Rio Tinto’s Incomplete Mining Plan for Oak Flat

Rio Tinto is the majority owner of a subsidiary called Resolution Copper Company that seeks to build a large underground copper mine under Oak Flat, east of Superior, AZ. President Eisenhower withdrew 760 acres of Oak Flat from mining in 1955. Since 2004, Rio Tinto has sought federal legislation to privatize Oak Flat and avoid the normal process of permitting large mines on federal land. Oak Flat is sacred and an ecological and recreational haven.

In mid-November, 2013, Rio Tinto gave the Tonto National Forest what the company refers to as a proposed General Plan of Operation for the Resolution Copper Mine Project (MPO). At the time, the Tonto National Forest did not accept the plan because parts were missing. Since then, additional parts of the MPO have trickled in to the Tonto National Forest (TNF) and the Tonto has begun a 6 to 9 month process to determine whether the MPO is complete enough to begin the public NEPA process. This process should give the TNF enough information to make an informed decision on whether to approve the plan or not. No matter how much Rio Tinto says the public review process has begun, the TNF should not begin the process until they are satisfied they have a complete plan.

Federal law requires that a mining plan of operations outline exactly what a mining company is proposing and what the impacts of the proposed project would be. Without a full and complete description of the project and its impacts, it is impossible for the federal decisional agency to comply with the requirements of the National Environmental Policy Act (NEPA) to gather enough information on the proposal and impacts to make an informed decision.

However, the plan that Rio Tinto sent to the Tonto National Forest is at best incomplete and does not give the TNF or the public enough information to even begin the public review process required by NEPA. The document reads much more like a public relations document rather than a serious attempt to outline exactly what Rio Tinto is proposing.

There are too many problems with the MPO to list in a concise document. At least two versions of the plan placed on Rio Tinto’s website since the MPO was “released.” This “trickling out” of the plan is problematic for an efficient process. This fact sheet is a review of the most recent version of the plan (most documents were dated late December 2013). We do not know if the TNF is working from this set of documents or a different set.

Rio Tinto had previously submitted a plan of operations to the Forest Service in June of 2013 to conduct hydrological and geological testing of a 15 square miles area of the Tonto National Forest west of Superior and east of Queen Valley to determine whether the area would be suitable for a toxic tailings dump. To date, the TNF has not begun the public review process to determine whether to grant Rio Tinto permits to carry out this testing.

However, despite the fact that Rio Tinto has not done any analysis of this area to determine whether it is suitable for a toxic tailings dumpsite, the MPO filed in
November shows that Rio Tinto plans on using this public land for a tailings dump. This is perhaps the biggest flaw in the incomplete MPO. Rio Tinto asks the TNF and the public to approve a toxic tailings dump in an area where no serious analysis has been done to determine its suitability. This is a fatal flaw in the MPO. It is impossible for the TNF and the public to make an informed decision based of all needed information unless the TNF concludes the June, 2013, plan is environmentally sound, permits Rio Tinto to conduct an analysis of the proposed tailings location, and the analysis is completed. Until that information is obtained, the November MPO is incomplete and the NEPA public review process cannot begin.

Another major flaw in the MPO is a complete lack of discussion (or even the mention) that Rio Tinto plans to destroy half of the Oak Flat Campground that was withdrawn from mineral entry by Presidential order in 1955. This area is completely off limits to mining but several maps in the MPO show that Rio Tinto would destroy much of the withdrawn area due to surface subsidence above their underground operations. It is incredulous that Rio Tinto would not even mention that they plan to destroy an area that was placed off limits to mining by Presidential order and certainly not even bother to outline the impact to the campground in their plan. The plan is incomplete in this regard and is disingenuous at best!

For the first time, Rio Tinto has provided a basic outline of their proposed mine. In the MPO Rio Tinto says:

- Rio Tinto would mine using a destructive underground block cave method between Apache Leap and Oak Flat Campground.
- Subsidence from their underground block cave mine would destroy half of the Oak Flat Campground Withdrawn Area that President Eisenhower placed off limits to mining in 1955.
- Rio Tinto plans to drill 4 additional deep shafts between Apache Leap and the Oak Flat campground.
- Initial crushing operations would take place underground.
- Rio Tinto plans to drill a new large tunnel under Apache Leap to carry ore on conveyors from the mine to a concentrating plant.
- Rio Tinto plans to build a new processing and concentrating plant (west plant) just west of Superior. Rio Tinto plans to build all facilities outside of Superior’s town limits to make sure that no direct tax benefit would go to the town.
- The plant would extract copper and molybdenum from the ore and concentrate it for shipment.
- No finished product would be generated at the west plant and the concentrate would be shipped out of the region for refinement.
- Rio Tinto would build a huge 1.5 billion ton toxic tailings dump west of Superior and east of Queen Valley on public land managed by the Tonto National Forest in the Queen Creek watershed.
- Surface water would be drained around the tailings, however surface water falling on the tailings would be collected for mine use thereby depleting the amount of water in the Queen Creek watershed.
- Since the stormwater plans are missing from the MPO, it is unknown how water would be conveyed around the tailings, how much would be polluted and how the polluted water would be treated.
- Rio Tinto would slurry the tailings to this dump site in two large concrete pipelines.
- The tailings pile and pipeline corridors would heavily impact the Arizona trail and completely change the character of that section of the trail.
Rio Tinto would dump toxic tailings directly on the ground without any kind of liner.
Dams used to hold the tailings in place would be constructed from the tailings themselves.
Rio Tinto admits that tailings would generate acid pollution that would leach dangerous heavy metals.
Rio Tinto admits that acid generation from the tailings would begin within 3 months.
For at least the first 8 years of operation, the most toxic tailings would be dumped directly on the ground and not surrounded by less toxic material.
The most toxic tailings would be covered by a pond. There is no mentioned of the water quality of this pond and what measures would be taken to prevent wildlife from being poisoned by the pond.
Testing of a limited number of ore samples show that the majority of rocks tested had the potential to generate acidic conditions. Samples have elevated levels of aluminum, iron, manganese, chloride, fluoride, and sulfate when compared to US drinking water standards. Samples contain elevated amounts of antimony, arsenic, bismuth, copper, lead, molybdenum, potassium, selenium, silver, tellurium, tin, and zinc. Leachate would contain elevated levels of chromium, selenium, uranium, and cobalt.
Molybdenum concentrate produced at the west plant would be dried and bagged then loaded onto trucks for shipment to an undermined location for final processing.
Copper concentrates would be slurried by pipeline to a drying and loading facility west of Florence Junction where water would be removed and the dried copper concentrate would be placed on railcars.
The MPO was not specific as to where the concentrate would be shipped, but Rio Tinto has already procured dock space at the Port of Guaymas on the Sea of Cortez in Mexico for shipping overseas. The MPO should include this type of information.
The MPO states that the water source for the mine (which is never fully quantified), will come from the CAP (either directly from the canal or from “banked” water pumped from the ground) and from mine dewatering and collection of surface water. (The mine dewatering process would deplete groundwater supplies throughout the region and dry up the many important seeps, springs and other water features.)
There is no mention in the MPO of any backup sources of water or discussion of contingency plans if CAP water is not available to Rio Tinto.
The U.S. Bureau of Reclamation recently determined that the Colorado River (the sole source of CAP water), will have a shortfall of 3.2 million acre-feet of water by the year 2060. This water is likely to be unavailable to Rio Tinto if the Secretary declares a shortage on the River (a likely possibility in coming years).

Many parts of the plan are missing completely. For example, the Road Use Plan, The Stormwater Design Plan, the Stormwater Prevention Pollution Plan, the Explosives Management Plan, the Spill Prevention Control and Countermeasure Plan, Water Management Plan, and the Environmental Material Management Plan are not included, but listed in the table of contents.

Some of the plans that are included, such as the Emergency Response and Contingency Plan are based on current design and not on what Rio Tinto is proposing.

There are many sections (too numerous to mention here) which conclude with language similar to this: “Resolution Copper will finalize and implement an SPCCC plan in accordance with applicable requirements as the design of the Project evolves and is informed by the NEPA and permitting
processes.” “Resolution Copper anticipates that the TNF will complete a Biological Assessment and Evaluation for the proposed Project that will evaluate Project effects to Forest Sensitive Species.” These statements show a fundamental lack of understanding of the NEPA mandated public review process by Rio Tinto. In order for the public and the TNF to make the informed decisions that NEPA requires, the TNF and the public needs this type of information to be included in the MPO up front. If Rio Tinto’s preferred method of making things up as the process moves along is followed, the entire purpose of the NEPA requirements of “looking before you leap” is subverted.

A number of biological studies are listed that Rio Tinto has commissioned and those are listed in one of the appendices. However, few (if any) of these studies are available to the TNF or the public. Listings of species found in the project areas are completely wrong in indicating that species such as bobcat, mountain lion, black bear, and javelina (which we have documented at Oak Flat) do not exist in the project area.

The MPO ignores the sacredness of Oak Flat and the current ongoing use of Oak Flat for cultural and religious purposes. The MPO does not mention that Oak Flat is eligible for listing as a traditional cultural property.

Sections of the MPO that deal with the actual mine design and resource and equipment needs are lacking in needed detail. For example, Augusta Resources Company submitted an MPO to the Coronado National Forest for the proposed Rosemont mine in 2007 that was rejected by the Forest Service as incomplete. Yet in that MPO, Augusta was specific in the equipment and resource needs. In the rejected Augusta plan actual numbers of dump trucks, drilling machines, loaders, ball crushers, etc. were listed including how they were propelled. In this Rio Tinto MPO, broad categories of equipment are listed making is impossible to determine the full impact of the project.

The transportation sections of the MPO are very rudimentary. Roads are listed, but transportation routes are not determined. No mention is made of what route trucks would take to deliver material, equipment or supplies. Broad estimates are made of total number of truck and car traffic, but what routes, what numbers at what point in the day are not made. The lack of detail makes it impossible to consider this MPO complete. Transportation projections were much more detailed in the rejected Augusta 2007 MPO.

This MPO continues to list the same inflated job numbers that we have seen for years, but offers no detail or rational that make these figures any more believable than in the past. A complete MPO would not only offer that level of detail, but would project where these employees would come from allowing decision-makers to fully assess the impact the proposed mine would have on the region. This plan is completely lacking in those details.

One can only conclude, after even a cursory examination of Rio Tinto’s MPO is incomplete and not a true and honest presentation of what exactly Rio Tinto would like to do to our public land in its quest to build a mine at Oak Flat. The Tonto National Forest should reject this plan outright. Rio Tinto should go back to the drawing board and develop a real mining plan not a public relations document in another attempt to pass its federal land exchange bill and avoid real public scrutiny.