



12 October 2009

MEMORANDUM

FROM : MIKE FREEMAN, S42A REPORTING OFFICER

TO : UPPER WAITAKI CONSENT HEARING COMMISSIONERS

SUBJECT : QUESTIONS ON FARM ENVIRONMENTAL MANAGEMENT PLAN AUDITING

INTRODUCTION

I have been requested to provide an outline of the proposed process for undertaking an audit, under section 42A of the Resource Management Act, of farm environmental management plans (FEMPs) being submitted as part of the Upper Waitaki Consent Hearing process.

Proposed audit process

The proposed audit would involve undertaking local field assessments of the FEMPs (which would ideally involve discussions with each farmer/consultant) to check for Overseer modelling appropriateness.

The basic scope of the audit would be to check specific on-farm characteristics/inputs used as inputs to the Overseer model and to make an assessment of whether they are accurate and appropriate for each farm. Using the Glen Eyrie Downs (Southdown Holdings Limited) FEMP as an example, the auditing process would focus on the Overseer input variables as detailed in Appendix D of that report. The audit would assess those inputs that are amenable to audit (e.g., irrigated area, number of dairy animals, effluent disposal method, climate, soil type, etc). This would obviously depend on the nature of the application; for an existing operation the audit process would be relatively straightforward. For a new development, the audit process would be significantly reduced to property specific features such as climate and soil type. In this situation, operational input variables that cannot be audited would need to be addressed subsequently through monitoring and reporting.

Mr Ewan Chapman has suggested a different approach that would involve two consultants both working for an applicant and no independent audit. I do not consider that process appropriate. However, I can see some significant advantages in a more collaborative approach (similar to, but not the same as, that suggested by Ewan Chapman) to developing an agreed Overseer/FEMP package. That would involve technical representatives specifically working towards an agreed technical 'package' of Overseer inputs and assumptions that both parties agree on. I could see that type of process being potentially very effective, from both a technical and cost perspective - provided that all involved were clear about their roles and responsibilities. I can see

that if that approach is agreed then that would involve a more one on one discussion that would make it more of a challenge to use the Rotorua person. However, this might just require that person coming down to the Upper Waitaki for a few days to go through some FEMPs to develop an agreed framework. This process would need to be established/agreed by 17 October if the hearing schedule is to be maintained. Clear direction on process, outputs and a timetable from commissioners on this would be needed.

Choice of person to audit FEMPs

In identifying an appropriate person to undertake audits of the FEMPs I set a qualification requirement of the Massey University Advanced Sustainable Nutrient Management Certificate. This is because the Overseer modelling process is relatively complex and requires considerable understanding of nutrient cycles, farm management, hydrology, hydrogeology, soil science, climate, etc.

I have not recommended some very experienced farm consultants because they do not have that qualification; which is generally accepted as essential for applying Overseer (e.g., I understand that Environment Waikato specify it as a requirement for calculating NDAs under RPV5). While the RPV5 process is different, it involves the use of Overseer in a similar manner.

At this stage it is proposed that an experienced Alexandra based AgFirst farm consultant would undertake the field-based assessments and then provide the technical Overseer information to the qualified Rotorua AgFirst consultant (Darren McNae, CV attached). Darren McNae has been identified because I could not find a more local person with the Massey certificate who was not conflicted or was not keen. For example, I contacted both major fertiliser companies but they both indicated that they were not interested in their Massey qualified staff doing the audits because of the potential conflict with their normal roles.

I am not convinced that a South Island based consultant is essential. Expertise, qualifications and track record should be more important than where a person lives. However, if a consultant could be identified that has the Massey qualification (or something clearly equivalent) and appropriate experience, they could be considered. No contract has been signed yet – although the clock is ticking loudly.

While I am far from being an expert in the application of Overseer, I have assumed that the most important requirements for a consultant would be an understanding of Overseer and a track record of experience in applying the model in different circumstances. Provided that they have that background they should be able to apply Overseer under different geographical/soil/land use/climate/rainfall/etc conditions.

Timing

It has been difficult to provide an exact timetable because we have had no guarantee of when FEMPs would be provided. However, we have assumed that many FEMPs would be provided by mid October and anticipate that an audit process would need to be completed by about 23 November to enable a s42A report to be circulated at least 5 working days prior to presentation (in the week starting 7 December or 14 December). We have assumed that while all FEMPs need to be audited, this

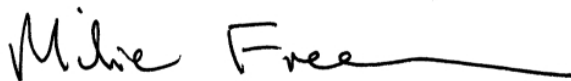
timetable could only be achieved for those FEMPs received by the end of next week, 23 October. The feedback that we have had from AgFirst indicated that that timetable is achievable, provided that a process is established/agreed within the next five working days.

Integration with a consent condition framework

It would be most effective for Overseer experts to have a discussion in the context of how that process might integrate in with consent conditions. For example, there are a suite of fixed inputs to Overseer that once agreed either don't change or only change very slowly e.g., soil type, rainfall, etc, and a suite of variables that can readily be changed and are particularly important in terms of nutrient leaching. Recognition of this distinction and how the critical variables could be built into a suite of conditions that can be monitored would provide a useful framework for those technical discussions.

Integration with other technical issues

The FEMP audit process would not address wider issues relating to the overall water quality effects assessment. However, it will be essential to bring related technical issues together at some point in the process. For example, there are some important outstanding technical issues that need to be resolved before there can be confidence in the starting point for the FEMPs, i.e., the identified maximum farm nutrient allocation has not been agreed between the S42A reporting officers and the applicants' representatives. This is the critical starting point for the FEMPs.

A handwritten signature in black ink that reads "Mike Freeman". The signature is written in a cursive style with a long horizontal flourish at the end.

Mike Freeman

12 October 2009