Registration of cathodic corrosion protection

Registration of cathodic corrosion protection takes place at the municipal building committee. RISE has made a quick guide that you can use to help with registration.

**What should be registered?**
Answer: Installed system for cathodic protection of type applied current or electrical drainage.

**Who does the registration?**
Answer: The plant owner, or alternatively the installer on behalf of the plant owner.

**Where is the registration made?**
Answer: At the building committee in the municipality where the protection plant is located. Registration is made at the municipality where the anode bed (protection with applied current) and the diode installation (protection by electrical drainage) are located.

**When is the registration done?**
Answer: Not later than one month after the cathodic protection is started.

**What is cathodic protection?**
Answer: Cathodic protection is an electrochemical corrosion protection method which means that a direct electrical current is fed through the earth / water to the metal surface of the structure to be protected.

**Need for cathodic protection registration**
Knowledge of where cathodic protection installations (anode beds and electrical drains) are located and how much protection current is discharged significantly facilitates the work of avoiding secondary effects on a structure that is subsequently buried near an existing cathodic protection. This is the background to the need for cathodic protection registration. The registration of cathodic protection with the building committee in each municipality was started in 1976.

**How to fill in the form:**

**Technical information**
The technical information that is known about the cathodic protection in connection with commissioning is completed.
Soil resistivity

Soil resistivity is measured either in the soil surface by Wenner 4-electrode method or in soil samples taken at the anode depth, with for example a soil-box. For measurement instructions, see: Bulletin 88, Determination of Earth’s resistivity, from the Corrosion Institute.

Ground resistance

The ground resistance of the anode bed is measured with a ground resistance meter according to the 3-electrode method, that is, the measurement is done in the same way as the measurement of the ground resistance of an electric earth ground. Measurement instructions are usually found in the ground resistance meter’s instruction book.

Risk area for secondary affects

The risk area for secondary affects around an anode bed can either be measured around the anode bed or calculated. For instructions for field measurement and method of calculation, see: KI-Report 1983: 4, Instructions for measuring secondary effect from cathodic protection, from the Corrosion Institute.

The outer limit of the risk area calculated from the anode bed can also be calculated according to:

\[ r = U \times L^{0.65} \]

- \( r \) = outer limit of risk area (m)
- \( U \) = rectifier output voltage (V)
- \( L \) = length of the anode bed (m)