**Stream/Waterway Worksheet**

The parameters of this Stream/Waterway Worksheet must be followed to ensure a viable permit and productive postmining land use.

# Site Specific Information:

1. **Operator Name:**
2. **Site Name:**

Note: Operator Name and Site Name must exactly match the Operator and Site name on the Standard Permit and other application documents.

1. Indicate the type of stream/waterway that would be impacted by the Opencut operation.

**Drainage River Stream/Creek Pond/Lake Wetland Irrigation Canal**

**Other Surface Water Feature with Defined Channel (describe):**

This worksheet provides recommendations regarding Opencut operations proposed to be conducted in any river, stream, creek, intermittent stream, drainage or any other waterway with a defined and/or eroded channel, hereafter referred to as waterways. The purpose of this form is to ensure that waterways intersected by Opencut Operations are mined in a manner that allows for the reclamation to a successful postmining land use (82-4-403(14), MCA).

Note: Mining the top of a knob that has swales is usually acceptable. Opencut recommends the operator submit a *Request for Pre-Application Meeting* form to address any unknowns or concerns.

In addition, Opencut operations conducted in waterways could have the potential to cause adverse impact to the site and adjacent land. For example, disturbing the drainage by removing vegetation and material could exacerbate lateral channel migration and erosion on-site; and changing the channel shape, dimensions, or gradient could cause both headward erosion upstream and excessive sedimentation downstream, thereby hindering reclamation.

Due to the potential for Opencut operations conducted in waterways to negatively impact the site and adjacent land, the Department recommends avoiding mining or other operations within any waterway and that at least a 50-foot wide buffer zone along both sides of the waterway be left undisturbed. This buffer may vary depending on existing easements, the size and significance of the waterway, among other potential factors. Regardless, any planned buffer zone must be shown on the Site Map.

**Alternatively, the operator may choose to adjust the proposed permit boundary so that the waterway is entirely excluded, thus negating the need to submit this form.**

Under the Opencut Mining Act and its implementing rules, it is the Operator’s responsibility to provide a complete, thorough, and comprehensive design for the proposed operations, mitigations, and reclamation methods, and to provide adequate bond to ensure that impacts resulting from the proposed operations could be remedied. Also, be advised that other sections of DEQ, state or federal agencies may have broad provisions and specific requirements that may apply to proposals to conduct mining and other operations in the waterway and may require permits in addition to the Opencut permit. It is the responsibility of the operator to comply with all applicable federal, state, county, or local regulations, ordinances and permits, licenses and approvals for the proposed operation (82-4-434(2)(j), MCA).

Additionally, the mine plan must provide that the Opencut operation will:

* 1. Leave reclaimed surfaces and roads in a stable condition that blend into the surrounding topography and drainageways/waterways (ARM 17.24.219(1)(c)). Note that the Department may require water-table-level monitoring to ensure that appropriate reclaimed surface elevations are established and the correct postmining land use is achieved.
  2. Reclaimed waterways must:

1. Be located in their approximate pre-mine locations;
2. Have channel and floodplain dimensions and gradients that approximate pre-mine conditions;
3. Connect to undisturbed drainageways/waterways in a stable manner (ARM 17.24.219(1)).
   1. When Opencut operations will cause the diversion, capture, or use of water, the Operator should consult with the regional office of the Department of Natural Resources and Conservation, Water Resources Division, concerning water rights to ensure their plan does not disrupt or impact the water rights of others.

Agencies that may require permits for impacting streams and waterways include but are not limited to:

1. Montana Department of Environmental Quality (DEQ) Water Protection Bureau
2. Montana Department of Natural Resources and Conservation (DNRC)
3. U.S. Army Corps of Engineers
4. County Floodplain Administrators
5. Soil and Water Conservation Districts of Montana

Additionally, the Permit must provide that the Opencut operation will:

* 1. Leave reclaimed surfaces and roads in a stable condition that blend into the surrounding topography and drainageways/waterways (ARM 17.24.219(1)(c)). Note that the Department may require water-table-level monitoring to ensure that appropriate reclaimed surface elevations are established and the correct postmining land use is achieved.
  2. Reclaimed waterways must:

1. Be located in their approximate pre-mine locations;
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   1. When Opencut operations will cause the diversion, capture, or use of water, the Operator should consult with the regional office of the Department of Natural Resources and Conservation, Water Resources Division, concerning water rights to ensure their plan does not disrupt or impact the water rights of others.