Ontario Operations Flowsheet

**MINES**
- Coleman
- Copper Cliff North
- Copper Cliff South
- Creighton No 9
- Froid-Stobie
- Garson

**CENTRAL MILLS**
- Clarabelle Mill
  - Crushing
  - Grinding
  - Magnetic Separation
  - CuNi Flotation
    - Main Flotation
      - Pyrrhotite Rejection
        - Not shown
    - Copper Flotation
     - Not shown
  - Magnetic Separation
  - Tailings
    - Copper Concentrate
    - Bulk Concentrate
  - Dewatering
  - Bulk Concentrate
  - 19% Cu-Ni

**SMELTER**
- Sulfur Products
  - Sulfuric Acid Plant
  - Sulfur Dioxide Liquefaction Plant

**Bulk Smelting**
- Bulk Concentrate
  - Fluid Bed Drying
  - Converting
  - Casting and Cooling
  - Crushing
  - Bessemer Matte
  - Metal Refineries
  - Nickel Oxide to Clydach
  - Nickel Oxide to Acton

**Matte Processing**
- Magnetic Separation
  - Metals

**Copper Smelting**
- Copper Sulfide
  - Steam Drying
  - MK Reactor
  - MPV
  - Copper Anode

**COPPER CLIFF NICKEL REFINERY**
- Metals, Nickel Oxide and Nickel Sulfide
  - Converting
  - Distillation
  - Storage
  - Decomposition
  - Electrowinning

**PORT COLBORNE REFINERY**
- Precious Metals Residues
  - Precious Metals Refinery
  - Nickel/cobalt carbonate
  - Cobalt Refinery
  - Electrowinning

**PRODUCTS**
- Sulfuric Acid, Oleum
- Liquid Sulfur Dioxide
- Nickel Powder
- Nickel Pellets
- Ferro-Nickel Pellets for Market and Thompson
- Copper Cathodes
- Gold Sand to Mint
- Platinum Group Metals Concentrate to Acton
- Electrolytic Cobalt
- Packaged Nickel Pellets and Discs
- Nickel Oxide to Clydach
- Nickel Oxide Sinter 75
- Copper Anodes
- Copper Concentrate