

To: Cagen, Stuart Z SCC <stuart.cagen@shell.com>; Gingell, Ralph R SCC <ralph.gingell@shell.com>
From: Tholstrup, Susan C SCC
</O=SHELL/OU=MSXSCC/CN=RECIPIENTS/CN=ST184969>
Cc:
Bcc:
Received Date: 2003-02-24 23:23:38 GMT
Subject: RE: BD

That would be great - let's start with an hour or two and go from there.

Susan

-----Original Message-----

From: Cagen, Stuart Z SCC
Sent: Monday, February 24, 2003 12:02 PM
To: Tholstrup, Susan C SCC; Gingell, Ralph R SCC
Subject: RE: BD

Susan:

A whole day session is a tall order from the perspective of finding an open day on your calendar anytime soon.

I have discussed this with Ralph and we would suggest a one hour introductory session that we could build on. In other words, perhaps this could be a bit iterative.

Items for a 1 hour session:

1. Our thoughts about the role of toxicology(sciences) in chemical specific and generic issue management in the US.

2. Discussion of examples;

for Stuart: **PBU specific: Lower olefins:** Product support for MSDS/GSAP, butadiene, isoprene, ethylene, propylene, HPV. **Aromatics:** Product support for MSDS/GSAP, benzene (Shanghai), benzene (global Shell coordination), benzene/toluene/xylene children's health (VCCEP). **HODER:** Product support for MSDS/GSAP, HPV, Neodol skin testing. **Non PBU specific:** Coordination with medical and OE, LRI, ACC issue management;

for Ralph: **PBU specific: Solvents:** Product support for MSDS/GSAP, MEK children's health (VCCEP), HPV, Stoddard solvent cancer study **EO/EG:** Product support for MSDS/GSAP, Ethylene oxide risk assessment/EPA IRIS, EG kidney toxicity risk assessment **Phenol/Acetone:** Product support for MSDS/GSAP, Acetone children's health (VCCEP) **PDO Corterra:** Product support for MSDS/GSAP, coolants SD. **HODER:** alkanes children's health (VCCEP) **Non PBU specific:** LRI risk assessment methods

3. Path forward for deep digging.

(Not sure what you are seeking with regard to 'concerns' but I am sure we can come up with something.)

If you agree we should find an hour first, I will schedule something. If you really want a day, I will look for a day somewhere on our calendars. Specific topics: see # 2 above.

Stuart

Stuart Cagen

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-----Original Message-----

From: Tholstrup, Susan C SCC
Sent: Friday, February 21, 2003 3:53 PM
To: Cagen, Stuart Z SCC
Subject: RE: BD

Stu,

I would really like to spend some time with you (and Ralph) and understand everything you do and your thoughts/concerns. Could you give some thought about how to structure that? I'm thinking it would be a good chunk of time (like all day) with an hour dedicated to each topic. I really want to dive deep into these areas. (Deep for me - maybe not deep from your perspective!)

Could you please make this happen?

thanks,,
Susan

-----Original Message-----

From: Cagen, Stuart Z SCC
Sent: Wednesday, February 12, 2003 3:36 PM
To: Tholstrup, Susan C SCC
Subject: FW: BD

Susan:

As per your request today regarding issues and costs. Apologies for minimum introduction, but the below relates to a significant issue for the Lower Olefins PBU. The note below to Colin was to let him know the 1,3 butadiene related implications of the EPA Clean Air Act Residual Risk calculations as we now understand it.

For purposes of the EPA Clean Air Act Residual Risk, there are possibly similar issues with benzene and ethylene oxide, but there is even more uncertainty regarding those products right now.

In the US, for Lower Olefins, Shell Chemical LP contributes approximately \$ 180,000 for research and advocacy for 1,3 butadiene (about 20% of the total) via the American Chemistry Council Olefins Panel. This Panel also deals with ethylene and propylene issues (Shell cost about \$ 29,000/year). Shell is also contributing about \$ 60,000 for similar issues with isoprene.

Stuart

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-----Original Message-----

From: Conklin, Jeffrey J SCC-CHSE
Sent: Thursday, February 06, 2003 5:10 PM
To: McKendrick, Colin CB SC-CBLO
Cc: Cagen, Stuart Z SCC; McClure, Jack JL SCC
Subject: FW: BD

Colin,

attached below is an extract of relevant information from the various reports produced by Kellogg Brown & Root that Stuart has pieced together which should provide you with some useful background data prior to our call tomorrow. An excel spreadsheet has also been attached that provides a summation of the estimated costs to reach the various levels (1.0, 0.1 and 0.01 ppbv) at Deer Park and Norco. In addition, at some of these levels the reports indicate that it is not technically feasible to reach the level even if all 4 of the options to control fugitive emission are done. Comments have been added to each of the cells in the spreadsheet as a way of explanation. The more detailed information is contained in the word document.

<< File: BD KBR Industry, DP, Norco summary.doc (Compressed) >> << File: Cost_Feasibility_summary.xls (Compressed) >>

Jeff

-----Original Message-----

From: Cagen, Stuart Z SCC
Sent: Tuesday, February 04, 2003 10:35 PM
To: McClure, Jack JL SCC; Conklin, Jeffrey J SCC-CHSE
Subject: BD

Jack and Jeff:

In anticipation of our conference call on Thursday afternoon, and the call with Colin McKendrick (LO PBU) on Friday, here are a few thoughts regarding our current situation.

Bill Rawson and Marcy Banton gave me some brief impressions of the 31 January meeting between the EPA Air office and ACC Air team and Olefins Panel:

- 1) EPA Air office toxicologists would not likely deviate from IRIS values (derived from EPA ORD/NCEA).
- 2) The EPA Air folks were much more interested in the KBR report and not really engaged in all of our claims about the conservative

IRIS values.

3) Regarding the possibility that they might give us a break on AMOS because of the conservative IRIS values, they claimed those decisions are made at much higher levels within the EPA. (We would also expect NRDC and others to hold them to 10-6.

4) Regarding the status of the EPA HON proposed rule, it is unlikely the proposal will come out by the end of the year. They did not give many clues about analyses they have run so far, but they did say something confusing about a location that seemed to have a very high Hazard index (like a value of 4), even though the cancer risk was less than 10-4 (probably a math error somewhere).

Thus the report to the PBU will not be so encouraging regarding our industry challenges. For Colin, we should summarize the KBR work, including where Norco and Deer Park fit into the industry, but remind Colin that these numbers are still fairly soft, with expectations that even if we win some of the risk assessment arguments our locations will have to deal with fugitives significantly (~ \$ 20 million per location ??). Timing: still a few years off for our current locations ('04 + 2 years), but implications to Sabina and customers should also be figured.

If either of you have the inclination or energy to put a quick table together (with, say, populated census block levels at Shell locations and industry range and costs for reductions to 0.1 ppb and lower), this might be useful for the PBU, regardless of how soft the data now is.

I'll check email again tomorrow night.

Thanks

Stuart

Stuart Cagen

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