State Diagram - Emergency Pump for Isolation Vacuum

**Automatic Mode**

- **Alarm Mode**
  - Turbo Pump Started. VH20 Closed
  - No diffusion power

- **Normal Mode**
  - Turbo Pump Stopped. VH20 Closed
  - Good isolation vacuum reached
  - Pump speed status > 80% and no diffusion
  - Diffusion power recovered

- **Warning Mode**
  - Turbo Pump Stop. VH20 Closed
  - Waiting for recovering diffusions

- **Recovery Mode**
  - Turbo Pump Started. VH20 Opened
  - Pumping isolation vacuum
  - Valve opening time not expired

**Manual Mode**

- Turbo on
- VH20 Opened

- **No warning signal**
- **Warning signal detected**
- **Warning signal switched**