December 22, 2008

Dear Reader:

The Montana Department of Environmental Quality (DEQ) completed a Draft Environmental Assessment (EA) for a revised Evaluation Adit Plan requested by RC Resources, Inc (RCR) for the Rock Creek Project. The draft EA was issued on July 1, 2008 and public comments were requested. The proposed mine and facilities are located in Township 26 North, Range 32 West, Sections 3, 10, 15, 22, 27, 28, 29 and Township 27 North, Range 36 West, Sections 33 and 34 in Sanders County.

ASARCO proposed an evaluation adit for the Rock Creek orebody in the Cabinet Mountains in July 1992. The Montana Department of State Lands (DSL) and Kootenai National Forest (KNF) reviewed the plan and ASARCO made revisions in October 1992 and February 1993 in response to agency review and comments on the Plan. The Evaluation Adit Plan was analyzed in an Environmental Impact Statement (EIS) by DSL’s successor, the Department of Environmental Quality. The Evaluation Adit Plan was approved as part of Alternative V in the Record of Decision (ROD). The Forest Service subsequently re-issued their ROD in 2003 (USDA 2003).

Since 2001, the approved Evaluation Adit Plan has been modified by ASARCO’s successor, RCR to address final design changes, provide an alternate water disposal method, lessen environmental impacts, and to satisfy stipulations in the ROD. A draft EA was issued that was tiered to the 2001 EIS and evaluated impacts of the modifications to the approved Evaluation Adit Plan.

The following changes to the approved plan have been proposed: Access to the evaluation adit would be by the existing Rock Creek Road (USFS Rd# 150) and Chicago Peak Road (USFS Rd# 2741). About 2.5 miles of the FDR No. 150 road would be upgraded to improve utility and reduce sediment yield. Modifications would include widening of several corners, upgrading water bars to meet USFS standards, installation of new culverts to meet USFS standards, and resurfacing to provide a smoother road bed and decrease sediment production. Best management practices (BMPs) would be used to control sediment from borrow areas used for road construction materials.

Estimated disturbance for the evaluation adit project would be 10.59 acres at the adit site (including new access roads and a septic system), 5.08 acres of disturbance associated with road improvements (including 1.74 acres for borrow areas), 1.0 acre at a new proposed ground water disposal site, and 3.13 acres at the support facilities area for a total of about 19.8 acres. The 2001 ROD approved disturbance of 14.68 acres for the Evaluation Adit Project. The modifications addressed in this final EA result in the
disturbance of 5.12 additional acres. Alternative V approved in the 2001 ROD had an approved permit boundary of 1,560 acres.

A number of comments were received in response to the draft EA. Agency responses to the comments are attached. The DEQ has decided to approve the draft EA as the final EA with several stipulations to require additional groundwater monitoring and contingent on posting a reclamation bond. The stipulations note that:

DEQ will stipulate that RCR submit a plan to install piezometers between the proposed location of the percolation ponds and the landslide for review, approval, and installation in fall 2008, and DEQ will stipulate that RCR add to the list of daily parameters Specific Conductivity measurements by meter, and add Total Dissolved Solids for discharge to ground water.

Information on the Rock Creek project can be obtained by writing or calling the Montana Department of Environmental Quality, c/o Herb Rolfes, P. O. Box 200901, Helena, MT 59620, telephone (406) 444-3841; e-mail address hrolfes@mt.gov.

Warren D. McCullough, Chief
Environmental Management Bureau

12/22/08 Date
Public Comments and Responses to Rock Creek Resources Draft EA

A. Comment Period and Public Notice

Comment 1: There does not appear to be a record of the public notice requesting public comment. Much more time should be given for the comment period.

Response 1:
A press release was issued by DEQ on July 23, 2008 and published on the DEQ website along with the draft EA. A legal notice giving notice of the availability of the draft EA was published in the Missoulian and Daily Interlake on July 21, 26 and August 2.

A legal notice indicating an extension of the public comment period was published in the Missoulian and the Daily Interlake on August 17, 24 and 31st. A press release was also issued to newslink (a free distributor to newspapers) on July 21, 2008. A press release was again issued on August 12, 2008 noting the extension of the public comment period. The Sanders County Ledger published a story on the Draft EA in mid-August.

Additionally, a mailing list based on the responses to the 2001 EIS was used for notification of the EA. Approximately 4,600 notifications were sent out.

Comment 2: I learned of the environmental assessment for the exploration adit in The Ledger. This was the first time the people of Noxon were notified and I feel we need an extension of time to comment. I also believe we need to hold a town meeting in Noxon since we will have the largest impact on our community if the mine goes into operation. Please consider extending your deadline for comments for at least 45 days so many of the citizens of Noxon can be heard.

Response 2:
Please see response to Comment A.1.

Comment 3: I am a property owner across the river from the Rock Creek Mine. I did not know about the public comment period until I read The Ledger. How did you notify the property owners here in the Noxon area?

Response 3:
Please see response to Comment A.1.

Comment 4: I feel the DEQ should hold a town meeting here in Noxon.

Response 4:
The DEQ believes that the public has had ample opportunity to discuss and understand the proposed changes to the Evaluation Adit. Comments received on the Evaluation Adit have been reviewed. This Final EA addresses those comments.

Comment 5: There does not appear to be a record of the public notice requesting public comment. Was it done?

Response 5:
Please see response to Comment A.1.
Comment 6: Six weeks, four weeks originally, is hardly sufficient time to analyze the environmental impact of these changes, even with sufficient notice.

Response 6: The DEQ believed that the proposed changes to the Evaluation Adit detailed in the Draft EA could be adequately reviewed in the original amount of time. However, the comment period was extended by two weeks.

Comment 7: The notice and comment period for this Draft EA is absolutely out of line with the environmental impact/importance of the project to the public.

Response 7: Please see response to Comment A.1 above.

Comment 8: I am asking that the comment period be extended so that everyone may be given a fair chance to comment on these proposed changes to the revised draft EA.

Response 8: The comment period was extended by two weeks.

Comment 9: Thanks for extending the comment period, but the time allowed is not adequate given the poor job of public notification and the complexity of the issues involved.

Response 9: Please see response to Comment A.1 and A.6 above.

B. Adequacy of the EA

Comment 1: The checklist EA is inadequate and provides insufficient information for the public to comment upon.

Response 1: The Plan of Operations for the Rock Creek Evaluation Adit was analyzed in an EIS issued in 2001. DEQ approved the Plan of Operations for the Evaluation Adit in a Record of Decision (ROD) issued in 2001 with additional modifications and mitigations. These mitigation measures have been implemented by RCR, and monitoring is ongoing.

The Draft EA analyzed proposed modifications to the Plan of Operations for the Evaluation Adit, including a change in the proposed water disposal site during Evaluation Adit construction, modifications to USFS Road No. 150, and 5.12 acres of additional disturbance area. These proposed modifications are within the permit boundary area approved in the 2001 EIS. The analysis contained in the EA does not indicate that an EIS is necessary.

Please see response to Comment A.1 above concerning the comment period.
Comment 2: My first comment is that an EIS should be mandatory. The planned changes to the adit proposal needs more detailed analysis for understanding its environmental safety hazards.

Response 2:
Please see response to Comment B.1 above.

Comment 3: DEQ must also consider the ‘new’ adit plans wish to increase waste rock by 33%. The addition of approximately 34,000 tons of material laced with heavy metals and blasting compounds will seep into the runoff and end in the ground and surface water as well as the Clark Fork River. This proposed change alone should require a more stringent EIS analysis.

Response 3:
The 2001 EIS approved the placement of 178,000 tons of rock at the portal patio downhill of the adit entrance. The 178,000 tons of rock consists of 59,000 tons of barren waste rock and 119,000 tons of mineralized ore. The proposed modification to the Plan of Operations for the Evaluation Adit has to do with the relative amount of barren waste rock and mineralized ore to be placed at the portal patio. No change has been proposed for the location or total volume of rock.

The amount of mineralized ore that would be placed at the portal patio would be reduced by 31,000 tons, providing less potential to degrade ground and surface water than the 119,000 tons previously analyzed. The residual amount of blasting compounds present in the total volume of rock to be placed in the portal patio would be equivalent to that previously analyzed.

Studies of the waste rock and ore, presented in the 2001 EIS, show that this rock is relatively inert and does not leach significant amounts of metals. The Evaluation Adit plan has been modified to include lined runoff collection ditches and ponds surrounding the waste rock / ore storage area. Intercepted runoff would be routed to the water treatment plant.

Comment 4: The checklist EA as well as the comment period are inadequate and provide insufficient information the public may comment upon.

Response 4:
Please see response to Comments A.1, B.1, and B.3 above.

Comment 5: There are way too many unresolved items with this mine to allow any site work to take place at this time.
Just to name those that come to mind:
Dewatering of the wilderness, incl. Cliff Lake.
Grizzly bear and Bull Trout.
Wastewater disposal.
Unstable soil along the river in the waste disposal area. The added water and tailings weight will worsen the problem and could result in a catastrophic slide of Hwy 200 into the river.

Response 5:
The Draft EA addressed issues concerning changes not analyzed in the EIS that was completed in 2001 and in the 2001 ROD. Dewatering of the wilderness and Cliff Lake were addressed in the EIS. Grizzly bear and Bull trout were addressed in the EIS. Wastewater disposal is addressed in the EA in Section 2 on pages 7-12. Unstable soil along the river in the waste water disposal area is addressed below in response to Comment D-1.
C. Power Supply/Air Quality

Comment 1: The proposal for back-up electrical power from a diesel powered generator instead of the propane fired generators that were identified in the FEIS/ROD is a significant change that needs addressing in terms of air quality. This is especially important if the exploration adit proposal is a year-round activity, as NW Montana winters are known for their numerous periods of stagnant air inversion.

Response 1:
Under the current Plan of Operations for the Evaluation Adit, electricity would be supplied by two propane-fired generators located on the portal patio. Under the proposed modification, electricity would be supplied by a powerline buried in the access road. A diesel-powered backup generator would be located at the portal patio in the event of a temporary failure of the powerline. It would not be an ongoing power source. The proposed change is considered an improvement to the current plan as it would reduce impacts to air quality and lessen noise.

Comment 2: The CMW is a Class I air shed, air quality at the wilderness boundary must meet Class I criteria both above and below ground. Northwest Montana is frequently subject to temperature air inversions that would trap any exhaust from the proposed diesel generators should it become necessary to operate them. The EA does not identify who, where or how air quality would be monitored should such an event take place. Nor does it explain what action would be required of RCR if the air quality falls beneath acceptable levels.

Response 2:
Please see the response to Comment C.1 above. Further, a backup power generator is included in the Air Quality Permit, which has requirements for sampling. As the permittee, RCR would be required to perform air quality sampling and meet air quality standards as described in the Air Quality Permit.

Comment 3: The proposal for back-up electrical power from a diesel powered generator instead of the propane-fired generators that were identified in the FEIS/ROD is also a significant change that needs to be addressed in terms of air quality.

Response 3:
Please see the responses to Comments C.1 and C.2 above.

Comment 4: As previously mentioned the dust condition from huckleberry traffic is untenable, try to imagine conditions with continuous heavy equipment traffic. Diesel fueled generators and diesel fueled heavy equipment would result in a great degradation of the pristine air quality and solitude of the wilderness conditions not to mention that diesel fueled equipment is a departure from specifications in the FEIS/ROD.

Response 4:
DEQ issued Air Quality Permit #2414-02 for the Rock Creek Project on December 1, 2003. The permit covers both the Evaluation Adit and mine phases and RCR must operate in compliance with the permit. An evaluation of potential sources of air pollutants indicates that an air quality permit is not necessary for the Evaluation Adit.

There are no proposed changes to the access road use with respect to the number of trips and types of equipment or vehicles traveling the roads as addressed in the 2001 EIS and approved in the 2001 ROD. RCR would be required to control dust on the access road during operations at the Evaluation Adit.
Please see response to Comment C.1 above concerning change from propane to running an electrical power line.

D. Ground Water Disposal and Quality

Comment 1: The EA on page 8 (Impacts to the physical environment #1) notes “Are soils present which are fragile, erosive, susceptible to compaction, or unstable?” The discharge to ground water at the infiltration pond is estimated at 200k to 300k gallons per day. The Montana Department of Transportation (MDOT) is currently engineering a fix for a massive slide, an area some 1450 feet long, straddling MP 16 on Highway 200, approximately 1500 feet west and below RCR’s proposed infiltration ponds. MDOT correspondence indicates that hydraulic (water) action is forcing an unstable massive area of clay to slide into the Clark Fork River, perhaps catastrophically. Obviously, much more study of the geological stability of the area impacted by the changed plan must be undertaken before a decision can be reached.

Response 1:
The slide to which the comment refers is the Cabinet Slide, located three-quarters of a mile west of the proposed ground water percolation site. The MDT has proposed several recommendations to arrest the slide. These recommendations primarily include measures to reduce the contribution of runoff to the headscarp of the slide. The August 28, 2008 geotechnical report states, “The proposed infiltration site, which is roughly ¾ mile east of the landslide is not expected to significantly affect the stability of the slide. There is no positive evidence indicating that a cause and effect condition will exist between the proposed mine infiltration and ground water levels at the slide area. If ground water flow volumes were to be increased at the slide location as a result of infiltration from the mine, the increase would have less impact than the seasonal variations in natural ground water infiltration from rain and snow-melt, which will be mitigated by the recommendations (made in the report).”

A supplemental report dated September 5, 2008 states further, “Proposed infiltration from the mine does have some, undefined potential to affect ground water near the roadway in the area, which could, in turn, affect the stability of nearby embankments. Whether or not, the effects are ultimately found to be significant, it would benefit both the public and the mining company if a series of piezometers were installed adjacent to the roadway to monitor ground water levels…so that natural ground water fluctuations can be measured over at least one spring season, preferably a full year, before the infiltration ponds are used.” DEQ has required RCR to submit a plan to install piezometers between the proposed location of the percolation ponds and the landslide for review, approval, and installation in fall 2008.

Comment 2: For DEQ or any of the agencies to accept Revett’s assurances that the discharge will meet Montana’s non-degradation discharge standards is also wrong. An analysis within the scope of an EIS is what’s needed, not the words of the company’s officials. Look at the assurances Revett tells the public about their Troy Mine in reference to safety and water degradation.

Response 2:
The water treatment systems required of RCR under the current Plan of Operations are proven technologies that have been demonstrated to be capable of treating water to the discharge limits proposed by RCR and that would be set by the ground water discharge authorization. The ground water discharge authorization uses legally-enforceable discharge limits that must be met by the permittee (Sections 75-5-301 and 75-5-303, MCA of the Montana Water Quality Act and Section 303(c) of the Federal Clean Water Act). These laws and the Montana Metal Mine Reclamation Act require that the discharge limits used by the discharge authorization must be met. If the limits are not achieved, additional treatment would be required, or the discharge must be terminated until the permittee can demonstrate that the discharge limits will be met. Should the permittee not be able to meet the requirements of the ground water discharge authorization, DEQ may require termination of the discharge.
and/or pursue significant penalties through an enforcement action. Also, DEQ would conduct random, unannounced inspections of the site and would sample water discharged to the percolation ponds to verify compliance with discharge limits.

Comment 3: Water, that exceeds drinking water standards for Montana, has met my first concerns. If samples are taken prior to and after treatment, a good watch is in place. Who will take the samples and who will examine the test results? DEQ?

Response 3:
The ground water discharge authorization requires the permittee to take all samples and have them analyzed for the parameter list required. DEQ inspectors would occasionally collect samples of the effluent to verify compliance with discharge limits. The 2001 ROD requires surface water and ground water monitoring for the life of the Evaluation Adit and for five years after the agencies have determined that the water within the adit meets ground water standards and water treatment is no longer needed. Additional requirements have been placed on development adits and the mine, if developed. The 2001 ROD also requires the establishment of a Memorandum of Understanding (MOU) to provide the framework for a third party contractor to conduct hydrological monitoring for the Rock Creek Project. The third party contractor may, as directed by the agencies, provide quality assurance duplicate or independent sampling at the MPDES outfalls, ground water monitoring wells, and routine underground flows. The MOU must require RCR to immediately notify the agencies of any discharge that does not meet ground water discharge authorization standards. DEQ and the Kootenai National Forest will perform ongoing review of all analytical results.

Comment 4: We also want to emphasize the importance of conducting adequate surface and ground water monitoring to verify compliance with the applicable water quality standards. Will there be adequate ground water monitoring wells to assess ground water quality with use of the infiltration/percolation beds?

Response 4:
The 2001 ROD requires surface water and ground water monitoring for the life of the Evaluation Adit and for five years after the agencies have determined that the water within the adit meets ground water standards and water treatment is no longer needed. Additional water monitoring requirements have been placed on development adits and the mine, if developed. The 2001 ROD requires an expansion of RCR’s water resources monitoring plan as outlined in Appendix K of the ROD. This expansion includes the collection of ground water monitoring data during construction, operation, and reclamation phases, as well as during temporary facility shutdowns. Ground water from existing domestic water supply wells would also be collected and analyzed, per the 2001 ROD. Proposed monitoring well locations would be reviewed and finalized in consultation with the agencies to ensure the adequacy of the monitoring network and the parameters to be analyzed. The ground water discharge authorization would also require a monitoring network to assess compliance.

Comment 5: Up to 360,000 gallons of contaminated water will be released daily, making its way to Idaho’s waterways, whether through surface or ground water discharge.

Response 5:
Please see responses to Comments D.2, D.3, and D.4. Discharge of contaminated water is not proposed and would not be authorized. Water would be treated to levels comparable to that of the receiving water. It is likely that water from the evaluation adit would meet all drinking water standards, with the exception of nitrate, prior to treatment. The estimated rate of discharge of water from the evaluation adit has not been modified from that analyzed in the 2001 EIS, that is, 168 gpm.
Comment 6: The discharge to ground water will be much larger than anticipated due to incorrect assumptions of discharge to the adit. The ground water discharge will reach the Clark Fork River and should be treated as a surface water discharge, with the Montana DEQ requiring a MPDES permit. The analysis of whether discharged contaminants could reach nearby domestic wells is not useful because an insufficient amount of water was added to the ground water to even be certain the dye made it into the ground water. The discharge to ground water near the Clark Fork River should be analyzed with an updated conceptual and numerical model to provide full disclosure to the public of the potential impacts associated with the project. Parker (2008) does not list the depth of wells. It is not possible to make conclusions regarding the effect of the ground water discharge on domestic wells [if] the well depth, or, more importantly, the screen interval, is unknown. Review of Ground water Inflow Estimate: Ruth (1992) estimated the inflow using an analytical equation, derived based on Darcy’s Law, for inflow to a tunnel based on Darcy’s Law. It treats the inflow as steady state and assumes the water table in the bedrock above the tunnel does not lower with inflow to the tunnel…The FEIS indicates that locations of fractures are unknown and that the fractures could be linked to existing springs. If the tunnel intersects these fractures, [their] ground water will drain to the tunnel at rates and from distances far larger and further than anticipated by the analytical model used to predict the inflow. Conductivity estimates are too low. The inflow to the tunnel could easily be an order of magnitude higher than analyzed here.

Response 6:
The percolation ponds are to be sited in an area where the basal gravels will receive the percolated water (Appendix O of the Rock Creek Resources (RCR) application for the exploration license “Rock Creek Evaluation Adit Ground Water Discharge Site Investigation and Percolation Pond Design,” Revised 3/22/06). Because no direct connection to surface water has been demonstrated, a Montana Pollutant Discharge Elimination System (MPDES) permit is not applicable; a ground water discharge authorization is sufficient. The well log for the Fitchett well (available online from the Montana Ground Water Information Center at Montana Tech) shows that the basal gravels start at a depth of forty feet. The well is of open-bottom construction and draws water at a depth of forty-three feet. The depths, elevations, and screened intervals for the other wells are shown schematically in Figure O-2 of the report.

On the subject of ground water volumes: In accordance with Stipulation No. 49 in the 2003 Record of Decision, the company is required to conduct directional grouting ahead of blasting to minimize seepage of ground water into the adits during and after mine construction and operation. This is intended to intercept and stop any unanticipated heavy ground water inflows and to minimize the amount of ground water seeping into the Evaluation Adit and, later, into the mine workings if the mine goes into full operation. Furthermore, in accordance with Stipulation No. 50, a detailed water balance will be refined annually during Evaluation Adit construction and mine construction and operation as outlined in Appendix K of the 2001 EIS.

Although DEQ considers the adit inflow estimate to be adequate for purposes of treatment system design and impact evaluation, actual water production rates may vary. It should be noted that adit development will occur over a period of two years, with inflows increasing as the adit advances; consequently, if actual inflow rates become significantly greater than anticipated, adit construction would likely be halted before full development occurs. Furthermore, it is instructive to compare the proposed Rock Creek Evaluation Adit with the nearby existing Montanore Exploration Adit located near the headwaters of Libby Creek to determine whether the inflow predictions are reasonable. The Rock Creek Evaluation Adit is proposed to be 6,700 feet in length, with a portal elevation of 5,775 feet. The Libby Adit is 14,008 feet in length, with a portal elevation of 4,020 feet. Average, sustained inflow into Montanore’s Libby Adit was 150 gallons per minute while the adit was being dewatered. Given the shorter length of the proposed Rock Creek Evaluation Adit, plus its higher elevation (indicating that the overlying rock is less likely to be saturated), the Rock Creek Evaluation Adit is likely to intercept less ground water than the Libby Adit. Inflow rates are more likely over-estimated than under-
Comment 7: The Montana DEQ should treat this ground water discharge as a discharge to surface water and require it to have a MPDES permit. Discharge monitoring should include sampling of the flow and quality at Springs 20 through 24. Also, there should be a series of monitoring wells constructed upgradient from the river spread across the half mile that the ground water flowpath would spread.

Response 7:

There is no clear line of authority as to whether an NPDES permit is required for discharges to ground water that have a hydrologic connection to surface water. Courts are split on the issue. Some courts have found that, since ground water is not a navigable water, the CWA does not apply – regardless of hydrologic connection. Other courts have found that discharges to ground water may be regulated under the CWA, but only if there is a demonstrated direct hydrologic connection that affects surface water. To establish a direct hydrologic connection, it is not sufficient to allege groundwater pollution and then assert a general hydrological connection between all waters. Rather, pollutants must be traced from their source to surface waters in order for an NPDES permit to be required. Washington Wilderness Coalition v. Helca Mining Co. (E.D. Wash. 1994), 870 F.Supp. 983; Idaho Rural Council (D. Id. 2001), 143 F.Supp.2d 1169; Northern California Riverwatch v. Mercer Fraser Company (N.D. Cal. 2005), 2005 U.S. Dist. LEIS 42997.

RCR proposes to discharge treated water into a basal gravel layer via a percolation pond located in the footprint of the proposed tailings impoundment. A tracer test was conducted in October 2006 through February 2007 to evaluate the possibility of a hydrologic connection between the proposed water discharge and private water supplies located generally down-gradient of the percolation pond between it and the Clark Fork River. The discharged water could not be traced to any of the wells.

Above the bedrock, the basal gravel layer is discontinuous and overlain with lake-deposited sand, silt and clay sediment layers. Water discharged to the percolation pond would move down gradient toward the northwest and the Clark Fork River. Some water would likely move into the underlying fractured bedrock and some may rise into the overlying sediments. Eventually, the water would move from the basal layer into the alluvial gravels adjacent to or beneath the river. The point at which the discharged water eventually enters the alluvial gravel is not known and will not be able to be identified because the discharged water will mix with ambient groundwater in the basal gravel unit, and the geology is sufficiently complex that dispersion of the water as it travels toward the alluvial gravels will result in the water following numerous potential flow paths. The zone within which flow in the basal gravel unit may enter the alluvial gravels stretches for at least two miles parallel to the river. Given the variability of the basal gravel unit and the underlying bedrock, potential for leakage into the bedrock, the fact that the discharged water will be similar in quality to the ambient groundwater, and dilution that will occur as the discharged water mixes with groundwater from the basal gravel, bedrock, and alluvial aquifers, it is expected that the discharged water will be indistinguishable from ambient groundwater before it reaches the river. Thus, the path of the discharged water cannot be traced from the percolation pond to where it eventually enters the Clark Fork River alluvium.

Moreover, the quality of the treated water proposed to be discharged in the percolation pond is consistent with both non-degradation criteria for groundwater and surface water (after mixing, which would occur efficiently via seepage out of the alluvium). Thus the water discharged to groundwater would not have an affect on any surface water.

A MPDES permit is not applicable to this proposed change in operations. A ground water discharge authorization is required for any source that may discharge pollutants into state ground waters. This authorization has equivalent authority over ground water that an MPDES permit has over surface water. Both
types of permits must meet the applicable Montana DEQ-7 numeric water quality standards and other applicable criteria, such as non-degradation criteria. Please also see responses to Comments D.4 and D.6.

Appendix E of the Rock Creek Resources (RCR) application for the Exploration License (“Water Resources Monitoring Plan for the Rock Creek Evaluation Adit Site,” revised April 2008) Surface Water Monitoring Program states that prior to construction of the Evaluation Adit, an updated Spring and Seep Survey will be conducted in tributaries adjacent to the ore body, including the East Fork of Rock Creek, Copper Gulch, and the East Fork of Bull River. Locations and flow data of springs and seeps will be documented and water quality will be sampled. A report will be prepared documenting the findings and will include the location of all springs and seeps, and water quality and quantity results. Spring and Seep stations will be monitored twice yearly following snowmelt and during the low flow season to document seasonal variations in flow and quality. Water quality sampling will be conducted following protocol in Attachment A. A follow-up Spring and Seep Survey will be repeated after Evaluation Adit completion and after flooding the Evaluation Adit to document the development of any new springs and seeps. Any new springs or seeps will be identified, locations established, then sampled and included in the annual survey.

There are currently 36 monitoring wells in the Rock Creek project area which can be utilized to monitor ground water quality. In the event that additional monitoring wells are needed to address gaps in monitoring, RCR will install them.

Comment 8: Three additional monitoring wells should be constructed along the path shown in cross-section A-A’. The lithology of these wells should be used to improve the understanding of the cross-sectional geology. An updated conceptual flow model for the flow from the percolation ponds to the river should be determined. The conceptual flow model should be simulated numerically so that travel times, flow spreads, and the adequacy of the basin design for significant variation in the discharge rate can be determined. A numerical model could be calibrated with water levels in the domestic wells and the monitoring wells. The model should be used to predict the flow paths that will occur with the potentially much larger discharge rates. The project should be redesigned to consider the much higher flow rates that could be expected based on a more reasonable assessment of the likely bedrock conductivities and head values controlling flow to the adit.

Response 8:
Please see responses to Comments D.4, D.6, and D-7. Note that domestic wells are generally not useful for tracking small variations in water levels because they are strongly influenced by pumping.

Comment 9: A hydrology model for the Montanore mine predicts a loss of water for the Cabinet Mountains Wilderness (MDEQ memo 2/8/08). If Montanore is used as an analogy for Rock Creek (Hydrometrics 10/9/92), can we expect the impacts for from Rock Creek to be similar? The EA does not analyze the potential impacts of dewatering to the overlying Wilderness Area. What are the potential impacts of dewatering?

Response 9:
Impact of dewatering was addressed in the 2001 Rock Creek FEIS (see FEIS, pages 4-64 to 4-70).

Comment 10: Discharge water can be monitored by regular monitoring & testing. This should be done not only regularly, but frequently, ex — once monthly as required by local municipal water systems.

Response 10:
The ground water discharge authorization would contain monitoring requirements that, for most parameters would be daily or monthly. Some monitoring would occur quarterly. Please refer to the Draft EA, pages 10 and 11 for a proposed list of parameters and monitoring frequency. The ground water discharge authorization
DEQ will stipulate that RCR add to the list of daily parameters Specific Conductivity measurements by meter, and add Total Dissolved Solids for discharge to ground water.

E. Public Safety

Comment 1: The catastrophic failure of highway 200 would be very expensive to remedy. Besides the property damage and possible personal injuries, the BN rail bed runs just yards north of the highway and would undoubtedly be affected. Also, there is no easy bypass around the area in question. Even worse, if the highway is closed, emergency services to the residents on the north side of the river and east of MP 16 becomes very problematic.

Response 1:
Please see response to Comment D.1. Note that the slide, one of many along Highway 200 between Noxon and the Idaho border, is being monitored and is very unlikely to fail catastrophically before mitigations are implemented to stabilize it. Also, the head scarp of the slide is beneath Highway 200 and does not extend northeast of the highway. Also note that the slide is located northwest of Miller Gulch, and that the rail line is 800 feet northeast of the highway at this location, and thus beyond the area of potential effect of the slide.

Comment 2: The Chicago Peak road is perched on the extremely steep slopes of a very narrow valley. While snowplowing activities are proposed to maintain access year round for the purpose of this operation there is no discussion of the possibility of vehicles leaving the road surface. Fuel and explosives trucks would be making delivery to the evaluation project site. Contingency plans and emergency equipment need to be discussed relative to this issue. What happens if a fuel truck (remember the diesel generator cited in 4 above) overturns?

Response 2:
The possibility of spills was addressed in the 2001 FEIS (See FEIS, page 4-93). RC Resources has a spill contingency plan. If a vehicle should go off the road the impact would be treated the same as currently handled on any other roadway. Other state laws would apply to the spillage of materials into running streams. RCR and their contractors are subject to those rules and regulations.

Comment 3: Unstable soil along the river in the waste disposal area. The added water and tailings weight will worsen the problem and could result in a catastrophic slide of Hwy 200 into the river.

Response 3:
Please see response to Comment D.1. The tailings facility would not be built during this phase of the Rock Creek Project. The tailings facility was analyzed in the 2001 EIS and approved in the 2001 ROD. Outcropping bedrock is present between the impoundment site and the slide, so the tailings impoundment would not add weight to the slide.

F. Reclamation Plan

Comment 1: If reclamation of waste rock and ore stockpiles are postponed until a mine is operable, which may take several years, weathering of the materials will introduce heavy metals into the Rock Creek Drainage; a stream listed as TMDL impaired. Rock Creek flows into the Clark Fork River which, due to the removal of the Milltown Dam is being heavily polluted with heavy metals from that area. The addition of additional pollutants is unacceptable. Rock Creek needs a plan to reclaim waste rock and ore, backed by a sufficient reclamation bond, and in place before any activity is allowed.
Response 1:
The USEPA reported (September 5, 2008) that the Clark Fork River below the former Milltown Dam was “cleaner than it has been in years” and was suitable for drinking, recreation, irrigation, and other uses. In other words, the water quality in the river has improved, not deteriorated, since removal of the dam.
Rock Creek Resources has developed and submitted an adequate reclamation plan, as required by the 2001 EIS and 2003 Record of Decision. The approved operation and reclamation plan includes measures to prevent acid and metal leaching from the waste rock and ore stockpiles. Stipulation No. 64g addresses reclamation of exploration disturbances in the event that mine development is delayed or does not occur. Geochemical testing conducted to date does not indicate that the waste rock or ore has a substantial potential to leach heavy metals. Runoff from the waste rock and ore stockpiles would be intercepted by a lined perimeter ditch and pond system, then pumped to the water treatment plant prior to discharge.

Comment 2: Supposedly this waste rock will be hauled back into the mine when mining is complete and reclamation begins. However, as of this writing the Troy mine does not have an adequate reclamation plan…If it isn’t being done at Troy what makes anyone believe it will occur at Rock Creek?

Response 2:
In accordance with the 2001 EIS and the 2003 Record of Decision, Rock Creek Resources has submitted a complete reclamation plan before the start of exploration and mining. The 2008 EA finds that the submitted plan satisfies the stipulations in the EIS and ROD. Correcting your comment, waste rock would not be hauled back into the adit; ore would. Waste rock would stay at the reclaimed portal as approved in the 2001 EIS.

The Troy reclamation plan was considered adequate when it was approved in 1978, but is now being updated.

Comment 3: It’s well known that mine evaluations and all their considerations (markets, finances, etc.) take a considerable amount of time; even years. Postponing site reclamation and ore stockpile removal until a mine is operable (if such is the case) allows for weathering of materials and the introduction of heavy metals into the environment of the Rock Creek drainage; a stream currently listed as TMDL impaired. It was DEQ and Revett that made notice that Troy and Rock Creek were synonymous in nature. Revett currently doesn’t have a satisfactory reclamation plan or bond on their operating mine at Troy. This is over 8 years after the fact that Revett assumed purchase and control of the Troy operation. If DEQ does not require a reclamation plan and bond for the evaluation adit that is concurrent with operations, then the public is badly misrepresented in this decision.

Response 3:
See responses to Comments F.1 and F.2.

G. Borrow Areas along Access Roads

Comment 1: Access roads FDR 250 and 2741. The borrow areas spoken of have not been identified and the EA is lacking in any quality type of mapping. Borrow areas are like open scabs and would tend to contribute to sedimentation and openings for weeds. Without this type of information the public has little to base their comments upon.

Response 1:
The borrow areas were analyzed in the 2001 EIS and approved in the 2001 ROD. Maps showing the locations of the borrow areas were included in the 2001 EIS.
Comment 2: Wherever the borrow area will be located it will present a noxious weed challenge; the bare mineral soil will be an invitation to pioneer plants — (WEEDS), that are presently overwhelming the control efforts of the USFS.

Response 2:
Control of noxious weeds was addressed in the 2001 EIS. The potential for infestation by weeds of the borrow areas will be addressed by the approved operation and reclamation plans. Compliance with the county weed control plan is required.

H. Ground Water Disposal Area

Comment 1: Neither DEQ, the US Forest Service or RCR have taken time to contact or interact with the Montana Dept. of Transportation (MDOT), to investigate the potential relationship of this activity (ground water disposal) on private (RCR) land, to surface and subsurface activities influencing a severe subsidence problem on Highway 200.

The subsidence issue in question is identified and referenced by MDOT as the Hwy 200 / Mile Marker 16 project (RP 16.2 Cabinet Slide), and is located immediately below the zone of influence of the proposed RCR mine tailing impoundment.

The RP 16.2 Cabinet Slide area involves a 1471-foot linear area running east of the Dan Fitchett property along Hwy 200. A combination of factors (slide area, springs, a malfunctioning highway drainage system, massive elastic clays, etc.), combine to create the potential for a catastrophic failure of land mass in this area of Hwy 200. The accompanying MDOT documents give credence to the effect that ground water disposal as proposed by RCR may exacerbate the situation and contribute to a catastrophic failure (MDOT letter 10/09/07, Brian Collin to Richard Sipe, Stephen Herzog / MDOT).

The descriptions used in the MDOT when associated with the intentions revealed in Appendix O/Evaluation Adit Ground water Discharge, clearly indicate the revised RCR proposal may violate elements of the MMRA, Title 82, Chapter 4, Part 3, 82-4-332 (2). “The application must include an exploration map or sketch of sufficient detail to locate the area to be explored and to determine whether significant environmental problems would be encountered.” Appendix O only takes its analysis to the immediate Rock Creek project area boundaries. The mixing zone provided for the mine proposal extends well into the area of the Clark Fork River. Therefore, analysis for the purposes of this proposal must extend to the Clark Fork River as well; this includes Hwy 200.

Additionally, the revised proposal fails to meet any exemption under 75-5-317 Nonsignificant Activities (2), because it creates potentially significant changes in water quality harmful to human health and the environment.

The application must include an exploration map or sketch of sufficient detail to locate the area to be explored and to determine whether significant environmental problems would be encountered. Appendix O only takes its analysis to the immediate Rock Creek project area boundaries. The mixing zone provided for the mine proposal extends well into the area of the Clark Fork River. Therefore, analysis for the purposes of this proposal must extend to the Clark Fork River as well; this includes Hwy 200.

This EA clearly demonstrates the regulatory agencies need for significantly more geologic detail and analysis before the mining company is allowed to proceed. The potential impacts their activities may have on this area of Hwy 200 would certainly affect the public well-being.
I am concerned about water quality. They now want to dump more water that will be toxic from blasting and more rock than in the original EIS.

Response 1:
Please see response to Comment D.1. The Rock Creek Project was fully analyzed in the 2001 EIS and approved in the 2003 ROD. The maps included with the revised RCR proposal are adequate to locate the proposed project and revisions to that project. The revised evaluation adit plan does not increase the proposed water discharge or the quantity of rock proposed to be mined. There is no mixing zone proposed for this project. RCR proposes to discharge treated water. Please also see responses to Comments D.2 and D.4.

Comment 2: We are also concerned about the increased waste water that the mine has proposed. The water retention ponds may not be able to hold this water during certain times of the year. Since AVISTA will not allow the waste water to empty into the Clark Fork, the waste water now will be allowed to go into the ground water which eventually gets to the Clark Fork as well as to local people’s wells that are in its pathway…How are we to be assured that our wells will not be contaminated?

Response 2:
RCR has proposed a revised water disposal plan. All other parts of the RCR plan have been analyzed in the 2001 EIS and approved in the 2001 ROD. Under the Proposed Action, treated adit water meeting criteria under Montana’s non-degradation rules would be discharged to ground water via percolation ponds. Please also see responses to Comments D.2 and D.4. The proposed volume of water to be discharged has not been increased by the revised plan.

Comment 3: How will the significant increase of water released into the ground affect the old landfills? Will this water leach through these landfills? If so, what is your plan for dealing with this pollution of the water that is released?

Response 3:
The former Noxon solid waste landfill is located within the proposed tailings impoundment area ½ mile southeast of the proposed water disposal area (Figure 3-13 in 2001 EIS). This 2-acre landfill was operated between 1977 and 1983, and was permitted and periodically inspected by DHES. The ground water flow in the proposed percolation pond area is toward the Clark Fork River (westward) and not toward the landfill.

I. Tailings Impoundment

Comment 1: Last but not least on the issue of ground water discharge. The Cabinet Resource Group has raised the issue regarding the placement of the proposed Rock Creek Mine tailings impoundment (FEIS 2000) and its potential for displacing the NW abutment (a huge rock) to which the Noxon Rapids Dam (NRD) is anchored. The Army Corps of Engineers originally rejected the Noxon Rapids dam site. Washington Water Power (Avista predecessor) gambled on building the dam there and had to overcome some of the very problems (plastic clays) that are present at the Rock Creek site. For about 20 years after the dams construction the company had to deal with slope failure requiring massive amounts of rock-fill to the southern abutment. Over the 50 years of its existence the Noxon Rapids Dam has a achieved a tenuous equilibrium with existing forces. The placement of a 100,000,000 ton facility on some of the very same elastic clays as the NRD may have the effect that is noticed above. The possibility of any problems at the NRD as a result of the Proposed Rock Creek Mine is not a trivial matter. It is a matter of potentially massive life and death. The regulatory agencies are remiss in their duties and public responsibility if they continue to overlook this possibility.
Response 1:
The tailings facility would not be built during this phase of the Rock Creek Project. The tailings facility was evaluated in the 2001 EIS and approved by the 2001 ROD. In a September 24, 2008 letter from R. Craig Findlay, PhD, PE, GE to AVISTA Utilities Manager, Dr. Findlay stated, “The concrete portions of the dam are founded directly on bedrock. Therefore, there will unequivocally be no effect on the concrete portions of the dam by the tailings pile. The embankments of the dam are generally founded on lacustrine clay over deeper gravels and bedrock. The information I reviewed indicates that the tailings pile (several different options for its configuration) will be constructed on similar soils, something like 80 +/- feet of lacustrine clay over coarse gravels. Scaling the drawings in the EIS, it appears that the tailings pile is to be located on the order of about a mile downstream from Noxon Dam. Pore pressure will increase in the lacustrine clay at the tailings pile location (water pressure in the clay under the tailings pile, induced by the weight of the tailings pile), but that clay is relatively impermeable, and the “cone of depression” of the increased pore pressures due to the tailings pile will not effect the pore pressures in the lacustrine clay under the dam as a result of the distance between the two structures. The coarse gravels underneath the clay below the dam are generally highly pervious. We know from past studies for the dam that there is significant flow of water under the dam in the gravels, so it has to be free draining to some place downstream, likely the downstream river channel or the upper stretches of Cabinet Reservoir. Owing to the free draining character of the underlying gravels, the fact that it will take considerable time to place the tailings (stress increase occurs slowly over time, placement is not instantaneous) and the distance between the dam and the proposed tailings pile site, no significant pressure increase in the gravels at the dam will occur, and therefore, there will be no deleterious effects on the stability of the dam.”

J. Reclamation Bond

Comment 1: Reclamation bond is not settled.

Response 1:
RCR must submit the appropriate bonds prior to start of work. The reclamation performance bond will include the full cost of reclaiming the Evaluation Adit and any other disturbance created during the Evaluation Adit phase.

Comment 2: Revett’s track record should speak volumes about a company who cuts corners and tries to do the least protections possible for the largest short sighted immediate gain. The environmental Russian-roulette being played in this situation demands the agencies to hold Revett and the ‘proposed’ Rock Creek Mine to the highest required standards.

Response 2:
The DEQ receives its authority under the Metal Mine Reclamation Act. DEQ intends to hold RCR to the same standard of performance as every other mine operating in the state of Montana. Please also see the response to Comment J.3.

Comment 3: R.C. has a dismal history of restoring areas once the mining is done. Revegetation efforts sound nice but in fact R.C. will not do what they say, they never have. We do not need to create an another superfund clean up site in Idaho which is down stream from this proposed mine. Do [not] allow this mine to operate in Montana or Idaho.

Response 3:
The Metal Mine Reclamation Act requires that the state hold a reclamation performance bond for the full cost of reclaiming the Evaluation Adit and any other disturbance created during this phase. In the event that RCR
defaults or does not fulfill its reclamation requirements, the bond is forfeited and DEQ is prepared to complete the reclamation. The amount of the reclamation bond includes amounts sufficient to address any additional costs, should the company go into bankruptcy.

Comment 4: The people involved in this mine have a bad track record (Asarco). The CEO of Asarco at the time it filed for bankruptcy was Mr. Daniel Salido, he now sits on Revett’s Board of Directors. So I fear we will have another Superfund clean up here in Noxon.

Response 4:
Please see the responses to Comments J.2 and J.3.

K. Evaluation Adit Soil Storage

Comment 1: Wind and erosion. There have been numerous instances and complaints filed in 2007 and 2008 regarding fugitive dust emissions from the Troy tailings impoundment. Soil stockpiled as a result of the evaluation adit can be expected to erode due to the high winds that traverse the upper elevations. There is no discussion about a contingency for this possibility.

Response 1:
RCR has committed to seed and mulch soil stockpiles to minimize erosion as approved in the 2001 EIS.

L. Surface Water Discharge

Comment 1: To change the discharge plan from ‘ground’ to ‘surface’ water is massive and to consider the present EA as adequate is wrong. Surface discharge requires stricter water quality standards and DEQ should require a MPDES permit for this, which has not been done.

We believe the discharge of mine wastewater to the infiltration ponds and then to the ground water will require an MPDES permit, due to the hydrologic connection between the ground water and surface water at this location…The discharge from the exploration adit will contain a number of pollutants, including nitrates from blasting residue, arsenic, and heavy metals such as copper. We believe that discharging the polluted mine wastewater into infiltration ponds – and then subsequently into the Rock Creek aquifer - would operate a de facto surface water discharge…

Response 1:
RCR has been issued an MPDES permit authorizing discharge of treated mine water to the Clark Fork River. This proposed modification to the evaluation plan provides operational flexibility for RCR and allows for discharge of treated water produced during the exploration Evaluation Adit phase to ground water through percolation basins rather than to surface water. The proposed percolation basins would be sited in an area where the basal gravels will receive the percolated water (Appendix O of the Rock Creek Resources (RCR) application for the exploration license “Rock Creek Evaluation Adit Ground Water Discharge Site Investigation and Percolation Pond Design,” Revised 3/22/06). Because no direct connection to surface water has been demonstrated, a Montana Pollutant Discharge Elimination System (MPDES) permit is not applicable to the ground water discharge. Section 75-5-301(2)(ii) of the MCA states that standards for aquatic life do not apply to ground water. The proposed discharge from the Evaluation Adit will be treated prior to discharge. Effluent limits for the proposed discharge to ground water comply with non-degradation limits for ground water, and are actually more stringent for several parameters than the limits in the MPDES permit for surface water discharge due to the allowance for dilution involved in a direct discharge to the river. Also, see response to D.7.
Comment 2: Also there was a concern that due to the stratigraphic conditions in the area, that polluted water in the adits could ultimately drain into the East Fork of the Bull River, a major Bull Trout spawning tributary of the Clark Fork River and a primary focal point of restoration of the Bull Trout population in the Lower Clark Fork watershed.

Response 2:
This concern in the EIS was for possible seepage through springs in the Bull River drainage after thirty years of mine operation, not during Evaluation Adit construction. To avert such occurrences, the EIS called for the following actions: “Springs and small streams surrounding the ore body in the Rock Creek, Copper Gulch, and Bull River watersheds would be monitored, and if levels of impact warrant, measures could be taken prior to adit plugging (such as grouting or prevention of water accumulation in the mine) to reduce the impact.” However, these actions do not apply to the Evaluation Adit operations.

Comment 3:
Contamination from spills and equipment left behind will eventually find their way to the river.

Response 3:
The Operating Plan includes (1) a water spill monitoring plan that requires daily inspections of the pipeline, (2) a water spill response plan, (3) a water leak response plan. The Reclamation Plan requires removal and dismantling of all buildings, related equipment, and infrastructure at the adit site. Inert underground equipment including mine roof support devices, ventilation bags, etc. would be left underground. No equipment that can cause pollution would be left underground. The bond will include costs to remove this material.

Comment 4: The 66,500 feet of discharge pipe from the evaluation adit to the treatment facility is classified as being temporary if the decision is made to mine the ore body. The decision to mine the ore body would still require the discharge pipe to operate until the main adits intersect the evaluation adit. This span of time would increase the risk of age related wear on the pipe and increase the risk of accident or vandalism to the line, thus increasing the likelihood of failure and subsequent rupture. The discharge pipe would cross Rock Creek twice. What analysis was done to evaluate the potential impacts to Rock creek of a leak or rupture? And what analysis was done to evaluate potential mitigation measures?

The 2001 FEIS states (FEIS Section 2, page 98) that the evaluation adit discharge pipe would be removed after the evaluation adit and the main adit intersect. With the pipe now being buried with the utilities, can it still be classified as temporary? The pipe should still be removed when the evaluation adit discharge is plumbed through the twin adits.

Response 4:
The EA states (page 6): “The change in pipeline design and routing in the access road corridor would produce less environmental impacts than the plan analyzed in the 2001 EIS. The new plan would reduce impacts to Riparian Habitat Conservation Areas (RHCAs), produce less sediment, and create less surface disturbance.” Removal of the complete buried pipeline would result in a temporary increase in sediment yield from the Chicago Peak Road. As a result, the pipeline would be sealed and left in place at closure.

Comment 5: If the decision is made not to mine the ore body then the treatment of the evaluation adit wastewater would become long term. The 66,500’ of discharge pipe should be fitted with leak detectors. The same attention to detail should be afforded this discharge pipe that was granted the discharge line for the full mine. (2001 FEIS Section 2, page 134)

Response 5:
The Operating Plan includes (1) a water spill monitoring plan that requires daily inspections of the pipeline, (2) a water spill response plan, (3) a water leak response plan. The proposed adit is a decline with low anticipated inflows and the portal is expected to remain above the water table (in which case water would never flow from the portal unless pumped from deeper inside the mine tunnel). Water inside the adit is expected to comply with all ground water standards. DEQ would bond for a hydraulic adit plug that would be installed to prevent discharge of water from the portal, as a contingency measure, if analysis of hydrogeologic data collected from the evaluation adit indicates that there is a potential for water to discharge from the closed adit.

Comment 6: The lined storage pond at the adit site is proposed to grow from a capacity to hold 30,000 gallons to 600,000 gallons. The pond would be used to store hauled water, but also to collect run-off (mine drainage 2001 FEIS Vol. 2, Part 1, page 5 of 36) from the site of the evaluation adit. The storage water for the evaluation adit would contain residues of nitrogen from the blasting compounds, plus metals. The EA does not address the potential risk of overflow from a significant storm event.

Response 6: The Environmental Analysis (EA) states on pages 7-8: “The larger pond size is not proposed because of an increase in adit water discharge. The larger pond size and public water supply well in the final design would limit potential impacts from traffic and dust due to hauling water on the access roads and prevent overtopping of the pond into the ephemeral drainage below the adit site. This would limit impacts to less than those analyzed in the 2001 EIS.”

Comment 7: The EA also acknowledges that there is an ephemeral creek adjacent to the artificial pond. The impacts to the creek from an overflow event or in the occurrence of a rupture in the liner would be significant. It is likely that this ephemeral stream feeds the West Fork of Rock Creek. There should be an analysis of the impacts these events could have on that stream and its critical bull trout habitat.

Response 7: See response to Comment L-6.

Comment 8: The discharge from the mill facility for its domestic sewage and wash water also warrants an MPDES permit. The evaluation adit site is now proposed to have a properly installed septic system. The mill facility has an MPDES permit for handling of domestic sewage (outfall #5). That same level of analysis and an MPDES permit also should be required of the sewage wastewater at the evaluation adit. The MPDES permit is site specific as to the domestic sewage disposal issue. (MPDES Permit page 6 of 36) so the discharge at the evaluation adit warrants a separate outfall.

Response 8: The company will use portable toilets (similar to Port-a-Johns ®) at the adit site. The support facility will have a conventional septic system as analyzed in the 2001 EIS. Just as with any other septic system, prior to its being put in service, its design must be approved and permitted by the Sanders County Sanitarian, and by the Department of Environmental Quality Public Water Supply Section.

Comment 9: The 2001 EIS authorized, and an MPDES permit was issued for, the discharge of evaluation water to the Clark Fork River under Outfall #001. In 2007, RCR requested and has since been granted preliminary approval to change the point of discharge to ground water via infiltration ponds. It has been established in the 2001 MPDES permit (2001 FEIS Vol. #2, Part 1, page 7 of 36) and in the 2008 EA, that there is a hydraulic connection between the ground water in the region of the discharge and the Clark Fork River. The 2001
MPDES permit does not authorize the discharge of evaluation adit water to ground water. Such a discharge would require an MPDES permit and a non-degradation analysis of the impacts. The Montana Water Quality Act and the Federal Clean Water Act prohibits any discharge of pollutants that will reach surface waters, unless the discharger first obtains an MPDES permit. Also, see response to D.7.

Response 9:
RCR has not been granted preliminary approval to change the point of discharge from surface water to ground water via percolation ponds. Please also see response to Comment L.1

M. Trout Habitat Comments

Comment 1: The streams of the Rock Creek sub-basin provide crucial habitat for bull and cutthroat trout…Rock Creek represents a key drainage with uniquely valuable biological resources, and merits stringent protections from further detrimental activities, such as mining and its associated impacts, in order to preserve this increasingly rare habitat.

Due to the stream’s already degraded condition, we believe any significant increase in sediment levels will likely have negative effects on Rock Creek’s bull trout habitat. In turn, further degradation of this core bull trout habitat could significantly jeopardize the productivity of the bull trout population in and around Rock Creek.

We are concerned that the environmental assessment (EA) for the initial phase of the Rock Creek Project – for exploratory adit construction, associated road construction, and vehicular traffic – does not adequately address the potential impacts to water quality associated with the project. Moreover, the initial phase was authorized under a General Permit for Storm Water Discharges Associated with Construction activity (MTR100000). We believe this permit provides inadequate authority to commence the proposed activity. We believe the MCA, the applicable Administrative Rules of Montana (ARM), and the language of the General Permit disqualify the proposed road modifications and construction from coverage under the permit.

Under Montana’s water quality standards, waters classified as B-1, such as Rock Creek, its tributaries and this reach of the Clark Fork River “…are to be maintained suitable for … growth and propagation of salmonid fishes and associated aquatic life…” [MCA 75-5-301 et seq.; ARM 17.30.623]. This rule outlines the minimum acceptable baseline necessary to achieve the assigned standard. Concerning steam sediment, the rule goes on to state that “no increases are allowed above naturally occurring concentrations of sediment or suspended sediment…which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife” [Id.]. While the EA examines provisions that are intended to decrease sediment loading in Rock Creek and its tributaries, we believe significant sediment loading will occur throughout the initial phase of the project as well as over the full term of the proposed mining operation. We further question the adequacy of the proposed road improvements, and whether they would be sufficient to prevent sediment loading over the mine’s lifetime. Road construction, vehicle traffic and exploratory adit construction all carry the potential for increasing stream sediment loads. As such, this increase would fail to comply with state water quality standards.

Furthermore, Montana’s non-degradation statute prohibits the degradation of all high quality waters of the state except in limited circumstances [MCA 75-5-303; ARM 17.30.715 et seq.]. Rock Creek, its tributaries and the Clark Fork River qualify as high quality waters. As applicable here, a circumstance in which the rules allow for the degradation of state waters is “…changes in the quality of water for any parameter for which there are only narrative water quality standards if the changes will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity” [ARM 17.30.715(1)(g)]. Given that the water quality standard for sediment and turbidity are only narrative, they would normally not be classified as degrading under the non-degradation statute. However the general rule provides an exception from the
standard. As the rule notes, activities that may have a “measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity,” may be subject to the non-degradation statute. Moreover, any activities that will have a “cumulative or synergistic effect” are subject to the non-degradation statute [ARM 17.30.715(20(a)]. The sediment loading that would occur during the initial phase of the project would, in and of itself, negatively impact bull trout by compromising the ecological integrity of its habitat. But the analysis of the sediment impacts to streams from the exploratory adit and road construction should not be reviewed in isolation; rather it must be in the context of the entire Rock Creek Project. The impacts of the initial phase in conjunction with the multi-decade mining operation would present a substantial cumulative effect on the bull trout and bull trout habitat, i.e. water quality. We believe this impact to be so significant as to violate Montana’s water quality standard and its non-degradation statute.

Regardless of the measures outlined in the EA to reduce sediment loading in the Rock Creek watershed, it would inevitably occur to some degree, threatening the long term viability of the bull trout. Thus the exploratory adit construction and road improvements contemplated in the permit would fail to comply with state water quality standards. It is for this reason we believe that the DEQ should deny the request for the modified Evaluation Adit Plan.

We believe the General Permit goes on to exclude the proposed project’s storm water discharges. The MTR 100000 permit authorizes storm water discharge associated with construction activity under the MPDES. Part I of the General Permit describes in detail those activities covered by the permit. The permit specifically states that “the Department may deny authorization for discharge under the General Permit if the specific source filing for authorization appears unable to comply with:…Water quality standards established pursuant to 75-5-301 MCA, and ARM Title 17, Chapter 30, Subchapters 5, 6, 7, and 10” [General Permit for Storm Water Discharges Associated with Construction Activity MTR 100000 Part I(e)(1)(b)]. As discussed above, sediment loading of the Rock Creek sub-basin would fail to meet Montana water quality standards.

The permit goes on to state that “the following sources are excluded from coverage under the General Permit:…the point source is or will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301 MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132…[MTR 100000 Part I(C)(2)(c,f)]. The exclusion of coverage under the General Permit for these activities is not discretionary, rather mandatory….All of the proposed construction activities are located in an area of unique ecological and recreational significance…This distinction would exclude the proposed activities from coverage under the General Permit [MTR 100000 Part I(C)(2)(f)].

Being that the extensive construction activity associated with exploratory adit and road construction/modification is specifically disqualified from coverage under the General Permit, we believe the DEQ erred in recommending approval of this project…therefore, we believe that DEQ should not approve the Plan based on the inadequacy of the permit issued and proposed project’s deleterious impacts to water quality and bull trout fishery.

Response 1:
As indicated by the commentator, streams in the basin have already been impacted by sedimentation caused by human activity. Mitigation measures were developed during the previous EIS process that, when implemented by RCR, would decrease sedimentation from current conditions. The authority to construct the evaluation adit phase of the Rock Creek Project under the General Permit for Storm Water Discharges Associated with Construction is the subject of a pending lawsuit brought against DEQ by the commentator’s organization.

N. Ore and Waste Rock Handling
Comment 1: Runoff from waste rock will further degrade the region.

Response 1:
Rock Creek Resources has developed and submitted an adequate reclamation plan, as required by the 2001 EIS and 2003 ROD. The approved operation and reclamation plans include measures to prevent acid and metal leaching from the waste rock and ore stockpiles. Runoff is to be collected by lined ditches and ponds and then routed to the water treatment plant.

Comment 2: The Environmental Assessment calculates that the Rock Creek mine would generate 178,000 tons of waste rock and ore — 90,000 tons of waste rock and 88,000 tons of ore. The overall volume remained static from the original calculations in the 2001 FEIS, yet the proportions of waste rock and ore expected in the evaluation adit were modified from that original estimate. What specific “final design changes” would be responsible for these volume modifications? Also, the Rock Creek evaluation adit revised application from Revett (Appendix D, Section 1, page 7, revised March 2008) claims that the evaluation adit would generate 95,000 tons of waste rock while the EA calculates 90,000 tons would be produced, and only 55,000 tons of ore while the EA quotes 88,000 tons. Why the discrepancy in volumes of material expected between the EA and Revett’s revised application?

Response 2:
The Evaluation Adit application (page 2-1, Operating Plan) and the EA both quote 88,000 tons of ore. [The quantities listed in Appendix D of RCR’s proposal, 95,000 tons of waste rock and 55,000 tons of ore are incorrect.] The revised adit design has slightly different dimensions (16-18 feet tall rather than 18 feet; 20 feet wide rather than 18 feet; and 6,700 feet long rather than 6,592 feet). These design changes are reported as required by Stipulation No. 64a of the 2003 ROD. Per Stipulation No. 29 to the 2001 EIS, RCR may not mine within 1000’ of Cliff Lake. The original design for the Evaluation Adit passed through this buffer zone beneath the lake. Redesign of the adit to comply with Stipulation No. 29 avoids this area and consequently less of the adit would be developed within the ore zone.

Comment 3: In the 2001 EIS, it states that if full-scale mining is pursued, yet the ore from the evaluation adit proves uneconomical to process, (2001 FEIS, section 2, page 138) then Revett would be required to develop a disposal plan for the ore. The 2008 EA makes no reference to Revett addressing the proper disposal of the 88,000 tons of ore if it proves uneconomical to process. Revett’s revised exploration adit plan also fails to mention a disposal option. Has the decision to process the ore been made?

The EA also states that the ore generated by the evaluation adit would be backfilled into the adit if full-scale mining were not pursued. What about the waste rock that would be produced? The EA does not address the management of the waste rock and ore that, as some studies suggest, has the potential to be acid-generating (EPA comments 3/10/01, 10/10/01). The 2003 ROD clearly states (Attachment 2, page 5 of 29) that AG, PAG, and ML waste rock and ore would need to be back-filled. The 2003 ROD also states that only ½ of the waste rock and ore would fit back into the adit. The EA claims that if mining were not pursued then ore would be backfilled without mention of the long-term management of AG, PAG, and ML waste rock and ore that would be stored outside of the adit because of space considerations…A decision on the materials long-term management should be finalized prior to authorization of the evaluation adit.

Response 3:
RCRs revised plan states that the ore would be placed back inside the Evaluation Adit if the mine is not developed. The revised exploration plan involves the extraction and storage of less ore than the originally approved plan; therefore all ore could now be placed back inside the adit at closure. As stated in Attachment 2 of the ROD, “Backfill preference would be given to ore and acid generating/potentially acid generating and
metals leaching rock.” Studies of the waste rock and ore, presented in the 2001 EIS, show that this rock is relatively inert and does not leach significant amounts of metals. The Evaluation Adit plan has been modified to include lined runoff collection ditches and ponds surrounding the waste rock/ore storage area. Intercepted runoff would be routed to the water treatment plant.

Comment 4: Lastly, the 52% increase in volume of waste rock that would be end-dumped near the portal should not be trivialized. The 31,000 tons of additional waste rock that would be deposited adjacent to the wilderness is unacceptable…Other options for the waste rock should be explored.

Response 4:
Please see the response to Comment B. 3.

O. Sedimentation

Comment 1: The access roads will be a major source of sedimentation, especially with the traffic of heavy equipment necessary for the project.

Response 1:
The issue of sedimentation has been addressed in the 2001 EIS. Reducing water hauling on the access road during the Evaluation Adit phase would lower potential sediment production.

Comment 2: The vegetative mitigation measures are not valid for the long term. Brush filters, straw bales and straw wattles are for the short term, during construction impacts, not for the long-term mitigation of expected sediment loads from increased traffic and road widths. The type of soil is critical in determining the distance between waterbars, but more importantly it is critical in determining the outfall capacity for sediments to settle or filter from the road runoff. The type of soil needs to be identified and the plan needs to be site specific for those soils, the slopes and the length of the slopes, the locations of receiving waters. The use of gravel from the stream crossing to the first water bar is not going to provide long-term reductions. It is a very short-term measure that will be quickly overwhelmed after one season of muddy tires.

Response 2: The vegetation mitigation measures and best management practices (BMPs) for the access road were addressed in the 2001 EIS. Sediment control measures would be reviewed and approved in a DEQ stormwater permit and would be adequate for the Evaluation Adit phase of the project.

Comment 3: I find it difficult to pinpoint exactly where the repair and resurfacing of FS Road 150 will take place. Mile markers are what I use and most others I know here do as well. Just below the borrow doesn’t really mean a whole lot to me. Can you please be more specific? Would this be above the facility buildings where Rock Creek washed out half the road this spring? If so, how is this repair going to be made so as to prevent the creek from another washout and distribution of sediment in this area into Rock Creek?

Response 3:
The Exhibit 1 of the RC Resources Inc. Rock Creek Evaluation Project Revised Application for Exploration License (revised April 24, 2008) shows the location of the adit, support facilities and access road at a larger scale. The location of road improvements is indicated on Exhibit 1 of the Rock Creek Resources (RCR) application for the exploration license “Rock Creek Evaluation Adit Ground Water Discharge Site Investigation and Percolation Pond Design,” Revised 3/22/06. FS Road 150 is a USFS road and repairs to the road would be approved by the USFS to comply with its standards.

P. Dewatering the Wilderness
Comment 1: A hydrology model for the Montanore (Noranda) mine predicts a loss of water for the wilderness (MDEQ memo 2/8/08). If Montanore is used as an analogy for Rock Creek (Hydrometrics 10/9/92) then should we not expect the impacts from Rock Creek to be similar? The risks to the wilderness lakes have not been properly analyzed...Cliff Lake is 90% ground water fed; a disruption of that recharge by the diversion of its essential ground water resources would have dire consequences to the lake (Joe Gurrieri, Hydrology of Western Lakes, page 49). The lakes and streams of the wilderness are considered Outstanding Resource waters, and any impact from underground mining would be a clear violation of Montana’s non-degradation policy. If an impact were discovered, what recourse or action would reverse the drainage or suspended recharge to these lakes?

Response 1: Risks to surface water resources from underground mine development are anticipated to be similar for both projects. Potential impacts were disclosed in the 2001 EIS, and a 1,000 foot buffer (mining exclusion zone) was stipulated around Cliff Lake at the recommendation of DEQ hydrologist, Joe Gurrieri. Consequently the evaluation adit plan was redesigned to avoid this area. Grouting to minimize ground water inflow to the adit has also been required (Stipulation No. 49 and Appendix G). RC Resources Inc. Rock Creek Evaluation Project Revised Application for Exploration License (revised April 24, 2008) Water Resources Monitoring Plan includes monitoring of wilderness lakes, springs, seeps, and ground waters.

Comment 2: Plantenberg/Furniss E-com. 10/10/06 and 2/5/08 discussing Montanore prediction of loss of water from Wilderness. The contents of this e-mail are disturbing and indicate that one level of scrutiny is occurring for the proponents of one mining project and another level of scrutiny for another. It also raises the question of just how comprehensive the oversights of the regulatory agencies are in this matter? If this is an example of one area where the agencies are willing to look the other way, what other issues are being compromised in the haste to accommodate this proposal. The loss of any wilderness lake is not something the public is willing to compromise on.

Response 2: Impacts similar to those disclosed in the 2001 Rock Creek EIS are anticipated for the Montanore project. Review of the ground water modeling performed by the Montanore EIS contractor indicates that the model does not predict impacts different than those presented in the 2001 Rock Creek EIS. The Montanore model is only as accurate as predictions made for the Rock Creek Project and would not result in different mitigations than those proposed for the Rock Creek project.

This environmental assessment evaluates potential impacts resulting from proposed modifications to the currently-approved Evaluation Adit Plan. The proposed modifications are summarized in the Comparison Table set forth in the environmental assessment and include, but are not limited to, proposed changes to the dimensions of the evaluation adit, improvements to roads used to access the evaluation adit, and a change in the disposal of adit water. The potential for the full-mine development to impact Wilderness lakes was evaluated in the 2001 EIS. None of the proposed modifications to the Evaluation Adit Plan bear on the analysis of the mine development's impact on Wilderness lakes set forth in the 2001 EIS.

Comment 3: Analysis of the volume of adit discharge is probably grossly underestimated. Further, there is insufficient analysis of the dewatering impacts to the Wilderness Area.

Response 3: See response to Comment D.6. These issues were reviewed in the 2001 EIS, and are not modified by this revision.
The Department received a total of 422 letters noting support of the evaluation adit and a total of 23 letters in opposition. Only substantive comments from those letters are addressed in this final EA.
Substantive Comments:

Carol Jenkins:

Up to 360,000 gallons of contaminated water will be released daily, making its way to Idaho’s waterways, whether through surface or ground water discharge. (See response D.5)

Runoff from waste rock will further degrade the region. (See response to N.1)

Dave Lyman:

Whatever water is infiltrated into the porous ground above the river will have a fast trip to the actual river.

Revett should have a wastewater discharge permit. Whatever is in the water will end up in the Clark Fork. (See response to L.8)

Subsidence on Highway 200 is likely due to ground water flow and soil saturation. (See response to E.3)

Debbie Lyman:

A MPDES permit should be required for the discharge. (See response to D.7)

An EIS should be mandatory. The planned changes to the adit proposal needs more detailed analysis for understanding its environmental safety hazards. (See response to B.2)

For DEQ or any of the agencies to accept Revetts assurances that the discharge will meet Montanans non-degradation discharge standards is also wrong. An analysis within the scope of an EIS is what's needed. (See response to D.2)

The new adit plans call for a 33% increase in waste rock. This requires an EIS. (See response to B.3)

There will be seepage from the additional waste rock (34,000 tons) of heavy metals and blasting compounds into the runoff into ground and surface water as well as the Clark Fork River. (See response to B.3)

June Thayer:

Contamination from spills and equipment left behind will eventually find their way to the river. (See response to L.3)

Bonnie Reishus and Steven Babb:

Lack of notification in local papers. (See response to A.1)

Concern about increased waste water. (See response to H.2)

Capacity of the water retention ponds to hold water. (See response to H.2)

What assurance is there that our wells will not be contaminated? (See response to H.2)
Mary Lou Peterson:
Who will sample the effluent water and who will examine the test results? (See response to D.3)

Geraldine Dosh Campbell:
Public notice was inadequate. I feel we need an extension of time to comment. I believe we also need a town meeting in Noxon. (See response to A.1, and A.4)

Howard Bakke:
There does not appear to be a record of the public notice requesting public comment. (See response to A.1)

Six weeks, four weeks originally, is hardly sufficient time to analyze the environmental impact of these changes, even with sufficient notice. (See response to A.6)

The proposal for back-up electrical power from a diesel powered generator instead of the propane fired generators that were identified in the FEIS/ROD is a significant change that needs addressing in terms of air quality. (See response to C.1)

The CMW is a Class I air shed, air quality at the wilderness boundary must meet Class I criteria both above and below ground. (See response to C.2)

Northwest Montana is frequently subject to temperature air inversions that would trap any exhaust from the proposed diesel generators should it become necessary to operate them. (See response to C.2)

Who would monitor and enforce air quality? (See response to C.2)

The EA states that “fragile, erosive, susceptible to compaction, or unstable” soils are not present. This is incorrect. (See response to D.1)

A catastrophic failure of Highway 200 would be very expensive to remedy. (See response to E.1)

If reclamation of waste rock and ore stockpiles are postponed until a mine is operable, weathering of the rock will introduce heavy metals into the Rock Creek Drainage, (which is) listed as TMDL impaired. (See response to F.1)

Tom Myers (Rock Creek Alliance and Earthworks):

The discharge to ground water will be much larger than anticipated due to incorrect assumptions of discharge to the adit. (See response to D.6)

The ground water discharge will reach the Clark Fork River and should be treated as a surface water discharge, with the Montana DEQ required a MPDES permit. (See response to D.7)
The analysis of whether discharged contaminants could reach nearby domestic wells is not useful because an insufficient amount of water was added to the ground water to even be certain the dye made it into the ground water. (See response to D.6)

The discharge to ground water near the Clark Fork River should be analyzed with an updated conceptual and numerical model to provide full disclosure to the public of the potential impacts associated with the project. (See response to D.6)

Parker (2008) does not list the depth of wells. It is not possible to make conclusions regarding the effect of the ground water discharge on domestic wells is the well depth, or, more importantly, the screen interval, is unknown. (See response to D.6)

Review of Ground water Inflow Estimate: Ruth (1992) estimated the inflow using an analytical equation, derived based on Darcy’s Law, for inflow to a tunnel based on Darcy’s Law. It treats the inflow as steady state and assumes the water table in the bedrock above the tunnel does not lower with inflow to the tunnel…The FEIS indicates that locations of fractures are unknown and that the fractures could be linked to existing springs. If the tunnel intersects these fractures, there ground water will drain to the tunnel at rates and from distances far larger and further than anticipated by the analytical model used to predict the inflow. (See response to D.6)

Conductivity estimates are too low. (See response to D.6)

The inflow to the tunnel could easily be an order of magnitude higher than analyzed here. (See response to D.6)

The Montana DEQ should treat this ground water discharge as a discharge to surface water and require it to have a MPDES permit. Discharge monitoring should include sampling of the flow and quality at Springs 20 through 24. Also, there should be a series of monitoring wells constructed upgradient from the river spread across the half mile that the ground water flowpath would spread. (See response to D.7)

Three additional monitoring wells should be constructed along the path shown in cross-section A-A’. The lithology of these wells should be used to improve the understanding of the cross-sectional geology. An updated conceptual flow model for the flow from the infiltration basins to the river should be determined. The conceptual flow model should be simulated numerically so that travel times, flow spreads, and the adequacy of the basin design for significant variation in the discharge rate can be determined. A numerical model could be calibrated with water levels in the domestic wells and the monitoring wells. The model should be used to predict the flow paths that will occur with the potentially much larger discharge rates. The project should be redesigned to consider the much higher flow rates that could be expected based on a more reasonable assessment of the likely bedrock conductivities and head values controlling flow to the adit. (See response to D.8)

USEPA Region 8, Montana Office (John F. Wardell):

Will there be adequate ground water monitoring wells to assess ground water quality with use of the infiltration/percolation beds? (See response to D.4)

Cesar Hernandez (Cabinet Resource Group):
The notice and comment period for this EA is absolutely out of line with the environmental impact/importance of the project to the public. The checklist EA as well as the comment period are inadequate and provide insufficient information the public may comment upon. (See response to A.1)

Additional 31,000 tons of waste rock...is indeed formidable. (See response to N.4)

However…the Troy mine does not have an adequate reclamation plan…If it isn’t being done at Troy what makes anyone believe it will occur at Rock Creek? (See response to F.3)

Access roads FDR 250 and 2741. The borrow areas spoken of have not been identified and the EA is lacking in any quality type of mapping. Borrow areas are like open scabs and would tend to contribute to sedimentation and openings for weeds. Without this type of information the public has little to base their comments upon. (See response to G.1)

There is a subsidence problem on/around Highway 200, which could be exacerbated by further ground water recharge from the percolation ponds. (See response to H.1)

Air quality must meet Class I standards below ground within the wilderness boundary. (See response to C.2)

The proposal for back-up electrical power from a diesel powered generator instead of the propane-fired generators that were identified in the FEIS/ROD is also a significant change that needs to be addressed in terms of air quality. (See response to C.3)

The Chicago Peak Road is dangerous. (See response to E.2)

The Agencies are deliberately ignoring the possibility of dewatering in the wilderness. (See response to P.1)

If waste rock is left out in the weather, it will introduce heavy metals into Rock Creek and the Clark Fork. (See response to N.1)

Wind erosion from soil stockpiles has not been allowed for. (See response to K.1)

Cal Ryder:

The access roads will be a major source of sedimentation. (See response to O.1)

The borrow area will present a noxious weed challenge. (See response to G.2)

Any addition of water percolated to ground water will exacerbate the Cabinet Slide along Highway 200. (See response to H.1)

Air quality in the wilderness would be made worse by dust from heavy equipment traffic and exhaust from the diesel generator. (See response to C.4)

It is possible that the wilderness could be dewatered. (See response to D.9 and P.1)

Polluted water in the adits could drain into the East Fork of the Bull River. (See response to L.2)

Ole & Rusti Leivestad:
There are way too many unresolved items with this mine to allow any site work to take place at this time. Just to name those that come to mind:
Dewatering of the wilderness, incl. Cliff Lake.
Grizzly bear and Bull Trout.
Wastewater disposal.
Unstable soil along the river in the waste disposal area. The added water and tailings weight will worsen the problem and could result in a catastrophic slide of Hwy 200 into the river. (See response to B.5)

Reclamation bond is not settled. (See response to J.1)

Bonnie Gestring (Earthworks):

In general, the EA is insufficient and fails to provide proper analysis of the potential impacts associated with the proposed activities. (See response to B.1)

Technical analysis (See Myers attachment) of the data in the EA indicates that the ground water will reach the Clark Fork River…requiring an MPDES permit. (See response to D.6)

Analysis of the volume of adit discharge is probably grossly underestimated. Further, there is insufficient analysis of the dewatering impacts to the Wilderness Area. (See response to P.3 and D.9)

Why the discrepancy in volumes of material expected between the EA and Revett’s revised application? (See response to N.2)

The 2008 EA makes no reference to Revett addressing the proper disposal of the 88,000 tons of ore if it proves uneconomical to process. Revett’s revised exploration adit plan also fails to mention a disposal option. Has the decision to process the ore been made? (See response to N.2)

What about the waste rock that has been produced? (See response to N.3)

The 52% increase in volume of waste rock that would be end-dumped near the portal should not be trivialized…Other options for the waste rock should be explored. (See response to N.4)

What analysis was done to evaluate the potential impacts to Rock Creek of a (discharge pipe) leak or rupture? And what analysis was done to evaluate potential mitigation measures? (See response to L.4)

The pipe should be removed when the evaluation adit discharge is plumbed through the twin adits. (See response to L.4)

The lined storage pond at the adit site is proposed to grow from a capacity to hold 30,000 gallons to 600,000 gallons. The pond would be used to store hauled water, but also to collect runoff from the site of the evaluation adit…The EA does not address the potential risk of overflow from a significant storm event. (See response to L.6)

There is an ephemeral creek adjacent to the pond, which likely feeds the West Fork of Rock Creek. There should be an analysis of the effects of an overflow on the stream and its critical bull trout habitat. (See response to L.7)

A number of other comments were identical with the Tom Myers comments.
Jim Costello (Rock Creek Alliance):

The discharge from the mill facility for its domestic sewage and wash water also warrants an MPDES permit. The evaluation adit site is now proposed to have a properly installed septic system. The mill facility has an MPDES permit for handling of domestic sewage (outfall #5). That same level of analysis and an MPDES permit also should be required of the sewage wastewater at the evaluation adit. The MPDES permit is site specific as to the domestic sewage disposal issue. (MPDES Permit page 6 of 36) so the discharge at the evaluation adit warrants a separate outfall. (See response to L.8)

The 2001 EIS authorized, and an MPDES permit was issued for, the discharge of evaluation water to the Clark Fork River under Outfall #001. In 2007, RCR requested and has since been granted preliminary approval to change the point of discharge to ground water via infiltration ponds. It has been established in the 2001 MPDES permit (2001 FEIS Vol. #2, Part 1, page 7 of 36) and in the 2008 EA, that there is a hydraulic connection between the ground water in the region of the discharge and the Clark Fork River. The 2001 MPDES permit does not authorize the discharge of evaluation adit water to ground water. Such a discharge would require an MPDES permit and a non-degradation analysis of the impacts. The Montana Water Quality Act and the Federal Clean water Act prohibits any discharge of pollutants that will reach surface waters, unless the discharger first obtains an MPDES permit. (See response to L.9)

The vegetative mitigation measures are not valid for the long term. Brush filters, straw bales and straw wattles are for the short term, during construction impacts, not for the long-term mitigation of expected sediment loads from increased traffic and road widths. The type of soil is critical in determining the distance between waterbars, but more importantly it is critical in determining the outfall capacity for sediments to settle or filter from the road runoff. The type of soil needs to be identified and the plan needs to be site specific for those soils, the slopes and the length of the slopes, the locations of receiving waters. The use of gravel from the stream crossing to the first water bar is not going to provide long-term reductions. It is a very short-term measure that will be quickly overwhelmed after one season of muddy tires. (See response to O.2)

The rest of this person’s comments are identical in thrust and nearly identical in wording with Bonnie Geestring’s.

Ina L. Pluid:

Discharge water can be monitored by regular monitoring & testing. This should be done not only regularly, but frequently, ex — once monthly as required by local municipal water systems. (See response to D.10)

Garrett James Budds (Clark Fork Coalition):

The streams of the Rock Creek sub-basin provide crucial habitat for bull and cutthroat trout…Rock Creek represents a key drainage with uniquely valuable biological resources, and merits stringent protections from further detrimental activities, such as mining and its associated impacts, in order to preserve this increasingly rare habitat. Due to the stream’s already degraded condition, we believe any significant increase in sediment levels will likely have negative effects on Rock Creek’s bull trout habitat. In turn, further degradation of this core bull trout habitat could significantly jeopardize the productivity of the bull trout population in and around Rock Creek. (See response to M.1)
We are concerned that the environmental assessment (EA) for the initial phase of the Rock Creek Project – for exploratory adit construction, associated road construction, and vehicular traffic – does not adequately address the potential impacts to water quality associated with the project. Moreover, the initial phase was authorized under a General Permit for Storm Water Discharges Associated with Construction activity (MTR100000). We believe this permit provides inadequate authority to commence the proposed activity. We believe the MCA, the applicable Administrative Rules of Montana (ARM), and the language of the General Permit disqualify the proposed road modifications and construction from coverage under the permit. (See response to M.1)

Under Montana’s water quality standards, waters classified as B-1, such as Rock Creek, its tributaries and this reach of the Clark Fork River “….are to be maintained suitable for … growth and propagation of salmonid fishes and associated aquatic life…” [MCA 75-5-301 et seq.; ARM 17.30.623]. This rule outlines the minimum acceptable baseline necessary to achieve the assigned standard. Concerning steam sediment, the rule goes on to state that “no increases are allowed above naturally occurring concentrations of sediment or suspended sediment…which will or are likely to create a nuisance or render the waters harmful, detrimental, or injurious to public health, recreation, safety, welfare, livestock, wild animals, birds, fish, or other wildlife” [Id.]. While the EA examines provisions that are intended to decrease sediment loading in Rock Creek and its tributaries, we believe significant sediment loading will occur throughout the initial phase of the project as well as over the full term of the proposed mining operation. We further question the adequacy of the proposed road improvements, and whether they would be sufficient to prevent sediment loading over the mine’s lifetime. Road construction, vehicle traffic and exploratory adit construction all carry the potential for increasing stream sediment loads. As such, this increase would fail to comply with state water quality standards. (See response to M.1)

Furthermore, Montana’s non-degradation statute prohibits the degradation of all high quality waters of the state except in limited circumstances [MCA 75-5-303; ARM 17.30.715 et seq.]. Rock Creek, its tributaries and the Clark Fork River qualify as high quality waters. As applicable here, a circumstance in which the rules allow for the degradation of state waters is “….changes in the quality of water for any parameter for which there are only narrative water quality standards if the changes will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity” [ARM 17.30.715(1)(g)]. Given that the water quality standard for sediment and turbidity are only narrative, they would normally not be classified as degrading under the non-degradation statute. However the general rule provides an exception from the standard. As the rule notes, activities that may have a “measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity,” may be subject to the non-degradation statute. Moreover, any activities that will have a “cumulative or synergistic effect” are subject to the non-degradation statute [ARM 17.30.715(20(a)]. The sediment loading that would occur during the initial phase of the project would, in and of itself, negatively impact bull trout by compromising the ecological integrity of its habitat. But the analysis of the sediment impacts to streams from the exploratory adit and road construction should not be reviewed in isolation; rather it must be in the context of the entire Rock Creek Project. The impacts of the initial phase in conjunction with the multi-decade mining operation would present a substantial cumulative effect on the bull trout and bull trout habitat, i.e. water quality. We believe this impact to be so significant as to violate Montana’s water quality standard and its non-degradation statute. (See response to M.1)

Regardless of the measures outlined in the EA to reduce sediment loading in the Rock Creek watershed, it would inevitably occur to some degree, threatening the long term viability of the bull trout. Thus the exploratory adit construction and road improvements contemplated in the permit would fail to comply with state water quality standards. It is for this reason we believe that the DEQ should deny the request for the modified Evaluation Adit Plan. (See response to M.1)

We believe the General Permit goes on to exclude the proposed project’s storm water discharges. The MTR 100000 permit authorizes storm water discharge associated with construction activity under the MPDES. Part I of the General Permit describes in detail those activities covered by the permit. The permit specifically states that “the Department may deny authorization for discharge under the General Permit if the specific source filing for authorization appears unable to comply with:…Water quality standards established pursuant to 75-5-301
MCA, and ARM Title 17, Chapter 30, Subchapters 5, 6, 7, and 10” [General Permit for Storm Water Discharges Associated with Construction Activity MTR 100000 Part I(c)(1)(b)]. As discussed above, sediment loading of the Rock Creek sub-basin would fail to meet Montana water quality standards. (See response to M.1)

The permit goes on to state that “the following sources are excluded from coverage under the General Permit:…the point source is or will be located in an area of unique ecological or recreational significance. Such determination must be based upon considerations of Montana stream classifications adopted under 75-5-301 MCA, impacts on fishery resources, local conditions at proposed discharge sites, and designations of wilderness areas under 16 USC 1132…[MTR 100000 Part I (C)(2)(c,f)]. The exclusion of coverage under the General Permit for these activities is not discretionary, rather mandatory….All of the proposed construction activities are located in an area of unique ecological and recreational significance…This distinction would exclude the proposed activities from coverage under the General Permit [MTR 100000 Part I (C)(2)(f)]. (See response to M.1)

Being that the extensive construction activity associated with exploratory adit and road construction/ modification is specifically disqualified from coverage under the General Permit, we believe the DEQ erred in recommending approval of this project…therefore, we believe that DEQ should not approve the Plan based on the inadequacy of the permit issued and proposed project’s deleterious impacts to water quality and bull trout fishery. (See response to M.1)

We believe the discharge of mine wastewater to the infiltration ponds and then to the ground water will require an MPDES permit, due to the hydrologic connection between the ground water and surface water at this location…The discharge from the exploration adit will contain a number of pollutants, including nitrates from blasting residue, arsenic, and heavy metals such as copper. We believe that discharging the polluted mine wastewater into infiltration ponds – and then subsequently into the Rock Creek aquifer - would operate a de facto surface water discharge… (See response to L.1)

Highway 200: Same as previous comments by other responders.

Kathy Ferguson (Coordinator, Bull River Watershed Council; in two separate e-mails):

I am asking that the comment period be extended so that everyone may be given a fair chance to comment on these proposed changes to the revised draft EA. (See response to A.8)

First of all, I would like to comment on the lack of notification of this draft EA to the local populace. This is a serious oversight on the part of DEQ. (See response to A.1)

How will the significant increase of water released into the ground affect the old landfills? Will this water leach through these landfills? If so, what is your plan for dealing with this pollution of the water that is released? (See response to H.3)

I find it difficult to pinpoint exactly where the repair and resurfacing of FS Road 150 will take place. Mile markers are what I use and most others I know here do as well. Just below the borrow doesn’t really mean a whole lot to me. Can you please be more specific? Would this be above the facility buildings where Rock Creek washed out half the road this spring? If so, how is this repair going to be made so as to prevent the creek from another washout and distribution of sediment in this area into Rock Creek? (See response to O.3)

Judy Hutchins:
Thanks for extending the comment period, but the time allowed is not adequate given the poor job of public notification and the complexity of the issues involved. (See response to A.9)

What will happen to the waste water once it is discharged in to the ground water? The paltry amounts Revett poured into pits in no way reflects the impacts 360,000 gallons per day will have on the site. The rinky dink dye study doesn’t prove much of anything – there probably wasn’t enough dye or water to get to the tested wells. (See response to D.5)

There is also the serious question of the potential slippage of Hwy 200 into the river if the clay seams become over saturated. (See response to E.3)

There is not adequate assurance that water quality will be protected by any portion of the proposed evaluation adit plan. I would not trust Revett’s claims that its discharges will meet Montana’s non-degradation standards. A non degradation analysis should be done of the evaluation adit discharge water. (See response to D.2)

A huge question in my mind is the dramatic increase in the size of the storm water retention pond from 30,000 gallons to 600,000 gallons. That is a huge increase. Where are the engineering designs for this impoundment and how in the world is Revett going to perch an impoundment of this size on the side of that mountain and not expect it to fail? The crest of the Cabinets receives the highest precipitation of any place in the state on Montana. A careful review must be done on this design change and there is no indication that I saw in the document that the agencies have done such a review. (See response to L.6)

Another rather large question is the increase in the amount of waste rock. A 33% increase is not small and of no consequence. I am not comfortable with the agency’s assurance that all will be OK. Where is the analysis that proves that contaminants from the waste rock will not dribble and seep all over the hillside and contaminate local runoff? (See response to B.3)

Improvement of the Chicago Peak Road is much needed, for the general public as well as for Revett. BUT this improvement is a double edged sword – the roughness of the road is an obstacle to east public access to the Cliff Lake/Chicago Peak area. That actually is fortunate as this area is very popular given it is a rare opportunity for the general public to be able to drive to the very edge of a wilderness. If Revett improves the road, public access will increase. I have seen absolutely no discussion anywhere of this potential impact on the Cabinet Mountains Wilderness. (See response to E.2 and B.1)

There is no discussion of the impacts of this proposed adit on air quality, noise, etc. on the adjacent wilderness. The original work on this proposal is about 10 years old (I may stand corrected on this time). It may be time to readdress these impacts. (See response to B.1)

In summary: Do an EIS, not an EA for this adit proposal revision. Charge Revett for every penny it costs and do not accept yet another half assed document. There is a huge amount at stake here – that has not changed one iota in the past 25 years. (See response to B.2)

John Powers:

R.C. has a dismal history of restoring areas once the mining is done. Re vegetation efforts sound nice but in fact R.C. will not do what they say, they never have. We do not need to create an anointer superfund clean up site in Idaho which is down stream from this proposed mine. Do allow this mine to operate in Montana or Idaho. (See response to J.3)
Peggy Johnson:

I am opposed to the Rock Creek Mine for several reasons. One I am a property owner across the river from the Rock Creek Drainage…Our air quality and water quality is at risk from this Mine. (See response to C.4 and D.4)

The people involved in this mine have a bad track record (Asarco). The CEO of Asarco at the time it filed for bankruptcy was Mr. Daniel Salido, he now sits on Revetts Board of Directors. So I fear we will have another Superfund clean up here in Noxon. (See response to J.4)

The mine is changing how much water it wants to discharge from the adit and how much rock will be dumped. It seems they change their plans all the time. (See response to B.1, B.5 and D.1)