

## Adeel Abdullah P.L (Eng.) Bio

Adeel has over 23 years of experience Senior management and technical matter expert in Civil Engineering in the oil and gas energy sector, petrochemicals, hydrocarbon, heavy industrial earthwork and municipal water and wastewater treatment, conventional and special hydraulic design for fluid conveyance (water, petroleum, chemicals, etc.). He has a thorough understanding of civil municipal infrastructure, as well as stormwater and sanitary designs. He is very proficient in conceptual and detailed design of highways road & bridges, geometric design of highway intersections level intersections & super elevated. Adeel also brings experience in design of utilities network such as water, sewage, irrigation, and fire network, as well as design experience in STP, WTP and sewage lift stations, surface drainage system u/g and open surface channels.

His other experience includes site planning and development, topographic survey, and site grading design work, and preparation of project execution plans. He has in-depth knowledge of modern safety management systems, processes, and techniques applicable to the oil/gas or related industries. Adeel is familiar with International and American Codes & Standards, AASHTO, IPA, ASTM, ASC, NFPA etc., and brings extensive expertise in design software such as AutoCAD, Civil 3d, Water CAD, Sewer CAD, PDS and MicroStation.

He is experienced in areas such as process utilities, water, and wastewater capital projects. Typical projects include saline water desalination, boiler feed water demineralization and steam production, fire suppression water systems for Syncrude, communities and industrial facilities, drainage of storm water, oily wastewater, and fire suppression water as well as handling of flammable waste hydrocarbon liquids and solids. In addition, the utilities planning engineer is responsible for industrial and sanitary wastewater treatment and effluent disposal projects.

### Relevant Project Experience

#### Syncrude Canada Ltd. – MLX – W Dewatering Road

**Role:** Senior Civil Design Engineer, **Scope:** Design of 16.5 km long temporary dewatering road design, lowland and upland road, drainage ditch and culverts. Pavement design of road, including geometric and structural design, drainage calculation which included ditches and culverts, site surveys (topographic and underground scan), geotechnical investigation.

#### Chevron Reservoir Inspection

**Role:** Senior Civil Design Engineer, **Scope:** Visual inspection of existing reservoirs, site visits for visual inspection, geotechnical coordination.

#### Argonaut Gold – Mine site development

**Role:** Senior Civil Design Engineer, **Scope:** Design of site grading including earth pads, access roads, haul roads, stormwater ponds, and ditches. Drainage calculations, site surveys (topographic and underground scan), geotechnical investigation.

#### Syncrude Canada – Tailings Suit Program – Aurora 72kV Powerline Relocation

**Role:** Lead Civil Design Specialist, **Scope:** Design of 72Kv powerline right away with access roads, existing haul and access roads crossings, substation pad and communication buildings pads. Charter studies which include, routing of powerline right away corridor, site drainage and substation and communication buildings pads at Opti.

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#### Syncrude Canada – Tailings Suit Program – FFT (36") and System 4 & 5 (28") Lines from NMSP to FFT PLANT and to NMNP

**Role:** Lead Civil Design Specialist, **Scope:** Design of 25 km long three pipeline corridors with access roads, existing haul and access roads crossings, low points drainage design with drain box and sumps.

#### Shell Canada – Winnipeg Terminal Site Drainage Improvements

**Role:** Lead Civil Design Specialist, **Scope:** Improvements of existing drainage system of tank farms Winnipeg terminal.

#### Syncrude Canada Ltd. – Froth Pipeline Replacement (36km long pipeline)

**Role:** Lead Senior Civil Engineer, **Scope:** Construction of new 36 km long underground Froth Pipeline from Aurora to Base plant through open cut trench and bore method. Identification of third-party crossings and third-party crossing agreement. Desktop study for geotechnical, site surveys (topographic and underground scan), tree clearing and grubbing for the corridor and designed drainage system around pipeline corridor to make sure surface water flow as per existing topography.

#### Syncrude Canada Ltd. – Aurora Tailing Extension (AEPNE)

**Role:** Lead Senior Civil Engineer, **Scope:** Extension of tailings line to discharge at the NE end of AEPNE. Needed approximately 3.5 km of 30" tailings line from bottom of ramp 6 to the proposed discharge area.

#### Syncrude Canada Ltd. – Satellite Fire Hall

**Role:** Lead Senior Civil Engineer, **Scope:** In order to increase response time for Syncrude fire rescue and medical assistance to FFTC full scale plant, a satellite fire hall was erected within the plant area. The satellite fire hall housed one 40-ton fire truck and one medic vehicle. General site preparation and earthwork design for 8.8m wide Gravel access road as per Syncrude standards S1 "Site Preparation and Earth work" and S2 "Design Criteria Roads and Paving" CAN/CSA S-6 "Canadian Highway Bridge Design Code" and industry standards ASTM C117, C131, C136 and ASTM D422. Designed Satellite Fire Hall building pad design as per Syncrude standards and CBC and ABC standards. Designed stormwater management system.

#### Syncrude Canada Ltd. – FFT – CFSP De-icing Bubbler System

**Role:** Lead Senior Civil Engineer, **Scope:** The civil work included construction of electrical equipment pad, blower building pad, portable compressor pad, relocation and construction of an existing 8.8 m wide Access road, construction of a new 4.4 m wide crane access road, and one road crossing. Design of 8.8m wide and 50m long Access Road as per SCL standard S2 "Design Criteria for Roads and Paving" and Transportation Association of Canada and Alberta Transportation "Pavement Design Manual". General Site preparation and earthwork design for Blower building pad, Electrical pad as per Syncrude specification S2 & S4 and Industry standard ASTM D422, D1557.

#### Syncrude Canada Ltd. – FFT Transfer from AEPN to ASB Aurora Dredging

**Role:** Lead Senior Civil Engineer, **Scope:** Assessment of existing barge FFT and water transfer capacity from AEPN to ASB ponds and design new 24" dredge to full fill transfer requirement of FFT and water. General Site preparation and earthwork design as per Syncrude specification S2 & S4 and Industry standard ASTM D422, D155.

#### Other Projects

- Syncrude Canada Ltd. – Coke line Extension 2012 & 2013 Base Plant Tailings pipeline
- Syncrude Canada Ltd. - CTPRE MFT Dredge and Pipeline Corridor, P/E house Base Plant Dredge and Pump House
- Syncrude Canada Ltd. – BMD (Base Mine North Dam) Base Plant Dam
- Enbridge pipeline Canada – Hilton Station Terminal (Ontario)
- Enbridge pipeline Canada – Kirby lake terminal (Alberta)
- Enbridge pipeline Canada – Sarnia Terminal Station (Ontario)
- Enbridge pipeline Canada – Hardisty Merchant Tanks (Alberta)