

SYAR NAPA QUARRY EXPANSION APPEAL HEARING

**Susanne von Rosenberg Rebuttal Testimony
to the Napa County Board of Supervisors**

July 11, 2016

Rebuttal Topics

- Reclamation
- GHG effects of truck loading assumptions
- Transfers to other quarries
- “Mineability” of Hybrid Alternative/
Increased set-back option
- Height of mining

All my prior comments and submittals are incorporated by reference

RECLAMATION

- Attempt to imply that reclamation was adequately analyzed in the existing document is **grossly misleading**
- No further work to attempt to actually quantify extent of work required to conduct reclamation
- Absent quantification of work, impact analysis remains incomplete

MISLEADING STATEMENTS

From GHD Memo dated July 1, 2016, AIR QUALITY section:

5) Did the EIR analyze emissions associated with mining and reclamation activities occurring at the same time and to what extent? If not, please explain why both were not calculated, and how the emissions for combined activities are otherwise quantified and/or accounted for in the analysis.

MISLEADING STATEMENTS

Response: Yes, the EIR analyzed emissions associated with mining and reclamation activities occurring at the same time to the extent that mining and reclamation have occurred in the past and that the existing condition is represented in the offroad engine activity levels provided by Syar for the baseline period [emphasis added].

Let's examine this statement in context
(analysis applies to both criteria air pollutants and GHGs)

MISLEADING STATEMENTS

Did any reclamation occur during the baseline period?

No! The inspection reports for the Years 2004 – 2008 indicate 0 acres of reclamation

MISLEADING STATEMENTS

What is the relative magnitude of all reclamation to date compared to the total reclamation that will be required?

- Total acreage of reclamation conducted to date: 20 acres (per EIR/permit)
- Total acreage of reclamation required: 497 acres currently classified as disturbed, plus up to 124 acres of expansion area. Roughly, 600 acres
- Total reclamation to date: ~3% of total required

MISLEADING STATEMENTS

What is the relative rate of reclamation to date compared to what will be required during final reclamation?

- Final reclamation period (per permit/EIR): 5 years
- Required average annual acreage to be reclaimed:
during final reclamation: 120 acres/year
- Average current reclamation rate: 0.67 acres/year
(~20 acres/~30 years operation)
- Ratio of current reclamation rate to final reclamation rate: $0.67/120 = 0.0056:1$ (**current rate = 0.56% of final reclamation rate**)

MISLEADING STATEMENTS

What if we assume the greatest possible rate of current reclamation (all 20 acres in one year)?

- 20 acres to date
- Required average annual acreage to be reclaimed:
during final reclamation: 120 acres/year
- Ratio of *all reclamation to date* to *annual average final reclamation rate*: 20:120 (1/6, 16.7%)
- At most, the baseline emissions include a single year with 16.7% of the average annual final reclamation emissions.

MISLEADING STATEMENTS

Is it appropriate to imply that reclamation emissions were considered in the EIR?

NO!

- The baseline period included zero acres of reclamation
- The ratio of *all reclamation to date to annual average final reclamation rate: 16.7%*
- At most, the baseline emissions include a single year with 16.7% of the average annual final reclamation emissions.

*****Conclusion: Reclamation-related emissions were not adequately addressed in the EIR*****

MISLEADING STATEMENTS

From GHD Memo dated July 1, 2016,
NOISE section :

4) Did the noise analysis include reclamation activities? If not, please explain why and if the analysis is still otherwise technically adequate.

(Response divided into 3 sections due to its length)

MISLEADING STATEMENTS

Response:

Noise levels from worst-case project operations (i.e., aggregate mining activities occurring on the ridgelines) were calculated at the nearest noise-sensitive receptors to determine whether or not project operations would have the potential to exceed the exterior noise level limits contained in the General Plan and Noise Ordinance [emphasis added].

MISLEADING STATEMENTS

Are the exterior noise level limits contained in the General Plan and Noise Ordinance the only applicable significance standards contained in the EIR?

No – the EIR also contains the following significance criterion

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

MISLEADING STATEMENTS

- Impact 4.11-4 then states:

“It is generally accepted that in quiet to moderate noise environments (i.e., 60 dBA Ldn or less), a 5 decibel increase in the day/night average noise level is necessary for a significant noise impact to occur (Napa County 2007).”

- Existing noise data show that there would be frequent night-time noise increases of more than 5 decibels
- The basis of evaluation is (continues to be) flawed

MISLEADING STATEMENTS

Response:

Some reclamation activities, such as the relocation and placement of overburden occur during aggregate mining utilizing the same heavy equipment used for the aggregate mining.

Therefore, predicted worst-case noise levels from aggregate mining operations would represent the potential worst-case noise levels due to reclamation activities using the same equipment
[emphasis added].

MISLEADING STATEMENTS

Will equipment use during reclamation occur at the same intensity as during project operations?

- The intensity of operations during reclamation has not been defined and the level of associated noise therefore cannot be defined
- My back-of-the-envelope calculation suggests that reclamation will require about 2 times the maximum intensity contemplated during operations
- Increased work requires more equipment and that would result in higher noise levels

MISLEADING STATEMENTS

Response:

Oftentimes, reclamation of the mining area once complete utilizes smaller and less noisy equipment to plant trees, hydro-seed, etc. Such reclamation activities are less intensive and produce less noise than the noise levels predicted for aggregate mining operations. Therefore, the noise analysis adequately discloses the potential worst-case noise levels due to project operations, including reclamation.

MISLEADING STATEMENTS

Have the worst case noise impacts during operation been adequately disclosed?

- EIR does not address effects of combined mining and reclamation activities, which could occur simultaneously
- The EIR does not limit reclamation activities during the operating period (there is no “production” associated with reclamation, thus no limit on reclamation activities has been set)
- The permit requires reclamation be completed prior to end of the permit term, which strongly implies that mining and reclamation may occur simultaneously with no combined limit

Combined mining and reclamation activities could result in substantially greater equipment use than disclosed in the EIR

RECLAMATION

Has groundwater use during reclamation been evaluated?

NO

- Groundwater will be required to
 - moisture condition fill
 - water plantings, and
 - for temporary dust control in active areas (where other approaches are not suitable)
- None of these have been quantified, therefore it is unknown if mitigation measure 4.8-4 is implementable during reclamation

RECLAMATION

Has reclamation been adequately addressed in the EIR? Is the impact analysis in the EIR adequate?

NO!

- Scope of reclamation activities not adequately defined
- Reclamation activity to date MUCH less than what will occur during final reclamation
- No evaluation of overlapping mining and reclamation activities
- Impact analysis is based on incomplete information

GHG EMISSIONS FROM TRUCK TRIPS

- **Maximum GHG emissions are understated, resulting in continued significant and unavoidable impact from GHG emissions that was not disclosed in the EIR**
- Truck trips scaled incorrectly in the EIR for the reduced alternative
- Truck loads in EIR excessive

GHG EMISSIONS FROM TRUCK TRIPS

Table 6. Syar Napa Quarry Annual Existing, Project, and Project Plus Area C Alternative Truck Trips

Scenario	Product Sales	1-Way Trips
Existing Condition (Baseline) ¹		
Haul Truck Trips (87.3%)	810,363	89,343
Import Truck Trips (12.7%)	--	12,981
Existing Total (100%)	810,363	102,324
Project		
Haul Truck Trips (81.9%)	1,091,956	60,329
Import Truck Trips (18.1%)	--	13,313
Project Total (100%)	1,091,956	73,642
Modified Project Plus Area C Alternative ²		
Haul Truck Trips (84.8%)	489,637	25,703
Import Truck Trips (15.2%)	--	4,607
Modified Project Plus Area C Alternative Total	489,637	30,310

1. Baseline production amount of 810,363 ton/yr matches the value used in the AQHRIA and is slightly different than the value listed in the DEIR Table 3-3 as discussed in Footnote 1 to DEIR Table 3-3. The AQHRIA also rounded down (i.e., Footnote 1 states the amount is 810,364 ton/yr) resulting in less baseline activity and greater project impact which is conservative.
2. Modified Project Plus Area C Alternative annual production rate increase is 44.8% of the project increase (i.e., $489,637 \div 1,091,956$). The percent ratio of export to import truck trips changes slightly from 87.3% export trips in the baseline to 81.9% export trips in for the project. The percent ratio of export to import truck trips was interpolated to be 84.8% (i.e., $87.1\% - (87.1\% - 81.9\%) * 44.8\%$).

GHG EMISSIONS FROM TRUCK TRIPS

- Average load/trip baseline (810,363/89,343):
9.07 tons/trip
- Average load/trip project increment
(1,091,956/60,329): 18.1 tons/trip
- No increase in truck size
- Per FEIR (response to comment V-20), all trucks are fully loaded at peak (2 million tons per year) production, at 25 tons/truck (12.5 tons/trip)
- Note that numbers shown calculate to 12.7 tons/trip

GHG EMISSIONS FROM TRUCK TRIPS

Response to Comment V-20:

Implementation of the project does not result in larger trucks being used to export material. There is, however, a difference between the existing conditions and the peak production of two million tons with regard to the type of material being exported and the size of the loads being exported. The exported material and truck trips for the existing conditions, as shown in Table 3-3 of the Draft EIR, was calculated based on an average of actual sales data over a 5-year period. This data shows that jobs were smaller and trucks were not always leaving the facility with full loads (a full load is considered 25 tons).

GHG EMISSIONS FROM TRUCK TRIPS

Response to Comment V-20 (continued):

Load sizes during this period ranged from 14 tons per load for aggregate sold to 25 tons per load for material transfers to other quarries, with an overall average of 18 tons per load, or nine tons per one-way trip. Under the rare peak production scenario of two million tons, the quarry would be running at full capacity to meet the demand of an unusually large project or responding to a natural disaster. In this scenario trucks would leave the quarry fully loaded at 25 tons, or 12.5 tons per one-way trip [emphasis added].

GHG EMISSIONS FROM TRUCK TRIPS

- Emissions for 1.3 million ton/year scenario were simply scaled off of 2 million ton/year scenario (not recalculated)

ISSUES:

- Peak use argument does not apply in the same way at considerably lower volume
- Trucks are considered full at 23 – 24 tons
- GHG emissions for 1.3 million tons/year scenario are underestimated

GHG EMISSIONS FROM TRUCK TRIPS

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TRANSFERS TO OTHER QUARRIES

Again from Response to Comment V-20:

Load sizes during this [baseline] period ranged from 14 tons per load for aggregate sold to 25 tons per load for material transfers to other quarries, with an overall average of 18 tons per load, or nine tons per one-way trip [emphasis added].

- Transfers to other quarries = material produced in Napa that is not needed in Napa (not sold from Napa)

TRANSFERS TO OTHER QUARRIES

We can therefore back-calculate the percentage of material associated with transfers to other quarries:

Average load: 18 tons

Inter-quarry loads: 25 tons

Aggregate sold loads: 14 tons

Basic algebra:

$$18 = 25x + 14(1-x) = 11x + 14$$

$$4 = 11x$$

$x = 0.364 = 36.4\%$ of the loads are transfers to other quarries

TRANSFERS TO OTHER QUARRIES

What percentage of Napa production is going to other quarries?

- 36.4% of the loads are transfers to other quarries, load is 25 tons for transfers to other quarries
- $25 \text{ tons} \times 36.4\% = 9.1 \text{ tons}$ of the average load is being transferred to other quarries
- $= 50.6\%$ of average load = 50.6% of baseline tonnage
- Average annual transfer tonnage during baseline period: $810,363 \text{ tons} \times 50.6\% = 409,683 \text{ tons}$ annually during baseline period

TRANSFERS TO OTHER QUARRIES

What was the per capita Napa demand during the baseline period?

- Material sold within the Napa Region:
 $810,363 - 409,683 = 400,679$ tons/year
- Average per capita demand during baseline period:
 $= 400,679 \text{ tons} / 130,818$ (2006 county population; mid-point of baseline period)
 $= 3.06$ tons/person/year

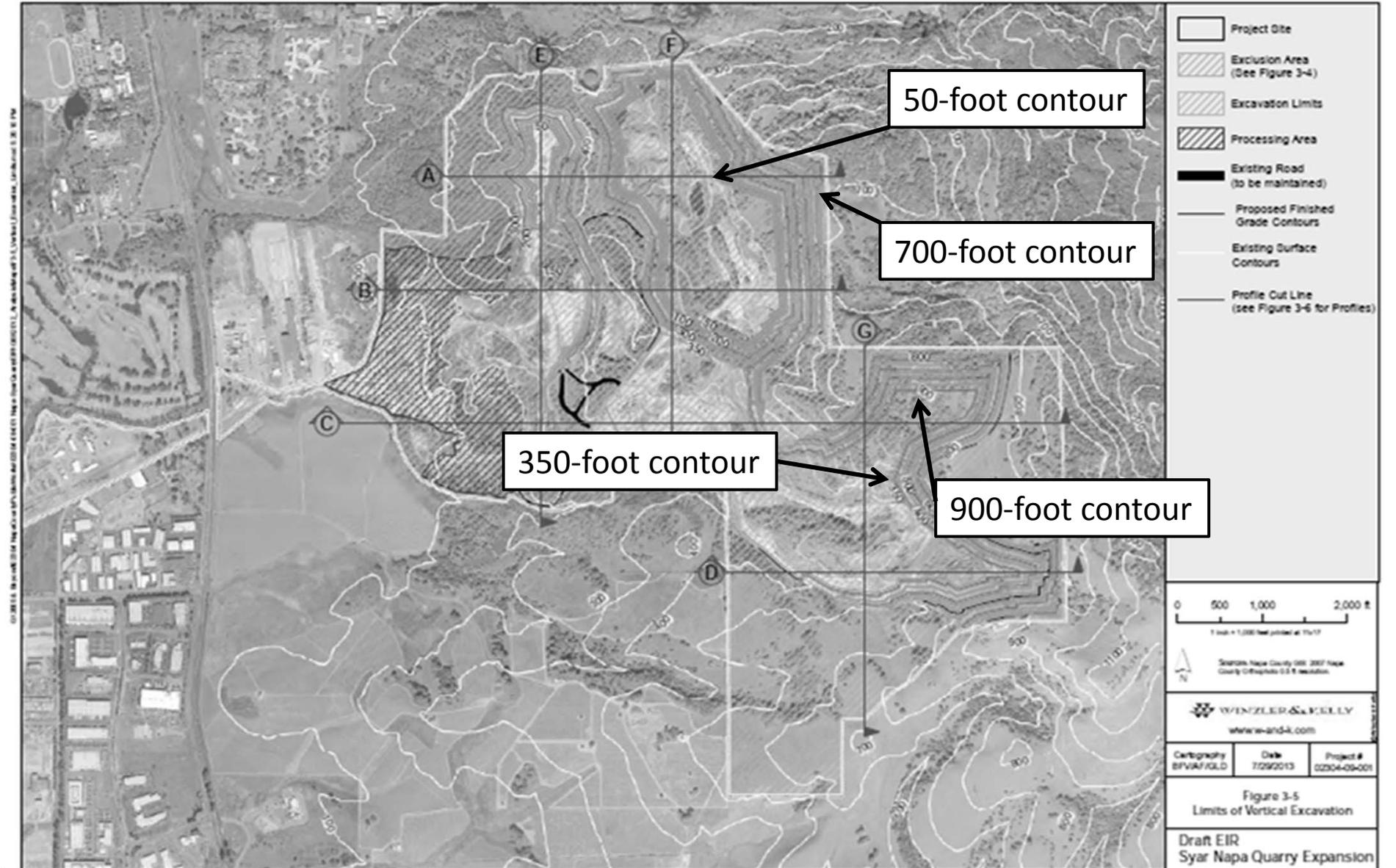
“MINEABILITY” OF HYBRID ALTERNATIVE/INCREASED SET-BACK

- AKA: “The Cone”
- Mr. Corrigan’s testimony indicated that the 30% reduction in acreage associated with the Hybrid alternative would reduce “mineable” rock by 45%
- The remaining amount would be more than adequate to satisfy local demand, even at the extremely high average consumption rate used in the EIR and by Syar, based on the Syar-submitted reserve estimates discussed in SSE’s March 22 testimony

“MINEABILITY” OF HYBRID ALTERNATIVE/INCREASED SET-BACK

- Mr. Corrigan then testified that adding the 300-ft setback from Skyline Park would, in Syar’s opinion, render the Pasini parcel “unmineable”
- Mr. Corrigan also testified that Syar had not analyzed whether the County’s configuration (with or without the increased setback) is “mineable.”
- Syar’s “need” for the Pasini parcel and rejection of the County’s Hybrid Alternative and increased setback is based on unsubstantiated opinion

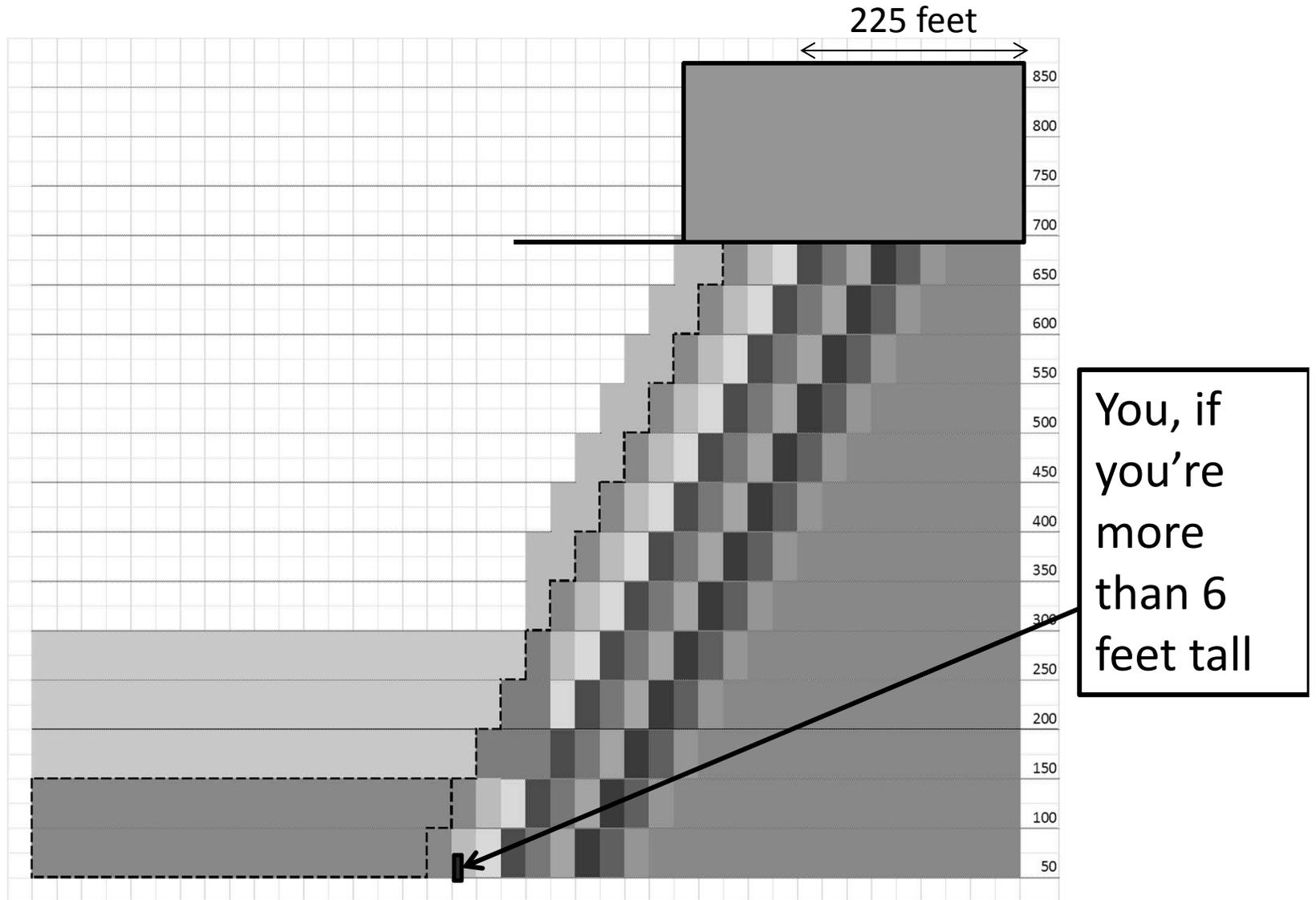
HEIGHT OF MINING



HEIGHT OF MINING

- Mr. Adams testified that the height of mining would not be as great as that shown in the EIR/on my figure from March 22. According to Mr. Adams:
 - Max height of only about 450 feet at State Blue, State Grey
 - Max height of only about 350 feet at Pasini
- Topographic contours in EIR show
 - 650 feet at State Blue
 - 550 feet at Pasini
- Confusing and shifting information

RECLAMATION AND RECLAMATION PLAN ISSUES



THANK YOU