Information to Support a Public Pool Permit Application

This document is designed to help identify what information must be submitted to a Public Health Inspector for review when constructing a new pool or renovating an existing public pool. In addition to notifying Alberta Health Services, Environmental Public Health (EPH), it is the responsibility of the owner/owner’s agent or contractor to obtain appropriate building, plumbing, electrical, gas or other permits from the local municipality/Safety Codes Officer.

Environmental Public Health Plan Review, Construction and Approvals Process

Not all renovations require plans to be submitted but notification must be provided and approval obtained from EPH. Please refer to the document Notification for Renovations, Alterations or Change in Operating Procedures of a Public Swimming Pool to clarify when notification is required, available at https://www.albertahealthservices.ca/assets/wf/eph/wf-eph-notify-reno-public-pools.pdf.

Before you start construction or renovation of a public pool, plans must be submitted and approved by EPH. A review of plans is intended to prevent potential problems prior to costly purchase, installation and construction.

The process of getting approval from EPH to open or renovate your pool consists of two parts:

1. Construction or renovation plan approval
2. Operational approval, which includes permit issuance

Public Pool Plan Submission Checklist

Before you start any construction or renovations,

- Have you submitted pool plans to Environmental Public Health for review?
- Have you submitted a completed Pool Permit Application? Available at: http://www.albertahealthservices.ca/frm-19381.pdf
- Have you obtained any necessary safety code permits?

Pool Premises Permit / Renovation Application Checklist

Please find below further details about the supporting documents that need to be enclosed with a Pool Permit Application:

- Site Plan

   An architectural plan of the proposed area for the aquatic facility must be submitted. The site plan includes property lines, an outline of existing and proposed buildings and structures, landscaped areas, and lighting. Fencing or barrier specifications must be submitted for outdoor pools.
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☐ Floor Plan

A floor plan is a diagram within an architectural plan which is usually drawn to scale indicating the layout of rooms, spaces and other physical features on one level of a structure.

A floor plan for a proposed pool must include the location of any pool basins, change rooms, saunas, steam rooms, fitness facilities, washrooms, showers (in change rooms and/or on deck), the mechanical room, designated food/beverage areas, emergency phone, and clocks for monitoring time in whirlpools, dry saunas and steam saunas.

☐ Structural Plan

A structural plan includes the following:

- Cross-sectional diagrams of the pool basin, skimmers, suction outlets (including sumps), pool ramps, pool stairs, play features, waterslides, dry and steam saunas;
- Location of walls, pillars, guard rails, stairs, ramps and other structural components in the pool area; and
- Type of surface finishes (including colour) used on pool basins, in dry and steam saunas, as well as on floors and decks in wet traffic areas.

Ensure all aspects of the structural plans including waterslide, spray park, wave pool etc. are stamped by a professional engineer or architect.

☐ Diagram Showing the Location & Dimensions of Diving, Swimming and Deck Areas

Please note that it is acceptable for these specifications to be included in other plans or schematics in the application package.

The location & dimensions of diving, swimming and deck areas must be clearly marked on the plans and must include:

- Water surface area
- Depths
- Volume of each basin
- Dimensions of deck areas
□ Plumbing Schematic/Mechanical Plan

A plumbing schematic must be submitted which illustrates the plumbing design of the water circulation and treatment systems, as well as any additional systems such as jet lines, waterslides, and/or water features. The plumbing schematic(s) must indicate the following:

- Illustrations of the plumbing for the pool(s), including submerged suction lines, skimmer lines, vacuum lines, equalizer lines, waste lines, domestic fill lines and any other pipe connections. Include the distance between interconnected suction outlets
- Location of filtration equipment
- Location of disinfection equipment and point of chemical injection
- Location of temperature regulators
- Location of the flow meter(s), pressure gauge(s), and vacuum gauge(s)
- Location of a domestic fill line and a backflow prevention device to protect the domestic water supply (if applicable)
- Location of a level controller & static sensor line (if applicable)
- Location of inlets
- Location and plumbing of jet lines, waterslides, and/or water features (if applicable)
- Location of any supplementary disinfection equipment (e.g. UV disinfection treatment systems).

Mechanical schematics must also include electrical and HVAC (heating, ventilation & air conditioning) specifications. These plans must be stamped by a professional engineer or architect.

□ Equipment Schedules

Equipment schedules must be submitted which provide the specifications in the following categories:

- Filtration:
  - Filter type
  - Make and model of the filters
  - Available filtration area
  - Rate of filtration (in gpm/ft$^2$ or lpm/m$^2$)
  - Location of the filter pressure gauge(s)

- Pumps:
  - Make and model of the pumps
• Flow and circulation:
  o Make and model of the flow meters
  o Design flow rate for each pool
  o Estimated resistance (total dynamic head) of the circulation system as well as any other systems (jet lines, waterslides, etc.)
  o Turnover period for each pool
  o Number of inlets
  o Number of skimmers or gutter drains
• Submerged suction/anti-entrapment:
  o Make and model of submerged suction outlet covers for main drains, equalizer lines and vacuum lines
  o Sump dimensions for field built sumps (if applicable)
  o Make and model for prefabricated sumps (if applicable)
  o Any additional anti-entrapment devices (if applicable)
• Disinfection:
  o Make and model of chlorine disinfection equipment (i.e. mechanical feeder)
  o Make and model of supplementary disinfection equipment (if applicable)
  o Make and model of automated controllers
  o Chlorinator capacity
• Miscellaneous:
  o Water source
  o Waste water disposal (if not municipal sanitary)
  o Make and model of the manual pool testing kit
  o Make and model of the temperature regulator
  o Maximum design bather load for each pool
  o Sauna and/or steam room specifications
  o Play feature(s) specifications
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☐ List of Chemicals

A list of chemicals used in normal operation of the pool must be submitted with the application which provides the name and manufacturer of each chemical. The list of chemicals should include, but are not limited to those that are used for:

- Chlorine disinfection (fed mechanically into the system)
- Supplementary disinfection
- pH adjustment
- Alkalinity adjustment
- Calcium hardness adjustment
- Additional treatment chemicals (e.g. shock products)
- Chlorine stabilizer (i.e. cyanuric acid)
- Cleaning and disinfection of decks, equipment and common areas

☐ Evidence of Pool Operator Training

The pool operator must submit proof of successful completion of an approved pool operator education course. Refer to the following link for a list of approved pool operator courses in Alberta:


☐ Signage

One or more signs must be posted that convey the following rules and safety information for the use of the pool in a size, type and location that may be easily seen by all patrons:

- Bathers must take a shower using soap prior to entering the public swimming pool.
- Patrons must wash their hands using soap after using the washroom or changing diapers.
- Glass is not allowed on the pool deck or in other barefoot areas.
- Street footwear must not be worn in wet traffic areas.
- Patrons who are intoxicated will not be allowed to use the pool.
- The maximum bather load for the public swimming pool.
- The public swimming pool depths and identification of those areas of the public swimming pool where diving is not allowed.
- The permitted temperature range of the whirlpool, dry sauna or steam sauna.
- Location of the fire alarm, telephone or other emergency devices, where applicable.
- Where there is no lifeguard on duty, signage stating
  - No lifeguard is on duty,
  - Children under 13 years of age should be supervised, and
  - Patrons should not swim alone.
- Any other information that the owner or owner’s agent determines is necessary to maintain the health and safety of the patrons using the pool facility. This could include statements on patron health or behaviour such as:
  - No person shall use a pool if the person has been instructed not to do so by a regional health authority or a physician.
  - Patrons with diarrhea or a history of diarrhea over the previous two weeks should not use the public swimming pool.
  - No person shall urinate or defecate in or otherwise pollute the water of a pool.
  - Children 35 months and under and anyone who is or may be incontinent should wear protective, water-resistant swimwear.

Additional strategies may be used to provide information to bathers. Refer to section 11.0 of the Pool Standards, July 2014 (Amended January 2018) for further details.

**Written Policies**

Every public pool must have written policies and plans which are accessible to the staff at the pool and to the Public Health Inspector.

The written policies and plans must include the following:

1. Pool Safety and Supervision Plan
2. Patron Education and Notification
3. Water Quality Incident Response Plan
4. General Sanitation Plan
5. Anti-Entrapment Plan

Refer to Section 9.1, 10.0, 11.0, 12.0 and 13.0 of the Pool Standards, July 2014 (Amended January 2018) for topics and information that must be covered in the written policies and plans. A safety and supervision plan must be based on current industry best practices. Best practice resources are available through organizations such as the Lifesaving Society or the Canadian Red Cross.