

### **Both proposed Rules 11-18 and 12-16**

- These two rules have nothing in common and should be analyzed and viewed separately: separate CEQA/EIR/Socio-economic/legal review processes and separate decision-making processes. Rule 11-18 aims at reducing health risk from TACs emitted by all stationary sources while Rule 12-16 aims to serve as a “backstop” to prevent refinery emission increases from possible future changes to refinery feedstocks and possible increases in exports. In this sense 11-18 should be viewed as an extension of existing TAC emission control rules aimed at public health and 12-16 should be viewed as part of a suite of permitting rules.
- BAAQMD staff is clearly in favor of 11-18 and opposed to 12-16. In the big picture, the problem is that while staff gives a somewhat clear picture of what’s wrong with 12-16, it doesn’t clearly describe how it wants to address the problems 12-16 is trying to solve. How hard would it be to write two or three pages profiling a set of alternative rules that accomplish the legitimate goals that have motivated people to argue for 12-16?

### **Rule 12-16**

- Significant questions have been raised regarding the legality of this rule. The spirit and purpose of the rule seems reasonable, but if developing it means a huge legal battle over BAAQMD authority and rule necessity, it seems wise to look for a less controversial way to achieve all or most of its laudable objectives. This argues for clear resolution of the legal questions as soon as possible to avoid wasted effort. Are “caps” legal or not? And if they are, are they legal for CARB or for BAAQMD?
- The key objective of 12-16 is to not allow changes to feedstocks to either increase emissions or to chew up a significant percentage of the emission reduction benefits associated with applying TBARCT technology over time. This objective could be achieved by making our refinery NSR permitting rules apply to all changes in feedstocks that involve increases greater than say 10-20% to any key crude slate characteristic such as sulfur. Tar sands oil is of concern because of the extreme amount of extra processing required to turn it into finished products. In this sense, feedstock changes must be assessed and approved based on pollution impact – both absolute and opportunity cost. These changes should be measured against the annual crude slate reporting required by our new reporting rules. Conditional use permits for feedstock changes and/or infrastructure projects should be tied explicitly to crude slate range permit windows.
  - Chevron’s Modernization Project that was approved in 2014 is a perfect example of the problem that must be solved. It was a project aimed at supporting an 88% increase in feedstock sulfur. A few emissions will go down from the “modernization”, but many, many more will go up - some like Hydrogen Sulfide and Formaldehyde a great deal. There was no framework for BAAQMD or the City of Richmond to use in reviewing what conditions or limitations should be considered. Only the Attorney General’s Office saved the day by simply asserting that the project should not be allowed to increase GHG emissions. And even with this condition, the people of Richmond and San Pablo will suffer a significant increase in at least twenty TAC emissions with significant health risks. If Chevron was permitted to increase their sulfur content by half as much, there would be probably be no such increase in health risk. This is the problem that must be

solved somehow. Effectively, we permitted Chevron to switch to dirtier feedstocks than necessary. There is plenty of crude available that is not as high sulfur as the Iraqi oil Chevron will use. It's just about them lowering their cost per barrel.

- In the discussion of 12-16, there must be a clear analysis of what pollution increases have already been permitted by the approval of recent infrastructure projects, including the Chevron "Modernization" project, Kinder Morgan's crude by rail project and the Phillips 66 project in Rodeo. This analysis should inform the shaping of new permitting rules as well as help us understand whether there is any conflict between the caps as proposed currently in draft rule 12-16 and already permitted projects.
- If 12-16 goes forward, the caps should be adjusted to reflect existing refinery permits. It is only fair that we not move the goal posts. What we would then be doing is essentially saying you can produce as much as you thought you could when you made your investments, but what you can't do is increase your pollution on your permitted throughput. Also, there should be provisions allowing refineries to seek permission to expand if other sources go out of business or if there are export opportunities that make sense. GHGs are a global problem and it is highly likely that California refineries are more efficient and less polluting than many other refineries. Exports are not a bad thing. (All of these things would be a natural part of revised permitting rules.)
- AB197 clearly says that the State will drive GHG reduction efforts with a focus on reducing absolute emissions in communities already suffering a high burden of industrial pollution. This is an important extension of SB32 and AB32. And it includes a recognition that we aren't going to get to our goals through the existing cap and trade program. But if the refinery sector needs to reduce its contribution to GHG emissions by 80% over the next 35 years, it is an open question about how much of this happens by driving down demand for gasoline and other fuels and how much by State mandates that would force refineries to either use less polluting feedstocks or TBARCT. The problem with 12-16 as a "cap" rule is that it doesn't achieve GHG reductions – it simply prevents the problem from getting worse before it gets better. One would think that the CARB would have a clear opinion about how it wants to drive to our 2030 and 2050 goals under the guidance of AB197. It's not that 12-16 is a bad idea, it's more that it can be viewed as unnecessary and not focused on the pollution reduction goals that currently exist.
- If health concerns are paramount, draft Rule 11-18 is a far more focused approach, especially if PM 2.5 emissions can be incorporated into it. The point that CBE raises about the increases in PM 2.5 over the last ten years is very important. It is certainly not ok to treat PM2.5 as something that can be allowed to increase in highly polluted industrial communities because of the availability of regional offsets. In this sense PM2.5 is not the same as CO or GHG. BAAQMD must address how to "cap" PM2.5 in the refinery communities. Rule 12-16 does this. If BAAQMD staff see a better way to do it, they should propose an alternative.

#### **Rule 11-18**

- The focus of proposed Rule 11-18 should be further clarified. The staff report should list the top twenty TACs contributing to health risks in the recent and in the new 2015 OEHA guidelines, explaining exactly what has changed with the new guidelines. Similarly, there should be explanations of how Diesel PM, chlorinated organics and metals have been reduced by 50% over the last ten years and why other high risk emissions have not gone down. Finally, Table 4 should

be more complete. Why for example, would Hydrogen Sulfide show up as a primary risk driver in landfills and not in refineries? Was Chevron's "Modernization" project's roughly 800% increase in Hydrogen Sulfide unimportant?

- The definition of TBARCT needs to be improved. There are two versions of best available technology. Things that have been proven as effective and feasible for existing in place processes and things that are based on different processes not currently in use at a facility. Switching processes is sometimes very expensive and sometimes even impossible given other processes. But it is also sometimes the best way to reduce pollution and can be perfectly affordable when amortized over thirty years. So, the definition of TBARCT has to address both better ways of managing and controlling existing process choices as well as establishing alternatives to existing process choices. The latter may take longer to implement and may be costlier, but they may also be the best solution in terms of public health.
- Rule 11-18 risk reduction plans should be organized into categories of improvements based on areas impacted and degree of disruption to ongoing operations. This will help everyone understand things that can be done within a year or two vs. things that might need three or more years to implement. It would also allow BAAQMD to approve plan sections while still reviewing and negotiating around other sections. The framework should help everyone understand the emission reduction expectations by category and the schedule for goal achievement.
- It seems clear that BAAQMD has responsibility for maintaining a database of TBARCT options by process category and by individual equipment-based process within the category. The staff report should describe how and when this will be accomplished and what staff effort will be needed to develop this from existing industry and governmental sources (APA, US EPA, etc).
- The definition of cost "reasonableness" in selecting or implementing specific TBARCT options as part of a risk reduction plan is left undefined. This is not acceptable. If a refinery could reduce PM 2.5 by 40 tons/year, what is a reasonable amortized cost for the refinery to bear? The Rule should not allow endless arguments about TBARCT best practices being too expensive: guidelines must be established. And they should be toxicity/health risk weighted guidelines. Reducing a ton of PM 2.5 is far more valuable than reducing one pound of Formaldehyde. I would think establishing "reasonable reduction costs" for all TACs would make sense. If a health risk reduction plan could not hit its emission reduction targets without spending more than the reasonable cost, the APCO could take this into consideration when reviewing the proposed plan. The most important thing is to make sure that the TACs with the highest health risks have appropriately high "reasonable cost estimates" based on appropriate 30-year amortization of true implementation costs. It should also be noted that there is no obligation for BAAQMD policy to value firm profitability over public health. Maintaining employment is a legitimate concern, but not firm profitability. (And for refineries, with the price of oil so low now, there is actually no reason to worry about refinery profitability if modernization costs are actually amortized appropriately.)
- The draft Rule 11-18 as it currently stands is a bit unclear regarding exactly what is expected if a stationary source is in violation of a Significant Risk Threshold vs. a Risk Action Level. What is the difference in response required?