The following are the post-meeting correspondences among the panel members. Please note that personal information has been redacted.

Panel Member 1 (*Thu, 14 May 2009*): Thanks so much for your active participation at this week's meeting. I believe that our effort fulfilled the intent of the Steering Committee when it gave approval for the work under the auspices of the Alliance for Risk Assessment (ARA). The fact that we had quite a few state risk assessment folks on the webcast made our effects highly visible and very likely to be quite useful, which as you know, is the intent of the ARA.

Like any endeavor with impact, we need some additional follow up. A short term task for all of us is to consider the individual experimental animal data on clinical signs from the alachlor ESA 91 day drinking water study. We need to judge whether these signs occurred more towards the start of the study, evenly throughout the study, or more at the latter part of the study. If our collective judgment is that these effects occurred evenly throughout or more at the end of the study, then our prior determination of the mid dose as a NOAEL is supported and we have no further work on this issue. If we collectively judge that these effects occurred more toward the beginning of the study when drinking water was known to be down, then we must judge whether the decrease in water consumption resulted in these clinical signs. If so, then we need to judge whether to use the BMDL for hematological changes or the high dose as the NOAEL. Either of these choices will change the value of the RfD we estimated. Please respond as soon as possible after reviewing the additional materials passed out to us during the last part of the meeting, which included the individual animal clinical signs and several letters that discuss eye effects.

A second item of work will be for us to review the developing notes. The note taker has promised to get these to us shortly, perhaps even by the end of next week. We have already seen some of these notes, but should take our time to carefully consider the complete writing, since this will serve as one record of our work. These notes will not be released without our full concurrence.

Finally, *TERA* staff is preparing a manuscript for publication based on its work and our deliberations. *TERA* will send out a draft of this text towards the early part of June, or perhaps sooner. We will be listed as authors of this text, so your critical thoughts will also be needed at this time.

Thanks for helping out on this effort!

Panel Member 1 (*Fri, 15 May 2009*): I have looked over clinical findings of the individual animals and do not find this to be easy, although many signs do occur in the first week, especially dehydration. I presume that it would be helpful if one of the *TERA* staff collated these clinical signs by thirds of the study length, and then gave us a breakdown by dose. Please expect this chart early next week, or if you have already done this, please send it on to all of us.

Panel Member 2 (*Fri, 15 May 2009*): I also went through the chart on the way home for the 90-day alachlor ESA DW study.

The dehydration, emaciation, hunched posture, unkempt appearance, few feces, feces small in size signs were seen only in the first 2 weeks of the study period for the high dose animals (10000 ppm). This seems to correlate with the decreased water consumption seen in the beginning weeks of the study period for this high dose group suggesting the effects related to decreased water consumption rather than the test compound.

The other clinical signs such as dark material around eyes, ocular discharge, hair loss were seen randomly in all groups including controls although the incidences appear to be more in all dosed groups compared to controls. Seeing the report from the pathologist relating the eye effects to infection, it is hard to assign these changes to the treatment. The hair loss may also be related to infection according to the pathologist.

Several pinkish colored crystals seen from 4 weeks to the end of the study in the high dose group is disturbing since the animal may not have received the intended dose. This may question the validity of the study effects seen, if any, at high dose level.

Another thing we may want to check is the clinical signs seen in the 28-day DW study. We may need to get the raw data from sponsor before we make determination on the clinical signs.

Panel Member 3 (*Fri, 15 May 2009*): I also noticed the same things as Panel Member 2, and I agree that a summary table would be useful.

1. Clinical signs related to dehydration appeared through ~Day 12 in the high dose group.

2. Signs about the eyes and mouth consistent with infection by of the sialodacryloadenitis virus began about Day 21 in all groups and continued with irregular incidence for the remainder of the study.

Panel Member 4 (*Mon, 18 May 2009*): I kinda beat the *TERA* staff to that effort. See the attached spread sheet (see pages 12 to 14). I've also started the conclusions, that draft is also attached. It looks to me that the High dose in the males and females is a NOAEL and I'm not sure if using that value or the Benchmark is the correct way to proceed.

Homework; Evaluation of the 91 day Alachlor-ESA drinking water study Panel Member 4

Throughout the study ocular effects including discharges (clear or red), dark material around the eyes, and hair loss around eyes were attributed to the presence of Sialodacryadenitis virus (SDA) Ferrel (1994) common in F-344 rats. A second source of ocular lesion was the dehydration observed at the beginning of the study in the high dose and several mid dose animals (Wilkie 1994).
It appears that most of the effects, other than the ocular effect cited above, in the first two weeks of the study day-1 to day-14 of the study are primarily related to dehydration and emaciation in the high dose (10,000 ppm) in both males and females. These signs included reduction in body weights **(check),** rough coat, changes in the amount and size of feces, urine staining. In some animals postural and appearance changes were noted. With the exception of urine staining,

primarily in females and occasional fecal effects, recovery from these signs occurred after day-14.
Urine staining occurred in one male in the control group. Incidence and average occurrence of urine staining were not dose-related (Table 1).

Table 1. Number of Animals (Females) with Urine Staining			
Concentration	Dose	# per group	mean
0	0	5	6.1
200		3	7.7
2,000	207	2	7.2
10,000	1108	7	8.8

Considering these observations, the appropriate NOAEL for the drinking water study would be 10,000 ppm (1,108 mg/kg/day). Using either the NOAEL (HDT) or the bench mark dose (381 mg/kg/day) for hematological effects to establish the RfD.

Panel Member 3 (*Mon, 18 May 2009*): I think we will still need a summary that examines the temporal aspects of these observations. To my mind, we can eliminate these clinical signs as a candidate for an adverse effect if (a) changes related to decreased drinking water are confined to the first two weeks, i.e., contemporaneous with body weight loss and recovery, and (2) show no treatment effect on those related to mouth and eyes, i.e. colony infection.

Panel Member 5 (*Mon, 18 May 2009***)**: Just got my box of papers back from the meeting and haven't had a chance to reacquaint myself with them. I'm starting to wonder about the timing of the decreased RBCs in 91-day drinking water alachlor ESA study. Do we have data on that?

Panel Member 1 (*Tue, 19 May 2009*): Based on suggestion by Panel Member 4 in the May 18th email to use the BMDL of RBC measurements as the critical effect, and Panel Member 5's question above on when such effects were monitored, I reviewed the methods section of the 91 day alachlor ESA study. Here is the verbatim text found on pages 16 and 17 of the attached study (i.e., Siglin (1993): "A 91-Day Drinking water toxicity Study in Rats with MON 5775. Final Report"):

"Blood was collected from all surviving rats on the day of scheduled euthanasia (day 92 or 93) for evaluation of selected hematology and clinical chemistry parameters. The animals were fasted overnight prior to blood collection. Blood samples were obtained via ocular bleeding while the animals were under light isoflurane anesthesia. The following parameters were evaluated:

a. Hematology
Erythrocyte count (RBC)
Hematocrit (Hct)
Hemoglobin concentration (Hgb)
Mean corpuscular hemoglobin (MCH)
Mean corpuscular hemoglobin concentration (MCHC)
Mean corpuscular volume (MCV)
Platelet count

Reticulocyte count
Total and differential leukocyte counts

b. Clinical Chemistry
Alanine aminotransferase (ALT)
Albumin
Albumin/globulin ratio (calculated)
Alkaline phosphatase
AspaRate aminotransferase (AST)
Calcium
Cholesterol
Chloride
Creatinine
Fasting glucose
Globulin (calculated)
Phosphorus
Potassium
Sodium
Total bilirubin
Total serum protein
Triglycerides
Urea nitrogen (BUN)

Methodologies for hematology and clinical chemistry are presented in Appendix C."

It appears that the hematological effects are not associated with decreased water consumption, since this parameter was near normal at the time of scheduled euthanasia for females and actually statistically significantly INCREASED in males at this time (see attached text on pages 50 to 55). As stated by Panel Member 5, hematocrit, RBC, and hemoglobin are all statistically significantly lower in males, even though the changes are modest. Is it possible that these statistically significant changes in males are due to the statistically significant increased water intake? (We will ask an expert in this area unless any of you know this off the top of your head.)

Based on this, I am comfortable with Panel Member 4's suggestion to use the BMDL of 381 mg/kg-day for reduced hematocrit in males as the basis of the RfD. However, if these modest decreases in hematological parameters are due to the increase water intake, then I would be comfortable with us choosing the high dose as the NOAEL. This latter judgment would at least make our choice of NOAELs from the drinking water and dietary studies for alachlor ESA more consistent.

Please respond at your earliest convenience. We are finalizing the notes this week.

Panel Member 3 (*Thu, 21 May 2009*): I agree that the hematological signs at study's end cannot be reflective of earlier, temporary avoidance of drinking water. The decreased hematocrit is small but consistent with other hematological signs, as Panel Member 5 pointed out during our meeting last week. I am OK with calling these measurements at study's end credible evidence of

a small but believable adverse effect at the high dose, leaving the mid-dose as the NOAEL. Use of BMDL is appropriate.

Panel Member 2 (*Thu, 21 May 2009*): The hematological changes seen in males of the 90 day DW study for alachlor ESA at HDT (896 mg/kg/day) are not robust to call it as adverse effects. The changes are within 5% and could be within normal variations in these animals. I hesitate to call the HDT as LOAEL. Also, similar changes are not observed for acetochlor ESA or alachlor ESA in dietary study

Page 54 of *TERA* Report, Table 3-6: Alachlor ESA, in 90 days DW study, produced small but statistically significant decreases in hemoglobin (-3.1%) and RBC counts (-5.2%) in males at 896 mg/kg/day (HDT). Mean cell volume, mean cell hemoglobin and mean cell hemoglobin concentrations in males are not affected. Also, no hematological effects are seen in HDT females. In this study, mid dose males (157 mg/kg/day) produced a decrease of 4.5% in hemoglobin but these changes are not statistically significant because of high standard deviation. These changes are not significant in my opinion.

I looked if any such pattern in hematological effects were seen for alachlor ESA 90 day dietary study or acetochlor ESA 90 day dietary study.

In 90 day dietary acetochlor ESA study (page 43 of the *TERA* Report, Table 3-2) some small statistically significant increases in hemoglobin levels, and RBC counts and small decreases in mean cell volume in females were reported at 1073.2 mg/kg/day (note the effects were in opposite direction for Hb and RBCs and these small changes were seen in females but not in males as observed for alachlor ESA in DW study). Although we called this high dose as LOAEL for acetochlor ESA based on decreased body weight and decreased food utilization, hematological parameters were not one of the endpoints. If we call hematological changes in males in alachlor ESA as adverse effect in the study above, there is inconsistency in our evaluation (assuming the rest of panel members call hematological effects as adverse effects).

I looked at the hematological changes for alachlor ESA in 90 day dietary study (page 57 of the *TERA* Report, Table 3-7). At comparable doses, no notable hematological effects were seen.

So, I go with calling the HDT in alachlor DW study (896/1108 mg/kg/day) as NOAEL.

Panel Member 3 (*Thu, 21 May 2009*): can go with the high dose or the mid-dose as NOAEL. The hematological effect at the high dose is certainly not large.

Panel Member 1 (*Fri, 22 May 2009*): I am persuaded by Panel Member 2's argument to call the high dose a NOAEL for the alachlor ESA drinking water study. The hematological changes only occurred in males and this group was drinking statistically significantly more water at the time of measurement. The changes are minimal and I believe would not be of any clinical significance in a human study. Finally, the choice of the high dose as a NOAEL is consistent with our judgment of the high dose being a NOAEL in the alachlor ESA dietary study, and also for alachlor OXA. As one or more of us said at the meeting, these chemicals are not (very) toxic.

At this point, we have two folks that wish to call the high dose a NOAEL (Panel Members 1 & 2), one of us inclined currently to use the BMD for the hematological effects (Panel Member 4), one of us who could live with either choice (Panel Member 3), and one of us to yet weigh in (unless I missed it) (Panel Member 5). Eventually we should come to a consensus on this choice. Regardless of the choice, it will be written up in the meeting notes, along with other choices of NOAELs, BMDLs and UFs, and a resulting value of the individual RfDs will be given. These notes should be in our hands by about mid next week for review. Afterwards, I will prepare draft manuscript, perhaps by the end of May for your review. Meeting materials are being loaded onto the *TERA* website, so that folks will be able to see our collective work.

Panel Member 3 (*Fri, 22 May 2009*): I certainly agree that changes in hematological parameters of this magnitude in humans would not so much as raise a clinician's eyebrow. However, why is it that finding increased water consumption in these males adds to the argument that the hematological changes are not adverse? Seems to me that increased water consumption means higher intake of (putative) toxicant. Panel Members 1 & 2, please explain.

Panel Member 2 (*Fri, 22 May 2009*): I did not relate the increased water consumption to the slight alterations in hematological parameters (spurious changes in my opinion). I do not understand that part of the statement. Perhaps, Panel Member 1 had some alternate thoughts.

Panel Member 1 (*Fri, 22 May 2009*): This is my statement, not Panel Member 2. It seems to me that SS water increase might evoke small decreases in parameters associated with blood measurements, simply due to mass balance. The extra water is both absorbed by the GI tract and excreted by the kidney, I presume, and therefore must increase the volume of the blood while on its way to be excreted by the kidney. If the volume of blood is actually increased, then measurements such as hematocrit, RBC and hemoglobin, which I believe are measured in relationship to blood volume, might be expected to be slightly less. This is what is observed.

Panel Member 4 (*Fri, 22 May 2009*): After reviewing Panel Members 1 & 2's discussion, I can see using the high dose in the ALA ESA study as the NOAEL. I had not considered the water consumption issue earlier.

Panel Member 1 (*Fri, 29 May 2009*): Thanks for all of your hard work over the last several weeks. The note taker will be sending out the draft meeting notes later today, but attached to those notes will be a 2-page+ synthesis of the resulting RfDs, which I developed from our discussions and attach to this note.

Please feel free to strike and replace this piece to reflect your thoughts on our decisions. Panel member 5, we need you to particularly focus on the write-up for alachlor ESA, since the rest of us are now comfortable calling the high dose of the drinking water study as a NOAEL. Since this drinking water NOAEL is higher than that seen in the alachlor ESA dietary study, the dietary NOAEL is used as the basis of the RfD. However, please feel free to disagree, and if so, please send us your thoughts so that we might work through this disagreement.

In order to move the process along, I suggest that we all look this piece and send suggested changes to me by sometime mid next week. Our thoughts on the meeting notes will be needed to

the note taker by early the week of June 8th. I will draft a manuscript from premeeting materials and our meeting notes and will send this to you shortly thereafter, with a target date of submission by the end of June.

NB: The attached 2-page+ synthesis is pasted as the following:

Development of Reference Doses (RfDs)

Based on the previous discussion the following RfDs were developed:
Acetochlor ESA: The critical effects for acetochlor ESA are decreased body weight gain, decreased food consumption, and decrease food utilization at the high dose of 12,000 ppm (~920 and 1100 mg/kg-day in males and females, respectively) in the 90 day feeding study (Lees, 2000b). The No Observed Adverse Effect Level (NOAEL) is 3000 ppm (230 and 260 mg/kg-day in males and females, respectively). An uncertainty factor of 1000 is applied to this NOAEL. This factor reflects the default value of 10 fold for experimental animal to human extrapolation, in lieu of chemical-specific information that would allow the development of a Chemical Specific Adjustment Factor (CSAF); the default value of 10 fold for within human variability, in lieu of chemical-specific information that would allow the development of a CSAF, and a combined value of 10-fold for uncertainties in both the lack of a full database to determine the critical effect and the lack of a chronic study as a basis of the RfD. This latter factor is best judged as 10, although it could be as high as 30, because the available toxicology data for the parent compound suggest only a modest change between subchronic and chronic NOAELs (~2-fold), and the available information suggests that neither developmental nor reproductive toxicity is the critical effect.

The resulting RfD is 2 mg/kg-day.

Low to medium confidence in this RfD exists. Additional studies that might reduce uncertainties would be a bioassay in a second mammalian species and comparative toxicokinetics information in humans.

Acetochlor OXA: The critical effects for acetochlor OXA are decreased body weight gain and decrease food utilization at the high dose of 12,000 ppm (~960 and 1100 mg/kg-day in males and females, respectively) in the 90 day feeding study (Williams, 2000b). The No Observed Adverse Effect Level (NOAEL) is 3000 ppm (230 and 270 mg/kg-day in males and females, respectively). An uncertainty factor of 1000 is applied to this NOAEL. This factor reflects the default value of 10 fold for experimental animal to human extrapolation, in lieu of chemical-specific information that would allow the development of a CSAF; the default value of 10 fold for within human variability, in lieu of chemical-specific information that would allow the development of a CSAF; and a combined value of 10-fold for uncertainties in both the lack of a full database to determine the critical effect and the lack of a chronic study as a basis of the RfD. This latter factor is best judged as 10, although it could be as high as 30, because the available toxicology data for the parent compound suggest only a modest change between subchronic and chronic NOAELs (~2-fold), and the available information suggests that neither developmental nor reproductive toxicity is the critical effect.

The resulting RfD is 2 mg/kg-day.

Low to medium confidence in this RfD exists. Additional studies that might reduce uncertainties would be a bioassay in a second mammalian species and comparative toxicokinetics information in humans.

Alachlor ESA:
[Note to Panel Member 5, in the next discussion I am presuming your concurrence with the high dose in the 91-day study as a NOAEL. Please feel free to not agree with this. If you do not agree, please send us all a note and we will work through the disagreement.]

Although several effects were seen, no effects were judged to be adverse after an extensive review of individual animal data, including clinical signs and chemistries, for alachlor ESA in either a 91-day drinking water study (Siglin, 1993; Heydens et al., 1996) nor in a 90 day-feeding study (Kirkpatrick, 2002). [Note well: a statistically significant decrease in body weight gain of less than 10% without a concurrent decrease in food utilization was judged not to be an adverse effect; clinical signs were judged to be due to taste aversion resulting in dehydration early in the study; and clinical chemistries while statistically significant at the high doses were modest and within control ranges of other studies.] The high dose in the dietary study of 12,000 ppm (~790 and 930 mg/kg-day in males and females, respectively) serves as the appropriate NOAEL as the basis of the RfD, since it is lower than that seen in the drinking water study. An uncertainty factor of 1000 is applied to this NOAEL. This factor reflects the default value of 10 fold for experimental animal to human extrapolation, in lieu of chemical-specific information that would allow the development of a CSAF; the default value of 10 fold for within human variability, in lieu of chemical-specific information that would allow the development of a CSAF; and a combined value of 10-fold for uncertainties in both the lack of a full database to determine the critical effect and the lack of a chronic study as a basis of the RfD. This latter factor is best judged as 10, although it could be as high as 30, because the available toxicology data for the parent compound suggest only a modest, if any, change between subchronic and chronic NOAELs (~equal), and the available information suggests that neither developmental nor reproductive toxicity is the critical effect.

The resulting RfD is 8 mg/kg-day.

Low to medium confidence in this RfD exists. Additional studies that might reduce uncertainties would be a bioassay in a second mammalian species and comparative toxicokinetics information in humans.

Alachlor OXA: Although several effects were seen, no effects were judged to be adverse for alachlor ESA in a 90 day-feeding study (Lemen et al., 2000). The high dose in this latter study of 13,000 ppm (~830 and 1000 mg/kg-day in males and females, respectively) serves as the appropriate NOAEL. An uncertainty factor of 1000 is applied to this NOAEL. This factor reflects the default value of 10 fold for experimental animal to human extrapolation, in lieu of chemical-specific information that would allow the development of a CSAF; the default value of 10 fold for within human variability, in lieu of chemical-specific information that would allow the development of a CSAF; and a combined value of 10-fold for uncertainties in both the lack

of a full database to determine the critical effect and the lack of a chronic study as a basis of the RfD. This latter factor is best judged as 10, although it could be as high as 30, because the available toxicology data for the parent compound suggest only a modest, if any, change between subchronic and chronic NOAELs (~equal), and the available information suggests that neither developmental nor reproductive toxicity is the critical effect.

The resulting RfD is 8 mg/kg-day.

Low to medium confidence in this RfD exists. Additional studies that might reduce uncertainties would be a bioassay in a second mammalian species and comparative toxicokinetics information in humans.

Panel Member 3 (*Fri, 29 May 2009*): 1. Might be useful to include a sentence comparing these RfDs to those for the parent compounds. 2. How about expressing RfD as 2 E+0 mg/kg-day, e.g., as in IRIS.

TERA (*Fri, 29 May 2009*): The RfDs calculated by Panel Member 1 are 10-fold higher than they should be. The RfDs should have been as follows: 1. Acetochlor ESA – 0.2 mg/kg-day; 2. Acetochlor OXA – 0.2 mg/kg-day; 3. Alachlor ESA – 0.8 mg/kg-day; and 4. Alachlor OXA – 0.8 mg/kg-day

Panel Member 3 (*Fri, 29 May 2009*): Please use scientific notation for RfD, e.g. 2 E+0 mg/kg-day. Please include a sentence comparing these to RfD of the parents.

TERA (*Fri, 29 May 2009*): The RfDs for the parent compounds are as follows:

1. Acetochlor = 0.02 mg/kg/day (or 2E-2 mg/kg/day), based on clinical signs (excessive salivation) and microscopic findings in the liver, testes and kidney in dogs.

2. Alachlor = 0.01 mg/kg/day (or 1E-2 mg/kg/day), day based on hemosiderosis and hemolytic anemia in dogs.

These are from the Revised HED Chapter of the Tolerance Reassessment Eligibility Decision (TRED) Document for acetochlor (US EPA 2006) and the Reregistration Eligibility Decision (RED) for alachlor (US EPA 1998). These values are the same as those on IRIS (US EPA 1993, for both parents).

Panel Member 2 (*Fri, May 29 2009*): Thank you for the notes on RfD. I will provide my comments early next week as requested. *TERA*'s note helps and puts the reference doses in context with the respective parents.

Panel Member 4 (*Tue, 2 Jun 2009*): I've finally waded through e-mails once I got back in the office and have reviewed the calculations provided by *TERA*. These agree with our discussions. One note on Panel Member 1's earlier e-mail, I checked the primary references and the acetochlor ESA in males is 225 mg/kg/day not 230 mg/kg/day. The *TERA* discussion on pg 65 has it both ways in the table.

Likewise the doses for the HDT in the Alachlor OXA 90 day dietary study were an average of 835 mg/kg/day in males and 1010 in females. None of this makes make any difference in the final RfDs but I'd like to be consistent in the write up.

Panel Member 1 (*Thu, Jun 4, 2009*): The draft notes of our meeting will be in our hands to review next Monday, and will include the short summary piece on the RfDs previously sent. The note taker apologizes for the delay.

Panel Member 5 (*Thu, 4 Jun 2009*): Sorry that I haven't weighed in earlier on the Alachlor ESA NOAEL/LOAEL issue. I've been distracted by a very time-consuming grant proposal and have been trying to get some insights from colleagues in clinical pathology regarding the findings in high dose males in the 91-day drinking water study. As we have discussed before, the red blood cell hematology findings are consistent with an effect of lowered counts. The magnitude of change is not enough to call it anemia -- we all agree on that, basically taking changes from the middle of the usual normal range to something toward the lower end. My only hesitation in calling the high dose a NOAEL has been trying to discern whether these changes are indicative of something that could be more clearly adverse in a longer-term study. I don't think that the increased drinking water rates are the explanation [it is easier to see how low drinking water consumption and dehydration can elevate blood concentrations; small increases in drinking water intake, however, should be compensated by increased urinary output if the kidneys are functioning properly.] The wording in the "Development of RfDs" text is fine -- I can go along with the high dose as a NOAEL, but it brings up again the matter again of the appropriate UFs. I think that the text we talked about at the meeting (that the panel preferred 1000, but a case could be made for 3000) needs to accompany this information some how.

Panel Member 1 (*Fri, 5 Jun 2009*): Thanks for your thoughtful response. I will put some words into the text near our choice of the high dose as a NOAEL that showed our difficulty in this decision and then will suggest that this difficulty needs to be considered in the choice of the uncertainty factor. In the uncertainty factor text, I will refer back to the difficulty.

We will all get to see this in the set of notes that the note taker sends out next week, and we can then all further consider appropriate changes.

TERA **(Note taker)** (*Tue, June 09 2009*): Attached is a brief technical summary of the workshop deliberations. This summary includes text from the RfD derivation that Panel Member 1 sent to you earlier and is intended to have captured your post-meeting deliberations as well. Please review these technical meeting notes and provide any comments by June 19, 2009. Once we receive panel comments we will revise the notes and post them on our website as the official record of the proceedings.

TERA **(Note taker)** (*Wed, 8 Jul 2009*): Attached is the intended final draft of the workshop report (including an executive summary) that reflects your review comments. We intend to post this report on Friday the 17th (sorry this only allows one week for any final comments). Let us know if you would like a strike and replace version to see the changes that were made or if you will need more time for review.

Panel Member 1 (*Thu, 16 July 2009*): Here is the final set of notes from our meeting. We intend to post these on the website tomorrow. Please send us any critical changes by COB today, if you have not already done so.

In addition, we have created a 10-page set of post meeting email correspondence, redacting personal information as appropriate. We felt that this was needed, especially since important judgments were made during these emails. Please look over this draft for completeness. We will post this correspondence on our website next week.

The final step is for *TERA* staff to create a draft publication for your review. We will have this created by the end of July, with a target submission date of early August. The publication will lean heavily on our meeting notes and summary information from the meeting, so that your efforts to review this text can be more minimal.

Panel Member 2 (*Thu, 16 Jul 2009*)**:** The reports captured all the deliberations/details and discussion. I am very impressed. I have no major comments. Just a few minor comments below.

FINAL REPORT : Please pardon me to bring up this comment now. When using the NOAELs (assuming no sensitivity among the gender), isn't the highest NOAEL preferred? If so, the RfDs for the degradates could change from 0.2 to 0.3 or from 0.8 to 0.9/1.0 mg/kg/day for the acetochlor, and alachlor degradates, respectively. I do not see the need to change but I thought we may expect a question on this. I am assuming the references would be added before web-posting.

Email Correspondence: In the draft post meeting correspondence, page 10, line 1 a typo was found. Change "Panel Memebr 4" (Tue, 2 Jun 2009) to "Panel Member 4" (Tue, 2 Jun 2009):

For the publication, I believe that a short write up on the need for the workshop, ARA's role, issues on degradates and summary from the panel deliberations would be a good approach. I thank *TERA* for their efforts in writing this for a publication.

Panel Member 3 (*Thu, 16 Jul 2009*)**:** This final version is fine with me.

Panel Member 4 (*Thu, 16 Jul 2009*)**:** Just a few suggestions, on the final report. No comments on the e-mail file. Member suggested the following: (1) replacing the word, "Moreover," in the Executive Summary, second paragraph, line 10, with "In spite of the complete databases for the parent compounds"; (2) listing the names of the Panel Members that declined the offer of honorarium; and (3) changing "…impact of the chlorine atom …" to "… impact of the reactive chlorine atom …" in paragraph 1, line 14, under the Charge Question 1.

NB: No comments were received from Panel Member 5 during this round of correspondence.

Spreadsheet provided by Panel Member 4

MALES ALA-ESA DW				
Rat #	Conc ppm	d1-d35	urine	fecal stains
7766	0			
7778	0			
7787	0		23	
7804	0			
7801	0			
7796	0			
7794	0			
7782	0			
7768	0			
7760	0			
7758	200	soft stool		2
7771	200	fecal stain		
7781	200	fecal stain		1
7784	200			
7805	200	fecal stain		1
7808	200			1
7810	200			1
7763	200			
7795	200			
7769	200			
7806	2,000			
7799	2,000			
7788	2,000			
7783	2,000			
7777	2,000			
7775	2,000			
7774	2,000			
7779	2,000			
7792	2,000			
7786	2,000			
7762	10,000			
7764	10,000			
7770	10,000			
7773	10,000			
7773	10,000			
7789	10,000			
7791	10,000			
7793	10,000			
7802	10,000			
7803	10,000			
7811	10,000			

FEMALES ALA-ESA DW														
Rat #	Conc ppm	d15-d35	freq	d36 - d70	freq	d71 - d93	freq	Total Urine Staining		other signs		# animals	urine	ave
7815	0	n	na	urine	13	urine	11	24				5	0	6.1
7818	0	n	na	urine	13	urine	22	34				3	200	7.7
7831	0	n	na	n	na	n	na	0				2	2,000	7.2
7839	0	n	na	n	na	n	na	0				7	10,000	8.8
7841	0	n	na	urine	1	n	na	1						
7844	0	n	na	urine	1	urine	1	2						
7845	0	fecal stain	1	urine	13	urine	11	24		feces	1			
7846	0	n	na	n	na	n	na	0						
7859	0	n	na	n	na	soft stool	1	0		stool				
7864	0	n	na	n	na	n	na	0						
7822	200	urine	3	urine	33	urine	21	57						
7824	200	n	na	urine	2	urine	3	5						
7825	200	n	na	n	na	n	na	0						
7826	200	urine	1	urine	1	n	na	2						
7828	200	n	na	urine	4	urine	2	6						
7847	200	n	na	n	na	n	na	0						
7848	200	n	na	n	na	n	na	0						
7852	200	n	na	n	na	n	na	0						
7854	200	n	na	n	na	n	na	0						
7858	200	n	na	n	na	n	na	0						
7820	2,000	n	na	n	na	n	na	0						
7529	2,000	n	na	n	na	dark nose	1	0		dark nose	1			
7533	2,000	n	na	n	na	n	na	0						
7835	2,000	n	na	n	na	n	na	0						
7836	2,000	n	na	n	na	n	na	0						
7849	2,000	n	na	urine/feces	6 (1)	urine	9	15		feces	1			
7853	2,000	n	na	n	na	n	na	0						
7855	2,000	n	na	n	na	n	na	0						
7856	2,000	n	na	n	na	n	na	0						
7857	2,000	urine	5	urine	30	urine	22	57						
7814	10,000	n	na	n	na	urine	1	1						
7821	10,000	n	na	n	na	n	na	0						

7827	10,000	urine	5	urine	27	urine	22	54						
7840	10,000	urine	5	urine	7	urine	9	21						
7842	10,000	n	na	n	na	urine	1	1						
7843	10,000	n	na	n	na	n		0						
7850	10,000	urine	1	n	na	urine	1	1						
7860	10,000	n	na	n	na	n	na	0						
7862	10,000	n	na	n	na	urine	1	1						
7865	10,000	urine	8	n	na	urine	12	20						