

# Statement of Basis

The **Statement of Basis** (124.7) shall briefly describe the derivation of the permit conditions.

The **Administrative Record** (124.9) shall consist of the application, draft permit, the statement of basis, all documents cited in the statement of basis, and other supporting documents.

## **General Information:**

- name and address of applicant

- description of the proposed injection activity

## **Description of Site:**

- location of proposed well or facility (legal description, tribal land, etc.) and area of review.

- population, groundwater use in area, and historical practices encompassed in area of review.

## **Geologic Information**

- description of geologic units of primary importance to the injection activity, e.g., aquifers, confining beds, the confining zone, and the injection zone. Information should include geologic name, depth, thickness, areal extent, lithology, hydrology, physical and chemical characteristics, presence or absence of fractures, and number and name of wells completed into each geologic unit in area of review.

- identification of all USDWs. For identified USDWs, information must include name, depth to bottom, water quality (TDS), and any known water wells completed into the USDW and its use(s) of water (e.g. domestic, stock watering, irrigation, industrial use only, etc.).

- identify if an aquifer exemption is sought, and evaluate the basis for granting the exemption.

- for the injection zone, evaluation of logs or test results that determined fluid pressure, estimated fracture pressure and other physical characteristics.

## **Area of Review (AOR) Considerations**

- method used to determine area of review (AOR) and evaluate whether adequate.

- the number of wells in the AOR, with their type, depth, present status, evaluation of construction, completion or plugging and abandonment.

- any necessary corrective action (CA) identified. (note: if CA is required, the permit must contain the required CA and a compliance schedule.).

## **Construction Requirement Considerations**

- evaluation of proposed well construction or conversion, including borehole size, surface casing depth, well casing(s), cement, and packer assembly, and adequacy to prevent movement into or between USDWs.

- evaluation of logs and well test interpreted results related to a USDW and its confining bed, and the injection zone and the confining zone.

- identify any additional tests necessary.

**Operating Requirement Considerations**

evaluation of proposed injection operation to assure fractures are not initiated into the confining zone, that injected fluid do not migrate into USDWs, or that formation fluids are not displaced into USDWs.

Evaluate the proposed maximum and average surface injection pressure and volumes. identify any additional tests necessary to further determine maximum permitted injection pressure.

evaluate the source(s) and characteristics of the injected fluid.

**Monitoring Requirement Considerations**

evaluation of proposed monitoring program to assure that fractures are not initiated into the confining zone, that injected fluid do not migrate into USDWs, or that formation fluids are not displaced into USDWs.

describe the purpose, method, and reporting requirements of any additional monitoring program(s) determined to be necessary.