

9.0 ENERGY AND NATURAL RESOURCES

9.1 ENVIRONMENTAL SETTING

9.1.1 Timber Resources

Two-thirds of the Boundary Expansion Area is timbered with second growth coastal redwood of merchantable size. The area is part of a region of coastal redwood, some of which is used for commercial forestry. Timber, primarily redwood, has formerly been an important part of the economy of Santa Cruz County, but conversion of timberland to residential neighborhoods, economics, and regulatory policies have led to a decrease in timber production. From 1991 to 2000, timber production in Santa Cruz County averaged 22,015,000 board feet annually. In the period from 2001 to 2005, production decreased by 57 percent to an average of 9,365,000 board feet produced (California Department of Forestry and Fire Protection, 2006). That level is 0.6 percent of the state's timber production.

9.1.2 Existing Energy Use

The existing quarry operation relies on conventional diesel powered heavy equipment. Fuel use is approximately 13,000 gallons of diesel per month, about 98 percent of which is used in the Limestone Quarry. Both the crusher and the conveyor line are electrically powered.

CEMEX operates the Quarry under an energy conservation program that includes replacing existing electric motors with high-efficiency motors. The Quarry is in the process of analyzing the feasibility of using biodiesel in the quarry mobile fleet; as the fleet equipment is somewhat dated, there are limitations in its use (Robert C. Walker, pers. comm.).

9.2 REGULATORY SETTING

The Boundary Expansion Area is part of the larger Quarry parcel (063-132-08). Current zoning is M-3, which allows timber harvest. The County Significant Tree Removal permit program would not apply to the commercial harvest.

Timber harvest in Santa Cruz County is subject to the jurisdiction of the CDF. CDF administers both the Timberland Conversion Permit and Timber Harvest Plan. According to Richard Sampson, CDF, Felton, timber cutting as part of site preparation for the proposed Boundary Expansion Area would require both a Timberland Conversion Permit and a Timber Harvest Plan.

Public Resources Code Section 4621. (a) states, "Any person who owns timberlands which are to be devoted to uses other than the growing of timber shall file an application for conversion with the board [of Forestry]". Granting the permit requires findings that all of the following exist:

- (1) The conversion would be in the public interest.
- (2) The conversion would not have a substantial and unmitigated adverse effect upon the continued timber-growing use or open-space use of other land zoned as timberland

preserve and situated within one mile of the exterior boundary of the land upon which immediate rezoning is proposed.

(3) The soils, slopes, and watershed conditions would be suitable for the uses proposed if the conversion were approved. (PRC 4621.1)

Where timber is to be cut following an approved conversion permit, usual requirements for stocking and methods of silviculture are waived. Even with an approved Timberland Conversion Permit and Timber Harvest Plan, no timber operations are allowed until the land use jurisdiction grants the actual underlying rezoning or use permit, which would lead to conversion.

Upon approval of conversion, actual commercial harvest requires a Timber Harvest Plan. The Timber Harvest Plan process takes into account economic and environmental factors and serves as the functional equivalent of an EIR.

Energy use in diesel powered heavy equipment is not directly regulated.

9.3 PROJECT IMPACTS

9.3.1 Thresholds of Significance

The County of Santa Cruz Environmental Review Initial Study identifies the following areas of potential effect where a project will normally have a significant effect on the environment if it will result in:

- Affect or be affected by timber resources;
- Have a substantial effect on the potential use, extraction or depletion of a natural resource (i.e. mineral or energy resources);

9.3.2 Site Preparation

Site preparation entails stripping vegetation. CEMEX plans to have the standing redwood commercially harvested. This provides natural resource value for the trees. The trees would not be replanted. The irreversible loss of timberland is addressed by the Timberland Conversion Permit. The effect on timberland would be considered less than significant as the area is small in comparison to the mixed conifer woodland remaining on CEMEX land in Quarry buffer lands.

9.3.3 Extended Operations

Mining into the Boundary Expansion Area would extend overall Quarry operations by approximately three years. This allows continue conversion of the vested mining resource into Portland cement. This use of a nonrenewable mineral resource is considered less than significant because the resource utilization is the business purpose of the Davenport Cement Plant and the land has been zoned for that purpose. Mining into the Boundary Expansion Area would continue the existing dependence on diesel fueled excavation equipment for an additional three years.

9.3.4 1996 Reclamation Plan Amendment

The proposed amendment to the 1996 Reclamation Plan would have no appreciable effect on energy or natural resources. The revegetation proposed would not reestablish the redwood forest. However, thorough natural succession of the coastal scrub, mixed evergreen forest would ultimately develop (see Measure BIO-3).

9.3.5 Cumulative Impact

Loss of approximately 17.1 acres of timberland would act cumulatively with other timberland conversion and parcel size regulation in Santa Cruz County to continue the downward trend in timber production. This effect is considered less than significant.

9.4 MITIGATION MEASURES

None required.