



## PUBLIC NOTICE

SHELL CANADA LIMITED

# ENVIRONMENTAL PROTECTION AND ENHANCEMENT ACT

Shell Canada Limited has published and submitted an Environmental Impact Assessment report (EIA) to Alberta Environment for the storage component of its proposed Quest Carbon Capture and Storage Project. Shell Canada Limited has also submitted a federal environmental assessment under the *Canadian Environmental Assessment Act* which includes the capture, transportation and storage components of the Quest Carbon Capture and Storage Project. The EIA report will be reviewed as a cooperative assessment under the *Canada-Alberta Agreement for Environmental Assessment Cooperation*. Alberta will be the lead party for the cooperative assessment.

### DESCRIPTION OF THE PROJECT

The carbon dioxide (CO<sub>2</sub>) capture infrastructure will capture CO<sub>2</sub> from the existing Shell Scotford Upgrader located in Strathcona County at Legal Subdivision (LSD) 12 of Section 32, Township 55, Range 21 West of the 4th Meridian. The CO<sub>2</sub> capture infrastructure will be constructed on a previously disturbed area, approximately 150 m by 150 m, adjacent to three existing hydrogen manufacturing units at the Scotford Upgrader. The Project will reduce the CO<sub>2</sub> emissions from the Scotford Upgrader by up to 35%, capturing and storing up to 1.2 million tonnes of CO<sub>2</sub> per year. The captured CO<sub>2</sub> will be dehydrated and compressed prior to entering the CO<sub>2</sub> pipeline.

The CO<sub>2</sub> pipeline, which will transport dense-phase higher than 95 vol% pure CO<sub>2</sub>, from the Scotford Upgrader to the storage area using a single high-vapour-pressure pipeline, will be approximately 84 km long and with an outside diameter of 323.9 mm. The proposed route extends east-northeast towards Lamont County. The pipeline then traverses north-northwest across the North Saskatchewan River, terminating approximately 8 km north of the Hamlet of Thorhild, within the County of Thorhild at LSD 15-29-60-21W4M.

The CO<sub>2</sub> storage area will include 3 to 10 injection wells connected to the main pipeline by laterals, each assumed to be less than 15 km long. The CO<sub>2</sub> will be injected through these wells into the Basal Cambrian Sands (BCS), a deep saline geological formation, for permanent storage at a depth of about 2 km below ground level.

Construction of the CO<sub>2</sub> capture infrastructure is expected to start in Q3 2012, and pipeline construction in Q4 2013. The injection wells will be drilled between Q3 2013 and Q3 2014. Commission and start-up of the operation is anticipated to begin in Q1 of 2015. The lifespan of the Project is considered to be for the life of the Scotford Upgrader (greater than 25 years).

**To obtain additional information or a free copy of the EIA or summary of it, contact:**

#### Shell Canada Limited

Attention: Kathy Penney  
400 4 AVE SW  
BOX 100 STN M  
CALGARY AB T2P 2H5  
Telephone: 403-691-4542 – Fax: 403-269-8031

**In addition, copies of the EIA have been provided to and are available for inspection at:**

#### Alberta Government Library

Great West Life Building  
6th Floor, 9920 – 108 Street  
Edmonton, AB T5K 2M4  
Tel: 780-427-5870  
Toll Free: 780-310-0000

#### Strathcona County

**Heartland Hall**  
55305 Range Road 214  
Fort Saskatchewan, AB T8L 4A4

#### Lamont County

**Administration Building**  
5303 – 50 Avenue  
Lamont, AB T0B 2R0

#### Thorhild County Office

Planning Department  
801 – 1 Street  
Thorhild, AB T0A 3J0  
Tel: 780-398-3741

#### City of Fort Saskatchewan City Hall

10005 – 102 Street  
Fort Saskatchewan, AB T8L 2C5

#### Sturgeon County Centre

9613 – 100 Street  
Morinville, AB T8R 1L9

#### Strathcona County Library

401 Festival Lane  
Sherwood Park, AB T8A 5P7