DRAFT BASIC ASSESSMENT REPORT COMMENTS RECEIVED - Hakskeen Pan

Date	Issue	Comment	I&AP	Response	Respondent
	FRESHWATER				
20/03/2017		The EIA (as per task) contained a glaring omission of major proportions, namely the requirement of assessing the wetland itself. Consequently the several specialist reports that vaguely alluded to living organisms on the pan (e.g. Soil & Freshwater reports, as well as the fauna) not properly go into this matter. The flora report did not even mention that probably the most productive system of the Kalahari in that area is contained in the pans, and I think that this should at least be mentioned (when it gets wet one would expect algae, diatoms, cynobacteria etc to flourish).	Dr Joh R Henschel. Manager: SAEON Arid Lands Node	The organisms in Hakskeenpan, such as "algae, diatoms, cyanobacteria" has not even been identified. Likewise, their productivity has never been measured. Their productivity has never been compared to that of any other system. Until scientific research provides the numbers, statements in this regard should be regarded as speculation. Dr Dirk van Driel. The purpose of the EIA study and is to assess the likeliness and risks of the activity (which is the bloodhound event, as a temporary activity in the dry season) on the Hakskeen Pan. It is this that has defined the scope and objectives of the assessments done and it was not intended to be a large scale assessment which would need years to gather accurate data. It is also important to note that it is a Basic Assessment study as part of a Section 24G Rectification process, as activities for land clearance has already started several years ago (2009). During the fauna and flora assessment, sensitive areas which would be sensitive even during the dry periods were identified and pointed out in the reports as would be relevant to the Bloodhound project itself. Preferred areas (less sensitive areas) to enjoy priority for the placement of camps and equipment were identified as would be best to prevent possible impacts and these pointed out after the field assessment. It is important to note that no activities will take place on the western sides of the pan, which were identified as areas to be avoided as they exhibited relatively greater variety and density of fauna and flora, as was specified in the reports and therefore needs to be protected even during dry periods. The importance of the Hakskeen pan was never ignored or disputed and impacts were given as High/Medium with potential for mitigation of impacts. Corlien Lambrechts	Dr Dirk van Driel - WATSAN Africa Corlien Lambrechts - Prescali Environmental Consultants (Pty) Ltd
		When wet and also when dry, it is expected to remain a life-filled system even during the driest times.		The Technical Report fully acknowledges the existence of a "life-filled system" both during the hydroperiods and prolonged desiccated times. The report pertinently states "Because of the dormant but very much alive biota in the bone-dry soil, it is indeed a water resource, even though there is no water during the dry part of the cycle".	Dr Dirk van Driel - WATSAN Africa
		The race itself is taking place on a wetland, which remains a wetland system (with lots of life) even when dry. This needs to be properly assessed.		It is not expected that the land speed record attempt will have noticeable detrimental effects of the survival stages of life forms in the dry sediments, as discussed in the Technical Report. If it has, it would be minimal, as the track comprises of only 7% of the northern part (there is a large southern part as well) of Hakskeenpan. The actual contact zone of the SCC with the surface of the pan will be much less. Dr Dirk van Driel. This leads to the conclusion that the Hakskeen pan is not a normal wetland per se in terms of the definition and the assessment thereof. As the Hydropedology also noted in their assessment is that the pan has absence of wetland (hydromorphic) soils due to chemical reduction and we noted the absence of hydrophytes and wetland associated species in the areas specifically within the pan where the activities is to take place. Please note that the Hakskeen pan was not assessed during flood periods. Corlien Lambrechts	Dr Dirk van Driel - WATSAN Africa Corlien Lambrechts - Prescali Environmental Consultants (Pty) Ltd
		In particular, the freshwater report is very disappointing because this is a specialist report only saying that nothing is known about this particular pan. I would expect that a specialist would use a background of knowledge about wetlands to specifically analyse what can be inferred about Hakskeenpan from studies elsewhere. Some of the other specialist reports, and the freshwater analysis itself, provides good background to make good inferences. There is a good body of published information on South African wetlands and arid pans elsewhere in the world. Furthermore, the act referred to (NWA, Act 36 of 1998) in light of NEMA Act 107 of 1998 require that the freshwater report specifically goes into some depth.		Granted, there is a good body of information available. The report fully acknowledges that there is a large body of scientific wetland information available in South Africa. More of this has been added to report, with the "inferences". Since the report is meant to be a limited WULA Technical Report, it cannot be an elaborate academic dissertation.	Dr Dirk van Driel - WATSAN Africa

		This specific specialist report should be regarded as the key component of the EIA given that is where the race will take place; without a proper analysis by an accredited competent specialist the actual impacts remain unknown and cannot be evaluated. If the Freshwater specialist was more focusing on other aspects of water than the life associated with the pan and does not have sufficient experience with wetland ecology, then I strongly suggest that this major omission be rectified.		Clearly Dr Henschell does not understand the specifications of the WULA Technical Report. The report specifically speaks to the requirements of the Water Use License Application (WULA), a requirement of the Department of Water and Sanitation (DWS) in terms of the National Water Act (36 of 1998). And more specifically with the requirements of Government Notice 267 of 24 March 2017. WATSAN has specifically been appointed to deal with the WULA. The WULA and the associated Technical Report specifically require that other aspects apart from life in the pan be addressed. These aspects include waste management, water provision and sanitation and their possible impacts and amelioration of these impacts on the fresh water environment. These have been addressed in the Technical Report. The DWS requires the submission of application forms, in which these aspects are addressed and which must be motivated for in no other document but the concomitant Technical Report. While the limnological aspects of the report may be adequate for the WULA, it could be significantly expanded for an EIA. This, however, was beyond the scope of WATSAN's assignment. The information given (based on speculation rather than available scientific facts collected on the ground at Hakskeenpan) is nevertheless considered to be adequate to provide decision-makers with insight to allow or disallow the event.	Dr Dirk van Driel - WATSAN Africa
		There are a number of competent wetland consultants in South Africa who could specifically address that component, and I strongly suggest that this be done even at such a late hour. Without such, the EIA itself has, in my opinion, an omission equivalent with "unable to complete a professional assessment".			
		This of course does not render other parts of the EIA invalid, although it would be incomplete in its entirety. For instance, the soils and the heritage reports in particular look professional and comprehensive in my opinion (fauna, and especially flora less so), but on their own are insufficient for an EIA to complete a proper assessment of the core impact of such an event.		Also, as mentioned in the reports, the Hakskeen Pan is located within a Southern Kalahari Salt pan zone, Azonal Vegetation Biome and Inland Saline Vegetation group with a Least threatened according to the National Database. The Vegetation group surrounding the Hakskeen Pan is given as Kalahari Karroid Shrubland, Nama-Karoo Biome and within the Bushmanland bioregion group. The conservation status of Kalahari Karroid Shrubland is also given as Least Threatened. Gordonia Duneveld, Kalahari Duneveld Bioregion is also present especially to the north and eastern borders of Hakskeen Pan. Gordonia Duneveld has a conservation status of Least Threatened and moderately protected. In terms of the flora impact assessment, very little vegetative growth was found and is expected to occur in the affected areas of the pan due to the high salt content of the soils. Species such as algae, diatoms, cynobacteria are usually covered in a surface water assessment. Recommendations were made that all infrastructure be constructed on those areas of the pan that are sparsely vegetated. The developer has also been advised by both the fauna and flora report that the footprint of the activities should be minimised and that measures should be taken to ensure that activities do not take place in areas other than those designated for the development.	Dr Dirk van Driel - WATSAN Africa
		Surely the highly visible Bloodhound Event should be associated also with a State-of-the-Art EIA (the world will be watching, and RSA can be embarrassed if the world also sees what was and what was not assessed). I hope that my feedback can help motivate that the existing gap be covered.		Decisions about capital intensive projects such as the Bloodhound SCC should be based on scientific fact rather than "inferences" and speculation. The world would be watching these "inferences". Dr Henschell and his organisation has aptly placed an advertisement for suitably qualified scientists to conduct research in the ephemeral pans of the Northern Cape. This advertisement is quoted in the Technical Report. Hopefully his organisation will soon come up with scientifically valid answers that would help decision-makers in very practical terms.	Dr Dirk van Driel - WATSAN Africa
	BOTANICAL				
20/04/2017		None of appointed specialist are registered with SACNAPS (;ega; requirement to provide environmental specialist services).	Elsabe Swart. Scientific Manager: Resreach and Development Support. Department of Environment and Nature Conservation	The registration with SACNASP is at this stage not a legislative requirement, refer to Regulation 13 of the 2014 NEMA Regulations as provided below. Ms Nicole Upton has the required experience to conduct Flora assessments, please refer to her CV attached. The report can also be reviewed by Dr. Petro Erasmus (SACNASP registered).	Corlien Lambrechts - Prescali Environmental Consultants (Pty) Ltd
				13 .General requirements for EAPs and specialists	
				13. (1) An EAP and a specialist, appointed in terms of regulation 12(1) or 12(2), must-	
				(a) be independent;	
				(b) have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, these Regulations and any guidelines that have relevance to the proposed activity;	
				(c) ensure compliance with these Regulations;	
				(d) perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the application;	

				(e) take into account, to the extent possible, the matters referred to in regulation 18 when preparing the application and any report, plan or document relating to the application; and	
				(f) disclose to the proponent or applicant, registered interested and affected parties and the competent authority all material information in the possession of the EAP and, where applicable, the specialist, that reasonably has or may have the potential of influencing-	
				(i) any decision to be taken with respect to the application by the competent authority in terms of these Regulations; or	
				(ii) the objectivity of any report, plan or document to be prepared by the EAP or specialist, in terms of these Regulations for submission to the competent authority;	
				unless access to that information is protected by law, in which case it must be indicated that such protected information exists and is only provided to the competent authority.	
				(2) In the event where the EAP or specialist does not comply with subregulation (1)(a), the proponent or applicant must, prior to conducting public participation as contemplated in chapter 5 of these Regulations, appoint another EAP or specialist to externally review all work undertaken by the EAP or specialist, at the applicant's cost.	
				(3) An EAP or specialist appointed to externally review the work of an EAP or specialist as contemplated in subregulation (2), must comply with subregulation (1).	
		Secondly, concerned over the rigour of the flora impact assessment report for Hakskeenpan as part of the Impact Assessment Report for the Bloodhound land speed record activity.		Clarification on this is required unless covered by the comments below. The purpose of the EIA study was to assess the likeliness and risks of the activity on the Hakskeen Pan. That is what lead the scope and objectives of the assessments done for the Bloodhound project as it was not intended to be a large scale assessment which would need years to gather accurate data. Therefore the REQUIREMENTS FOR BIODIVERSITY ASSESSMENTS as published by GDARD was used to determine the scope of the assessment.	
		The primary point of departure is to consider that a single field survey for the flora assessment was conducted from 25-27 October 2017. This is an exceptionally dry period of the year for the region after the dry winter season, before the onset of the summer rains.		It is noted and a second assessment during / after the rainy season would have been preferred. However, Prescali / Menco was severely limited by the timeframes prescribed thus a second site was not feasible. Should the client which to have a second site visit conducted this can be arranged but would require additional costs for time and disbursements.	
		The peak rainfall month is March (van Rooyen et al., 2008) The report acknowledges this fact but this does not lessen the ultimate flaw that results from this assessment. Diversity in arid regions is often directly linked to moisture availability (Cowling et al., 1989), and this would be especially true for the pans systems of the Kalahari that episodically respond to moisture availability. It is telling that some of the diagnostic species of the Kalahari pans such as Sporobolus rangei (grass), S. coromandelianus (grass) and Nerine laticoma (bulb) were not encountered during the survey (van Rooyen, 2001; van Rooyen et al. 2008). Indeed for all of the seven sites surveyed combined the total list of plants species recorded was only 24, and at some sites only 4 species were recorded for the whole site (sites 2 and 7). Although the southern Kalahari can be regarded as an area of low species diversity in relation to other broad vegetation units (Cowling et al. 1989; Van Rooyen & van Rooyen, 1998), and the diversity of the pans can also be expected to be low during the dry season, the pan environments is known for high beta-diversity (species turnover along habitat gradients) due to the transition between dune/calcrete habitats and the pans (van Rooyen & van Rooyen, 1998 - Figure 1). The report also fails to report on common pan habitat descriptors such as the type of pan environments that are present: "kalkpanne"/calc-pans, salt pans or sand pans (sensu Leistner, 1967) / bare pans vs. grassy pans (sensu van Rooyen et al., 2008) and the regional pan type diversity context, or describe/comment on the occurrence of the concentric bands characteristic of the pan habitats (Leistner, 1967).		Prescali / Menco can update the report to reflect this. Also, as mentioned in the reports, the Hakskeen Pan is located within a Southern Kalahari Salt pan zone, Azonal Vegetation Biome and Inland Saline Vegetation group with a Least threatened according to the National Database. The Vegetation group surrounding the Hakskeen Pan is given as Kalahari Karroid Shrubland, Nama-Karoo Biome and within the Bushmanland bioregion group. The conservation status of Kalahari Karroid Shrubland is also given as Least Threatened. Gordonia Duneveld, Kalahari Duneveld Bioregion is also present especially to the north and eastern borders of Hakskeen Pan. Gordonia Duneveld has a conservation status of Least Threatened and moderately protected.	
		Surveys in an inappropriate season will make the latter description more difficult. The low species count further seems to indicate that the pan-terrestrial habitat interface (the broader habitat connectivity) context was not investigated. It seems unfathomable that a total species count of 4 were produced for site 7 which includes a dunefield habitat, indicated as one of the habitats in the Kalahari with the highest species diversity (van Rooyen & van Rooyen, 1998).		See point above. It should be noted that the dunefield site was located at the existing MTN stand right next to the pan and this together with the dry season could have had in impact on the species diversity. Please refer to the photos included in the Flora assessment report which illustrates the condition of the vegetation at the site. The photos indicate that the site is very sparsely vegetated.	

		I would recommend a more in depth, season appropriate survey of the pan and the associated habitats.		A second site visit can be arranged at additional costs. However this must be done asap as the dry season is starting again. The purpose of the EIA study was to assess the likeliness and risks of the activity on the Hakskeen Pan. That is what lead the scope and objectives of the assessments done for the Bloodhound project as it was not intended to be a large scale assessment which would need years to gather accurate data. Therefore the REQUIREMENTS FOR BIODIVERSITY ASSESSMENTS as published by GDARD was used to determine the scope of the assessment.	