

Anti-degradation Study Objectives – For new quarries

- (1) Description of operation: The location of the new operation and the reason it is being proposed. Will rock only be extracted (mined), or will the rock be washed or cut (sawed) on-site?
- (2) Possible pollutants in new discharge: The pollutants (silt, rock solids, petroleum from fuel tanks and vehicles) that could potentially be contributed in the new discharge.
- (3) Designated uses of receiving stream: The existing conditions and quality of local streams, hydrology of the area and the designated uses of the receiving stream.
- (4) Pollutants of concern in stream: Explanation as to whether the receiving stream is on the 303(d) list for any pollutants or if there is a TMDL on the receiving stream. See link below;

<https://maps.kdhe.state.ks.us/kstmdl/>

- (5) BMPs that will be used: The available Best Management Practices (BMPs) for the operation and discharge in order to maintain existing water quality of receiving stream. For quarries, this could include using new or existing ponds, terraces, berms, grass filter strips that will or could be used to treat contaminated stormwater runoff from the site, to minimize any adverse impact to surface water quality in the area. Example practices could include only disturbing a few acres at a time, in lieu of opening many acres and/or reclaiming inactive areas of the quarry.
- (6) Discharge options: Alternatives to creating a new discharge could include constructing a large non-discharging pond, including irrigating from a large pond. If any new ponds will be constructed we would need calculations showing the ponds are sized properly, based on the size of the drainage area (3600 ft³ of capacity needed per acre drained)
- (7) Best BMP option and cost: Based on the BMPs available, propose the best BMPs that could be implemented to minimize the potential adverse impact of the new discharge to the receiving stream. Normally costs are shown for each option and the most feasible and economical option is identified.
- (8) Economic Benefits: Explain the social and economic benefits the new operation will provide to the local area, to offset the contributions of new and/or additional pollutants present in the new discharge.
- (9) General: The report should state why KDHE should allow for a new discharge into the watershed from this facility.