## **Humber Treatment Plant**

## Capital Projects Status February 2011

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## **Humber Treatment Plant**Capital Projects Status

- Digesters 1 6 rehabilitation
- Digesters 7-10 clean-out and mechanical upgrade
- South Primary tanks upgrade
- STB upgrade
- New Bar Screens installation
- Odour Project



### Digesters Rehabilitation Scope of Project

- Digesters 1 6 rehabilitation (structural)
- Digesters gallery rehabilitation (structural)
- Mechanical upgrade
- Electrical upgrade
- Control systems upgrade

## **Digesters Rehabilitation**Key Benefits

- · Improved process equipment
- Improved treatment process
- Improved housekeeping
- Improved working conditions
- Reduced odour emission
- Improved safety in the Process Area









# Digesters 7 – 10 Clean-out and Mechanical Upgrade Scope

- · Tanks clean-out
- Tanks gas proofing
- Upgrade of mechanical equipment
- Preventative Maintenance Activities

# Digesters 7 – 10 Clean-out and Mechanical Upgrade Key Benefits

- Improved process equipment
- Improved treatment process

## Rehabilitation of South Primary Settling Tanks

#### Scope of Project

- Replacement of sludge collection mechanisms
- Structural improvements
- Installation of a dedicated odour control system (pre-phase of the Odour Control Project)

## Rehabilitation of South Primary Settling Tanks

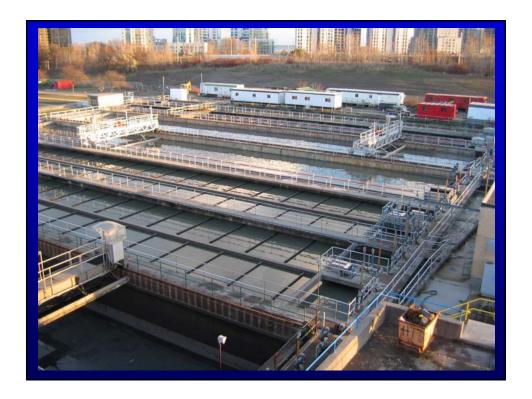
#### **Key Benefits**

- Improved process equipment
- Improved treatment process
- Improved working conditions
- Reduced odour emission
- Improved safety in the Process Area

## Rehabilitation of South Primary Settling Tanks

#### Status

- Last phase (tanks 5 & 6)
- Completion scheduled for late summer 2011













## Sludge Thickening Facility Improvement

Scope of Project

- Major structural modifications
- Extensive process improvements
- Installation of dedicated odour control system (pre-phase of the Odour Control Project)

## Sludge Thickening Facility Improvement

#### **Key Benefits**

- · Improved process equipment
- Improved treatment process
- Improved housekeeping
- Improved working conditions
- Reduced odour emission
- · Improved safety in the Process Area

### Sludge Thickening Facility Improvement

#### **Project Structure**

- Phased construction
  - Phase 1
    - Demolition work, structural work, replacement of two DAF tanks with new centrifuge units, polymer and sludge handling systems, electrical systems, dedicated odour control system
  - Phase 2
    - Removal of remaining DAF units, installation of five more new centrifuge units

## Sludge Thickening Facility Improvement

## **Project Status**

- Phase 1 completed (two centrifuges in service)
- Phase 2 in commissioning
- Completion scheduled for fall of 2011













## New Bar Screens Installation Scope of Project

 Replacement of two old bar screens with two new units

## New Bar Screens Installation Key Benefits

- Improved process equipment
- Improved treatment process
- Improved housekeeping
- Improved working conditions
- Reduced odour emission
- Improved safety in the Process Area

