

INTRO SLIDE:

In 2010, The department of toxic substances control signed Administrative Orders on Consent, also known as (AOCs, with The department of energy and NASA in which they agreed to clean up their portions of the property to background levels. That means, in lay terms, a full cleanup, cleaning up all of the contamination that can be detected, would take place.

Also in 2010, DTSC issued a formal statement that under longstanding law, the parties involved would have to cleanup to background for the full property, even if there were no AOCs and even if SSFL-specific legislation (SB990) didn't exist.

Boeing has resisted a full cleanup, pushing for alternative standards that are considerably weaker than DOEs or DTSCs. One key question we are addressing here today is: How much contamination would remain if the Cleanup Agreements Were Not Carried Out? In other words, **how much contamination would not be cleaned up if Boeing's alternatives were allowed?**

SECOND SLIDE:

The answer to this question is quite striking as you can see. The original cleanup agreements reached in 2010 would require **A FULL ONE-HUNDRED PERCENT** of the contamination above background levels to be cleaned up. Boeing's alternatives on the other hand would result in only 1.9% of the total contamination being removed from the site if their Suburban Residential standards were to be used, and only 0.4% if their Open Space standards were to be used. This is an extremely clear indication of just how much less stringent Boeing's numbers are than those proposed by and agreed to in the Administrative Order on Consent in 2010.

Slide Three

To analyze this issue more closely, we took the actual measured levels of radioactivity found by EPA in its multi-year radiological characterization of the site and compared the EPA findings of contamination against Boeing's proposed cleanup levels.

EPA found hundreds of locations at SSFL with cesium-137, strontium-90 , and other radionuclides above background levels. Of the 477 exceedances found by the EPA, 291 of them were Cesium-137, and 153were Strontium-90. Thus, these compose most of the contamination at SSFL. Under the AOC, all of the contamination would be cleaned up.

If Boeing had its way, however, only 3.1% of the Cesium-137, as shown in blue in the diagram above, would be cleaned up using its Suburban/Residential numbers and only 0.6% of the Cesium would be cleaned up under its Open Space alternative. And if either it's Residential/Suburban or Open Space numbers were used, it would leave **all 153 samples of**

Strontium (as shown in red) found above background levels at the site, resulting in 0% cleanup.

FOURTH SLIDE

Here we show the reason why Boeing's alternatives would result in so much less of the contamination being removed from the site. This chart shows the cleanup standards for Cesium-137 and Strontium-90 based on the Agreements on Consent (which were conducted to background levels) in comparison to Boeing's Suburban Residential and Open Space alternatives. As you can see, Boeing's proposed values are much higher than Background.

FIFTH SLIDE:

To attempt to display just how far apart Boeing's proposed numbers are from those in the AOC, we have calculated how many times higher their values are. As you can see, this comparison shows that for Cesium-137, as shown in blue, Boeing's proposed Suburban Residential standard is nearly 50 times higher than background. And their Open Space Standard is nearly 250 times higher.

SIXTH SLIDE

For Strontium-90, as shown in red, Boeing's Proposed Suburban Residential Standard is 480 times higher than Background. While Boeing's proposed Open Space value is astoundingly over five thousand times higher than Background levels

SEVENTH SLIDE

When we compare Boeing's proposed Suburban Residential standards to EPA's Suburban Residential Preliminary Remediation Goals, Or PRGs, we see a similar pattern.

EIGHTH SLIDE

For Cesium-137, as shown in blue, Boeing's Suburban Residential Standard is 154 times higher than EPA's Suburban Residential Preliminary Remediation Goal, or PRG. For Strontium-90, as shown in red, Boeing's Suburban Residential standard is 156 times higher than EPA's Suburban Residential PRG.

Boeing has insisted on being able to average contaminated areas with less contaminated areas so as to even further reduce what has to be cleaned up. DTSC had in the prior administration barred this from happening, but it has now reversed itself on that matter and will allow the averaging. With averaging, 100% of the radioactive contamination at SSFL would not be cleaned up under both of Boeing's proposed cleanup alternatives

NINTH SLIDE:

Under the AOCs, DTSC was required to prepare a Look-Up Table, which was to be composed of either the EPA "Background Threshold Values" (BTVs), based on the higher of the background values EPA found, or the detection limits it had used in the original background study.

However, the new DTSC administration did not follow the AOC requirement and instead created a Look-Up Table based on higher values than EPA's BTVs—in other words, they ignored the requirement in the AOC to clean up to background. That one DTSC action alone would result in 12.2% of the contaminated soil identified by EPA as being above background not getting cleaned up.

Some other people have pushed for a cleanup based on risk, presuming it would produce a different result. DTSC itself in 2010 said that if it followed its normal risk-based procedures, it would still result in having to essentially cleanup to background. We have checked that assertion empirically and in this next slide we answer the question of what percentage of the contamination would be cleaned up if the cleanup were based on risk instead of background.

TENTH SLIDE

As DTSC said in 2010, its normal risk-based procedures would require that the site be cleaned up to prospective land use allowed under current zoning and general plan. The land is zoned rural agricultural with a 5-acre minimum parcel size. Additionally, the land is in a general plan area that allows agricultural uses. (There is a minor discrepancy between the zoning and general plan in that the former allows 5 acre parcels and the latter only 10 acre parcels, but both allow agriculture.) DTSC said in 2010 that it would have to require cleanup to the agricultural standard, the most protective, and that that standard is generally equivalent to background. Indeed it is. We found under that risk-based standard, EPA's agricultural preliminary remediation goal (PRG), 99% of the contamination would be cleaned up.

Furthermore, even under EPA's suburban residential PRG, less protective than the agricultural and generally not allowed because of deference to current zoning and general plan designations, 93% of the contamination would be cleaned up.

ELEVENTH SLIDE

In short, The AOC, as shown in blue, results in one hundred percent cleanup and the EPA Agricultural PRG, as shown in Red, results in 99% clean up.

In short, a risk-based cleanup is, as DTSC itself said in 2010, virtually the same as a cleanup to background. That is why DOE proposed it in the first place.

The EPA Residential PRG, as shown in green, results in 93% clean up, and DTSC's Look Up Table values, as shown in purple, which were supposed to be based on background, result in only 88% being clean up, a full 12% less than background.

The problem, as seen earlier, is when Boeing's version of suburban residential is employed, it leaves 98% of the contamination NOT cleaned up.

We see, that Boeing's Suburban Residential Standards, as shown in light blue, result in about 2% being cleaned up, and Boeing's Open Space Standards, as (not) shown in orange, result in none of the contamination being cleaned up.

SLIDE 12:

In conclusion, If Boeing got its way, and the 2010 cleanup agreements and DTSC's 2010 cleanup commitments were abrogated and Boeing's alternatives employed instead, virtually all of the radioactive contamination would be not cleaned up. Similarly, the great majority of the chemical contamination would not be cleaned up.

DTSC has already deviated from the AOC and abandoned the cleanup to background by adopting a Look-Up Table less protective than EPA's background values, which the AOC required be used. This would leave 12% of the contamination in place.

But if it goes along with Boeing's push, virtually all of the contamination would not get cleaned up.

Cleanup to background turns out to be essentially the same as a cleanup based on normal risk-based procedures; all would get cleaned up.

But if Boeing prevails, or if DOE or NASA break out of their agreements, virtually none of the contamination would get cleaned up. And it would continue to be available to migrate offsite and potentially affect the communities nearby.