

**Table 1 Shell Quest CCS Project Summary: Capture Infrastructure**

<b>Proponent Name:</b>	Shell Canada Limited	<b>Date:</b>	August 6, 2010.
<b>Project Name:</b>	Quest Carbon Capture and Storage Project.	<b>Company Contact Name and Information:</b>	Kathy Penney, Regulatory and Environmental Manager – Quest CCS Project. 400-4th Avenue SW PO Box 100, Station M Calgary, Alberta 403.691.4542
<b>Name of Company that will hold Approval:</b>	Shell Canada Limited.	<b>Company Website:</b>	<a href="http://www.shell.ca">http://www.shell.ca</a>
<b>Type of Project (e.g., in-situ, mine, quarry, upgrader, etc.):</b>	CO <sub>2</sub> capture as part of carbon capture and storage project.	<b>New Project, Expansion, Additional Phase or Modification:</b>	Capture infrastructure – new to Scotford Upgrader.
<b>Projected Construction Start (Month/Year):</b>	Q2 2012 to Q4 2015.	<b>Projected Operation Start (Month/Year):</b>	Q2-Q4 2015.
<b>Life of Project (# years, YYYY - YYYY):</b>	Begin operation in 2015. Expected to operate for the life of the Scotford Upgrader (several decades).	<b>Project Location (Legal Land Description) and Municipality:</b>	Scotford Upgrader located at NE and NW Quarters of Sec 31 and the NW Quarter of Sec 32, Twp 55, Rge 21, West of the 4 <sup>th</sup> Meridian and the SE Quarter of Section 6, the NW, NE and SW Quarter of Sec 5 and the NW Quarter Sec 4, Twp 56, Rge 21, West of the 4 <sup>th</sup> Meridian in the County of Strathcona.
<b>Total Project Area (ha):</b>	Capture infrastructure will occupy about 2.25 ha within the Scotford Upgrader.	<b>Private or Public Land:</b>	Shell owned lands.
<b>Nearest Residence (km):</b>	Approximately 2 km.	<b>Nearest First Nation Reserve(s) (name and km):</b>	Enoch Cree First Nation (48 km southwest of Scotford Upgrader).
<b>Types of Activity (major project processes):</b>	Carbon Capture: CO <sub>2</sub> removal using activated amine process (Shell's ADIP-X technology), dehydration and CO <sub>2</sub> compression.	<b>Power Source (If on site power generation describe quantity (MW) and facilities):</b>	The power required for capture infrastructure at Scotford Upgrader is 22.1 MW, sourced 80% from third-party cogeneration plant and 20% from the grid.

**Project Description Summary Tables**

<b>Project Products:</b>	CO <sub>2</sub>	<b>Average Production Capacity per Year (specify units):</b>	Up to 1.2 million tonnes per year of CO <sub>2</sub> .
<b>Method of Product Transport (e.g., pipeline, rail, truck):</b>	Pipeline.	<b>Location of End Market:</b>	Underground disposal in the Basal Cambrian Sands (approximately 2 km below ground surface).
<b>Infrastructure Requirements (roads, pipelines, water intake, storage, tankage):</b>	Capture infrastructure will use existing Scotford Upgrader infrastructure.	<b>Project By-Products:</b>	None.
<b>Expected Types of Air Emissions (e.g., SO<sub>2</sub>, NO<sub>x</sub>, CO<sub>2</sub>):</b>	NO <sub>x</sub> , fugitive CO <sub>2</sub>	<b>Expected Types of Effluent Releases (note the water bodies the effluent will be released to):</b>	Liquid effluent will be incorporated into the Scotford Upgrader water management plan. Existing infrastructure for treatment and disposal will be used.
<b>Types of Wastes Generated:</b>	Wastewater collected from the amine wash water vessels, the triethylene glycol dehydration unit, and the compressor knockout drums. These streams will be treated in the existing wastewater treatment plants at Scotford Base Plant and Expansion 1.	<b>Waste Management Facilities (i.e., Disposal Well, Salt Caverns, Landfill, or Third-Party):</b>	Wastes generated from the capture infrastructure will be incorporated into Scotford Upgrader waste management plan.
<b>Nearest Waterway/Waterbody (name and km):</b>	North Saskatchewan River (adjacent)	<b>Watercourse Crossings (type of crossing, any Class A to C waterbodies):</b>	N/A.
<b>EPEA Approval Required (Y/N/Unknown):</b>	EPEA Amendment required for capture infrastructure at Scotford Upgrader (EPEA No. 49587-01-00)	<b>Regulatory Board(s) (ERCB/NRCB/AUC):</b>	ERCB
<b>Water Act Licence Required (Y/N/Unknown. If yes: purpose, source and estimated volumes):</b>	No.	<b>Water Act Approval Required (Y/N/Unknown. If yes, purpose):</b>	No.

<b>Fisheries Act Authorization Required (Y/N/Unknown):</b>	No.	<b>Navigable Waters Protection Act Authorization Required (Y/N/Unknown):</b>	No.
<b>Waterbodies Required (Y/N/Unknown/NA. If yes, # and ha):</b>	No.	<b>Nearest Water Well (km) (Domestic and Commercial):</b>	Industrial water wells located within Scotford Upgrader. Nearest domestic water well is >2 km from Scotford Upgrader.
<b>Nearest Provincial Highway (# and distance):</b>	Hwy 15 (3.5 km from Scotford Upgrader).	<b>Access Improvements to Provincial Highway:</b>	None required.
<b>Traffic Impact Assessment Required (Yes/No/Unknown):</b>	No.	<b>Total Area to be Disturbed (ha):</b>	No incremental disturbance required for capture infrastructure (within Scotford Upgrader).
<b>Existing Land Use(s):</b>	Industrial (Scotford Upgrader).	<b>Post-reclamation Land Use(s):</b>	Industrial (Scotford Upgrader).
<b>Reclamation Start and End (YYYY - YYYY):</b>	Capture infrastructure will be reclaimed after closure of Scotford Upgrader (greater than 25 years).	<b>Unique Environmental or Social Considerations (Describe or None):</b>	None.
<b>Historic Resources Impact Assessment Required (Y/N/Unknown):</b>	No.	<b>Estimated Construction Person-Years of Employment:</b>	1700 person-years over the construction period
<b>Estimated Operation Persons-Years of Employment:</b>	2 person-years for each year of operations	<b>Construction or Operation Camp Required (Y/N/Unknown. If yes, on-site or off-site):</b>	No.
<b>Method of Transport of Employees to Site (Construction and Operation):</b>	Bus-based during construction; no specific measures during operations.	<b>Date Stakeholder Engagement Started (Public/Aboriginal):</b>	August 2008.
<b>Aboriginal Groups Involved in Stakeholder Engagement:</b>	Shell engaged with both the Metis Nation of Alberta (MNA) and Metis Regional Council Zone 4 (MRC4), and Beaver Lake Cree Nation (BLCN) with regard to the Quest project. Shell met with the MNA and MRC4 to discuss the project on two separate occasions (June and November 2009). In February 2010 Shell distributed invitations to community Open Houses and in April 2010 project information packages were provided to BLCN, MNA and MRC4. A project update was provided to BLCN in July of this year and Shell plans to meet again with MNA and MRC4 in 2010 to provide a project update. Shell will continue to provide project updates to Aboriginal stakeholders as the project progresses and will engage with Aboriginal groups that identify an interest in the Quest project going forward.		