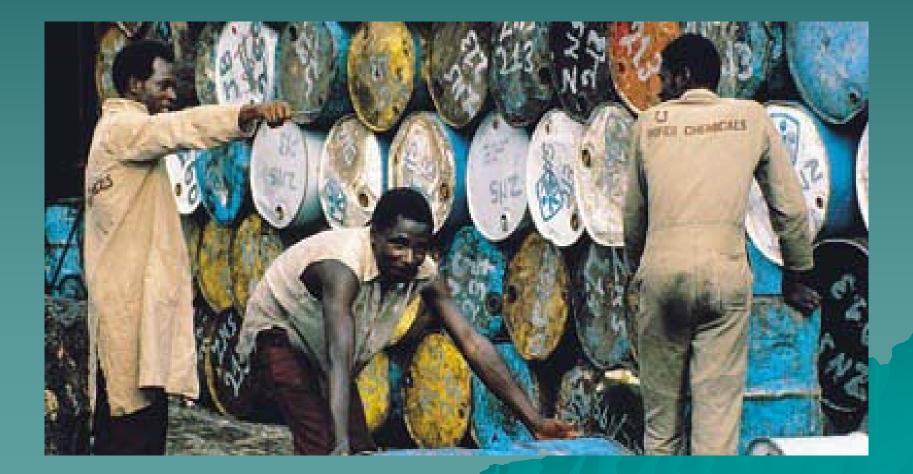
#### A TURISTIC PEARL ALONG THE HIGHWAY

#### THIS IS THE PEARL WE WANT TURISTS TO SEE IN LIBYA





# TYPICAL PROBLEM COST TO SOLVE: 1X



### TYPICAL PROBLEM COST TO SOLVE: 10X



## TYPICAL PROBLEM COST TO SOLVE: 100X



### ENVIRONMENTAL

### PROTECTION

# TECHNOLOGIES & FACILITIES AVAILABLE TO LIBYA



# GREEN OIL LIBYA: HIGH TEMPERATURE

### HAZARDOUS WASTE

### **DESORPTION (INCINERATION)**

### & OXIDATION SYSTEM

SMOKE STACK SCRUBBER QUENCH SYSTEM OXIDIZER

FILTER BOX

DUAL CYCLONES

ROTARY KILN

CONTROL ROOM





#### **Green Oil Libya**

Savings Bank Building, 145 Haiti Street, Tripoli, Libya

Holds Certificate No: 50471763

and maintains a management system that has been assessed and registered by QMS Global, Inc. as conforming to the requirements of:

#### ISO 9001:2008 & ISO 14001:2004

The Integrated Management System is applicable to:

Provider of incineration and hazardous waste treatment services

IAF Codes: 34/24 Certificate Issue Date: June 17, 2010 Initial Certification Date June 17, 2010 Valid Until: June 17, 2013

For QMS Global:



President, QMS Global, Inc.

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# GREEN OIL LIBYA:

# **BIO-MICROBIAL**

## REMEDIATION

#### MICROBIAL TESTING AND ADAPTATION



Bacteria taken in soil samples from the site to be treated are isolated, tested, adapted and fermented in the laboratory, and then produced in large quantities on site for injection into the ground. To adapt bacteria to digest specific hydrocarbons may take 2000 to 6000 generations.



### MICRO-BIOLOGICAL TREATMENT

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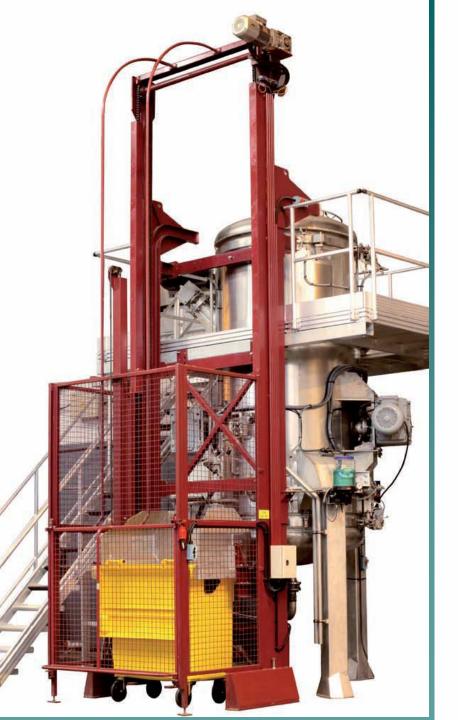


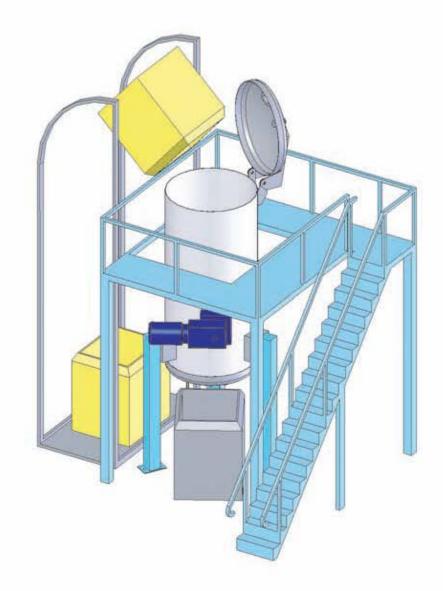
# GREEN OIL LIBYA:

# HAZARDOUS MEDICAL WASTE

# TREATMENT & DISPOSAL

# SYSTEM IN PREPARATION





# USED LUBRICATING OIL COLLECTION

# FARIS AL KHALIJ LIBYA:

 COLLECTING USED OIL FROM GAS STATIONS, GARAGES, COMPANIES & INDUSTRIES SINCE 1994
 COLLECTING WASTE HYDROCARBONS FROM INDUSTRIES & OIL COMPANIES NORM (NATURALLY OCCURING RADIOACTIVE MATERIALS):

GREEN ENVIRONMENT LIBYA

 > LIBYAN OIL INDUSTRY NORM SURVEY CONTRACT WITH PETROCANADA
 > PREPARE NORM WASTE CLEANING, STORAGE & HANDLING FACILITIES

## **RECYCLING PLANTS IN LIBYA:**

> RUBBER TIRES > PLASTIC > SCRAP > PAPER > WOOD > ACID BATTERIES > (GLASS)

### **EXPORT FOR RECYCLING:**

> USED LUBE & WASTE HYDROCARBONS > DRY BATTERIES > ELECTRONIC SCRAP > NEON/MERCURY LIGHT SOURCES > PRINTER CARTRIDGES > CATALYSTS > BASED ON BASEL CONVENTION AND WASTE PRINCIPLES

#### THE EARTH IS IN YOUR HANDS

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#### PROTECT IT WELL FOR ALL OUR CHILDREN

#### THE EARTH IS IN YOUR HANDS

#### PROTECT IT WELL FOR ALL OUR CHILDREN

THANK YOU FOR ALWAYS REMEMBERING THIS

#### USERS: INDUSTRY,TRADE & CONSUMERS

Lube Oil 70,000 mt 100 %



PRIMARY RAW MATERIALS

