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PROTOCOL FOR LAND APPLICATION OF PURGED GROUNDWATER

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These procedures must be followed for groundwater discharges to land.

- The source of the discharge must solely be uncontaminated groundwater collected as a part of purging monitoring wells for the purpose of groundwater sampling and cannot contain pollutants in concentrations that exceed water quality standards for groundwater, as evidenced by a minimum of four consecutive quarters of analytical data.
- No chemicals may be added.
- The groundwater discharge must be conducted in the vicinity of the well from which the water was purged.
- Land application of purged groundwater must be conducted at a rate and location that does not allow for any runoff into state waters or other drainage conveyance systems, including but not limited to streets, curb and gutter, inlets, borrow ditches, open channels, etc. If the land application is to agricultural land, it must not reach or have the potential to reach an agricultural ditch. Discharges to drainage conveyance systems as described above are a discharge to surface water that require a discharge permit and are not covered under this guidance document.
- Land application of purged groundwater must be conducted at a rate that does not allow for any ponding of the groundwater on the surface, unless the ponding is a result of implementing best management practices that are designed to reduce velocity flow. If the best management practices used result in ponding, the land application must be done in an area with a constructed containment, such as an excavation or a bermed area with no outfall. The constructed containment shall prevent the discharge of the ponding water offsite as runoff.
- A visible sheen must not be evident in the discharge, nor should a sheen be created by putting the purged water in contact with petroleum-stained surfaces.
- The discharge must be applied a sufficient distance away from building foundations or other areas that may be damaged from ground settling or swelling.
- If the discharge is located at a facility covered by a Colorado Discharge Permit System (CDPS) General Permit for Stormwater Discharge associated with Construction Activities, the requirements in that permit associated with discharges of groundwater to the ground must be complied with, including identification in the Stormwater Management Plan.
- Best Management Practices shall be implemented to prevent any sediment deposited during land application from being transported by stormwater runoff to surface waters or other conveyances.

Best Management Practices for Discharges to Land

These Best Management Practices (BMPs) are for discharges to the ground through the soil or onto non-trafficked pavement where evaporation can be observed and where the discharge will not flow overland directly into a surface water, storm sewer or similar conveyance.

- All BMPs used to meet the provisions of this guidance document must be selected, installed, implemented and maintained according to good engineering, hydrologic and pollution control practices. These BMPs must be adequately designed to provide control for all potential pollutant sources associated with the discharge of uncontaminated groundwater to land.
- The discharge should be routed in such a way that it will not cause erosion to land surface. Energy dissipation devices designed to protect downstream areas from erosion by reducing the velocity of flow (such as hose attachments, sediment and erosion controls), may be necessary to prevent erosion.
- When discharging, allow the water to drain slowly so that it percolates into the ground without running off of the property or causing flooding issues.
- The discharge should be routed in such a way that it will not contact petroleum products/waste. A visible sheen must not be evident in the discharge, nor should a sheen be created by putting the purge water in contact with petroleum-stained surfaces.
- To minimize the potential for stormwater pollution, a filter bag or similar filtration device may be used to remove sediment/solids prior to land application.