

3.2.2.7 Reduced Quantity Mining Concept Alternative Analysis

Impacts

The Proposed Action incorporates measures to assure that no impacts would occur through a controlled water monitoring program. With these same measures, impacts would also not occur under the Reduced Quantity Mining Concept Alternative. The demand for water would be approximately the same as that for Phase 1 of the Proposed Action but would be reduced for Phase 2 due to the 43-percent reduction in tonnage to be mined.

Under this alternative, annual production for Phase 2 would remain the same as that analyzed for Phase 1 of the Project. Therefore, water usage for Phase 2 of the Project would be reduced to 442 acre feet per year, for this alternative.

Mitigation Measures

Since local water resources would continue to be used for the Project, the Water Shortage Contingency Plan and mitigation measure WR1 would be implemented with this alternative. As with the Proposed Action, impacts would be reduced to less than significant under this alternative.

3.2.3 Flood

3.2.3.1 No Action Alternative

Impacts

Under the No Action Alternative, site drainage characteristics would not be changed and existing conditions would continue. There would not be any SWPPP and SPCCP plans (Mitigation Measures F1 and F3). Under the No Action Alternative, the significant adverse impacts from existing erosion and sedimentation of the un-reclaimed former mining operation would continue. Uncontrolled runoff from the site through undersized culverts would continue to cause overtopping of Soledad Canyon Road by stormwater. This impact could be mitigated by installing a larger or parallel culvert under the roadway (such as measure F2); however, this alternative does not provide the capability to implement such a measure.

Mitigation Measures

No mitigation measures are implemented under this alternative, and existing drainage problems on site would continue.

3.2.3.2 Reduced North Fines Storage Area Alternative Analysis

Impacts

Under this alternative, mining would occur below the 2,075-foot elevation. Because the area of disturbance by mining activity under this approach would be reduced by approximately 15 percent compared to the Proposed Action, there would be a slightly reduced potential for erosion and sedimentation in debris basins below Cut 3 and the NFSA (Basins A, B, C, D and F). Relative to Cut 3, the mining excavation will be lower in elevation than debris basin D and F toward the end of mining activity in this cut. During this time, runoff will flow into Cut 3 rather than the basins. No impact will occur since the runoff will be retained within the mine area of Cut 3. As fines are placed in Cut 3 and the area increases in elevation, the debris basins will once again perform their drainage control function under this alternative.

Mitigation Measures

The mitigation measures for this alternative are the same as for the Proposed Action (measures F1, F2 and F3). Because of the reduced acreage subject to increased erosion and sedimentation, it is probable that the debris basins A, B, and C could be reduced in size, subject to final design as specified in measure F1. All impacts would be reduced to less than significant.

3.2.3.3 Batch Plant Location Alternative Analysis

Impacts

Location of a batch plant offsite, but at a nearby location, will result in a slight reduction in grading but otherwise the same impacts as the Proposed Action site in addition to potential impacts at the additional site. Mining, aggregate processing, and material stockpiling would be conducted onsite and those impacts described for the Proposed Action would still occur at the Project site under this alternative. In addition, there is the potential that flood impacts would occur at the batch plant location, and mitigation would be required to control surface runoff and sedimentation and erosion at both locations. There is also the potential that the batch plant at the Lang Station area would be located in a flood zone.

Mitigation Measures

The mitigation measures for this alternative for the Project site would be the same as for the Proposed Action (measure F1, F2 and F3). Additional mitigation could be required to control floodwaters, surface runoff and erosion at the batch plant. All impacts would be reduced to less than significant.

3.2.3.4 Addition of Water/Reclaimed Water Alternative Analysis

Impacts

Under this alternative the impacts would remain the same as the Proposed Action. There could also be impacts associated with the additional facilities necessary to import water. Impacts would be associated with construction of a water supply pipeline to the site. There would be no additional flood impacts associated with trucking in water assuming that water is purchased from an existing supplier.

Mitigation Measures

The mitigation measures for this alternative for the Project site would be the same as for the Proposed Action (measures F1, F2 and F3). Additional measures to control surface runoff and erosion would be associated with construction of a supply pipeline. All impacts would be reduced to less than significant.

3.2.3.5 Product Transportation Alternative Analysis

Impacts

The addition of a rail spur would result in the same impacts as presented for the Proposed Action plus additional impacts associated with establishment of a rail spur, product conveyors across Soledad Canyon Road, and loading facilities closer to the Santa Clara River.

Mitigation Measures

The mitigation measures for this alternative would be the same as for the Proposed Action (measure F1, F2 and F3). Additional runoff and sedimentation and erosion control measures would be required for the rail spur, loading facility and conveyor system to prevent runoff from entering the Santa Clara River. All impacts would be reduced to less than significant.

3.2.3.6 Alternative North Fines Storage Area Analysis

Impacts

All of the alternative fines areas are located downstream of much larger watersheds than the Proposed Action's fines storage area. The alternative NFSA ravines would have a greater volume of runoff during the rainy season due to their larger drainage areas. Area A supports a well-developed drainage that runs along the western edge of the site. During a reconnaissance survey on June 1, 1995, this drainage had flowing surface water along most of its course. Use of Area B would directly impact a "blue line" drainage. Using these areas for fines deposition would alter the runoff characteristics of these drainages in a manner proportional to the Proposed Action. Blue line drainages would still be affected although larger and more complex drainage control basins would be required.

Mitigation Measures

The mitigation measures for this alternative would be similar to the Proposed Action's measures F1, F2 and F3. Because of the reduced acreage of the NFSA subject to increased erosion and sedimentation, it is probable that the desilting/debris Basins A, B and C would be eliminated onsite, but basins would be added to drainages at the alternate sites. In fact, at least four and probably five basins would be needed if all areas are used. All impacts would be reduced to less than significant.

3.2.3.7 Reduced Quantity Mining Concept Alternative Analysis

Impacts

The Reduced Quantity Mining Concept Alternative reduces site exposure to surface erosion due to mining by approximately 24 acres, but does not change the number of debris basins required at the site. All of the flood prevention measures applicable to the Proposed Action would be applicable to this alternative (measures F1, F2, and F3); however, the actual placement of the debris basins would differ and would need to reflect potentially reduced runoff volumes.

Mitigation Measures

The mitigation measures for this alternative would be similar to the Proposed Action's measures F1, F2 and F3, reflecting adjustments for probable decreased runoff volumes. All impacts would be reduced to less than significant.

3.2.4 Water Quality

3.2.4.1 No Action Alternative

Impacts

No mining onsite would occur under the No Action Alternative, and no plan for erosion control would be implemented. Therefore, existing conditions onsite would eventually result in potential significant impacts on water quality in the Santa Clara River because of sedimentation from the unreclaimed quarry.

Mitigation Measures

Since no action would be taken, no mitigation would be required for this alternative, and potentially significant impacts on water quality would remain.