



Energy & Chemicals

CH2MHILL®

What We Do

E&C enables our clients to meet the world's ever increasing demand for energy and chemicals by safely delivering their most challenging projects around the globe by providing innovative solutions that span the entire energy value chain.

Our Work

- Surmont Wellpad 102 Extension
- BP Noel Major Project, Elkton Compressor
- Husky Sunrise PM support and Windy Lake Development
- Shell General Alliance Projects, Ethanol and BioDiesel Projects Across Canada
- Suncor Maxhamish Pipeline Loop
- Kinder Morgan Trans Mountain and Anchor Loop Pump Station Expansion
- Devon SHU Pipeline Replacement Program
- IPF Cold Lake Quarter Point Pump Stations

Services to Our Clients

Our E&C team provides project execution services for the entire project life cycle (from concept through commissioning) in multiple business sectors:

- Feasibility Studies and Conceptual Designs
- Front End Engineering Design (FEED)
- Detailed Design
- Project Management
- Construction Management
- Procurement
- Construction
- Full Service EPC
- Start-up and Commissioning
- Sustaining Services, ongoing Operations and Maintenance

E&C Business Sectors

- Upstream
- Midstream
- Downstream
- Chemicals
- Renewables and Biofuels
- Mining





Environmental Business Group

CH2MHILL®

What We Do

Our Environmental Business Group integrates the principles of sustainability into our projects, helping public and private clients find innovative, practical ways to conserve resources, create or improve healthy natural environments, and meet cost goals.

Our Work

- CFB Suffield Environmental Investigations
- The City of Calgary Shepard Landfill Site Landfill Gas Power Plant Design
- The City of Calgary Waste Composition Study
- Town of Cochrane Recycling Plant Design/Build
- Suncor MacKay River Landfill Design and Construction Management Services
- Dow Chemical Site Management Activities at a Large-scale Primary Chemical Plant
- Cumulative Effects Management Association Wetlands Guideline Development



Awards/Recognition

- 2009 Canadian Urban Institute Brownie Award for Brownfield Site Remediation – Hamilton Health Sciences Redevelopment
- 2009 APEGGA Environment and Sustainability Award for the Calgary Biocell Project



Services to Our Clients

Dedicated to protecting public health, preserving the environment, and restoring impacted natural resources, we deliver diverse projects.

- Environmental Liability Management for the Oil and Gas Sector
- Site Assessment, Remediation and Brownfield Redevelopment
- Demolition
- Planning, Design, Operations and Management of Municipal, Industrial and Organic Waste Processing and Disposal Facilities
- Landfill Closure and Redevelopment, and the Containment, Collection, and Treatment of Landfill Leachate
- Landfill Gas Recovery and Utilization (power generation)
- Design and Construction of Natural Treatment Systems
- Mine Site Closure
- Contaminant Hydrogeology
- Groundwater Assessment, Modelling and Remediation
- Human Health and Ecological Environmental Risk Assessment





Industrial System Business Group

CH2MHILL®

What We Do

Our Industrial Systems Business Group provides full service consulting and engineering solutions to help our industrial clients identify opportunities, understand, manage and mitigate risks, while ensuring regulatory compliance and satisfying the demands of investors, regulators, and the public.

Our Work

- **Carbon Policy Financial Impact Assessment** for a multinational Oil & Gas Company with facilities in Canada Evaluated technical compliance solutions and market-based solutions in light of pending Canadian regulations
 - Assessed financial impact of various options for bridging the gap between estimated emissions and emission targets
 - Facilitated strategic corporate planning and budgeting
- **Suncor Energy - Energy EHS Program** as an Alliance Partner, we provide EHS expertise that includes
 - Assistance in developing EMS components
 - Developing and implementing compliance tools
 - Compliance auditing
 - Climate change support services
- **Suncor Mackay River SAGD Water Services**
 - Providing integrated operations support services, including process optimization, operations supervision, operator training, analytical services
 - Helped Suncor achieve the highest uptime performance for any water block facility in Alberta
- **Alberta SAGD Design (Confidential Client)**
 - Designing water block of 100k BOPD SAGD facility
 - Innovative silica management strategy developed to address issues related to ERCB water management requirements
 - Design optimized based on extensive water block operations experience

Services to Our Clients

In delivering the diverse projects that meet the needs of our industrial clients, we are dedicated to protecting public health, preserving the environment, and restoring impacted natural resources.

- **Environmental, Social & Health Impact Assessments (ESHIA) Services**
 - Siting and environmental impact assessments
 - Terrestrial and water resource assessments
 - Air quality analysis and modeling
 - Cultural resource assessments
- **Environmental Compliance & Sustainability**
 - EHS auditing/ compliance management
 - Environmental information management systems
 - Carbon, energy and climate change services
- **Water & Wastewater Management**
 - SAGD water management
 - Brine management /TDS controls
 - Conceptual, front-end and detailed engineering design
 - Analytical services





Transportation Business Group

CH2MHILL®

What We Do

Our Transportation Business Group believes that by applying the principles of Context Sensitive Solutions, we can address the technical aspects of transportation assignments while respecting the site's aesthetic value, historic importance, environmental sensitivities, and community values.

Our Work

- The City of Calgary Glenmore Trail/18 Street SE Interchange
- Alberta Transportation Deerfoot Trail/Stoney Trail Interchange
- Calgary Stampede Elbow River Cable-Stayed Bridge
- Calgary Airport Authority Airside Electrical Improvements
- The City of Calgary 7 Avenue LRT Refurbishment Program



Awards/Recognition

- 2010 CEA Award of Excellence – Calgary Stampede Elbow River Cable-Stay Bridge
- 2009 CEA Award of Merit – The City of Calgary Northwest LRT Extension – Crowchild Trail/Sarcee Trail Interchange
- 2006 CEA Award of Merit – Alberta Transportation Concrete Bridge Deck Testing Program
- 2003 CEA Award of Merit – The City of Calgary Glenmore Trail/18 Street SE Interchange



Services to Our Clients

We are working to link communities, businesses, and families by land, sea, and sky by solving our clients' problems one project at a time.

- Highway and Bridge Planning and Design
- Corridor Location Studies
- Traffic Engineering
- Intelligent Transportation Systems
- Integrated-Community and Environmental Management
- Value Engineering
- Construction Services
- Bridge Condition Assessment and Load Ratings
- Structural Seismic Analysis and Retrofit Design
- Airport Engineering
- Port Planning and Design
- Management Consulting
- Major Investment Planning





Water Business Group

CH2MHILL®

What We Do

Our Water Business Group partners with water clients to successfully meet today's challenges, such as regulatory compliance, aging infrastructure, drought, security, customer needs, wet weather, rate increases, asset management, information technology, workforce pressures, sustainable growth, and total water management.

Our Work

- The City of Calgary Pine Creek Wastewater Treatment Plant
- The City of Calgary Currie Reservoir
- The City of Calgary Nose Creek Sanitary Sewer
- The City of Calgary Beddington Sanitary Sewer
- The City of Calgary Valley Ridge Feeder Main
- Calgary Regional Partnership Regional Water and Wastewater Servicing Study
- University of Calgary School of Veterinary Medicine Water Reuse Facility
- The City of Calgary Corporate Strategic Asset Planning
- Metro Vancouver Asset Management Advisor
- City of Saskatoon Water Treatment Plant Long-term Capital Development and Expansion Plan



Awards/Recognition

The City of Calgary Pine Creek Wastewater Treatment Plant

- 2010 American Academy of Environmental Engineers Award for Excellence in Environmental Engineering
- 2009 CEA Awards of Excellence in Project Management and Sustainable Design
- 2009 APEGGA Summit Award for Project Achievement

The City of Calgary Glencoe Storm Sewer Upgrade Phase B/C

- 2008 CEA Awards of Excellence in Community Development, Environmental, Water Resources/Energy Production; Award of Merit in Project Management



Services to Our Clients

We help our clients to manage their water resources from a total system perspective.

- Asset Management
- Conveyance Design
- Stormwater Management
- Tunneling
- Water Treatment
- Wastewater Treatment
- Water Resources and Ecosystem Management
- Utility Management Solutions
- Construction Services



