

Chairman Mary Nichols Members of the Board California Air Resources Board 1001 "I" Street P.O. Box 2815 Sacramento, CA 95812

Dear Chairman Nichols and Members of the Board:

SCS Global Services ("SCS") appreciates the opportunity to comment on the California Air Resource Board's proposed 15-day draft of the Regulatory Review Update of the Compliance Offset Protocol for U.S. Forest Projects ("Forest Offset Protocol update"). SCS understands and appreciates that the Forest Offset Protocol update is the result of a sincere effort on the part of Air Resource Board staff to improve the integrity and clarity of the Forest Offset Protocol, and SCS hopes that these comments we offer may serve to strengthen the Forest Offset Protocol.

Over the past several years, SCS has conducted offset verification services with respect to a majority of compliance projects that have been developed under the Forest Offset Protocol and for which ARB offset credits have been issued. This recent experience has been built upon SCS' extensive prior experience in conducting verification services against the Climate Action Reserve Forest Project Protocols (which have formed the basis for the Forest Offset Protocol), having verified nearly all California projects developed under those protocols, as well as widespread verification experience under other schemes in the voluntary offset market. Additional, and germane to the discussion, below, is SCS' extensive experience in conducting certification audits under, and actively participating in the development of, the Forest Stewardship Council program, which has provided SCS with global, in-depth and nuanced understanding of the complexities inherent in promulgating normative standards for sustainable long-term forest management practices.

On the basis of the experience outlined above, SCS has substantive concerns regarding the new requirements, and the corresponding implications for verification against said requirements, as set out in Sections 3.1(a)(4) and Section 8.1(b)(2)(E)-(F) of the Forest Offset Protocol update. It is SCS' recommendation that the content of these sections, and all corresponding definitions, be removed from the proposed changes. These requirements are not present in the current version of the Forest Offset Protocol (dated November 14, 2014) and they would impose significant constraints that would serve to: (a) limit the applicability of the Forest Offset Protocol, (b) introduce the potential for ambiguity in the Forest Offset Protocol that cannot be easily rectified and (c) lead to a significant increase in costs related to offset verification services. It is fundamentally unclear to SCS that the benefits that might be realized from imposition of these new requirements would outweigh the significant increase in

verification costs and the concomitant reduction in the number of compliance-grade forest carbon offset projects that are developed.

Our specific concerns are as follows:

- A review of the new requirements indicates that they are transcribed, verbatim, from the corresponding regulatory requirements embodied in the California State Forest Practice Rules. The effect, if not the intent, appears to be to impose the requirements of those Rules, so far as they relate to harvest unit size, regeneration requirements and spatial constraints on harvesting with respect to even-aged silvicultural methods, on all project participants in the forest carbon offset market throughout the United States. While the desire to "level the playing field" is understandable, the following challenges with the approach undertaken are foreseen by SCS.
 - The California Board of Forestry and Fire Protection has relatively free rein (within certain constraints) to update the California Forest Practice Rules, as needed, to correct errors or inconsistencies in those rules and to update those rules to address circumstances as they arise. The process for updating the Forest Offset Protocol allows for significantly less flexibility. Thus, adverse effects potentially resulting from an error or lack of clarity in any new requirements may not be easily or promptly rectified.
 - As the California Forest Practice Rules are not intended to be applied to areas outside of California, as they are responsive to California's unique socio-political and bio-physical contexts, unintended consequences could well result from imposing key sections of the California Forest Practice Rules on other areas of the United States.
 - o The transcription of these regulatory requirements into the Forest Offset Protocol will oonly further increase the uncertainty inherent in offset project development, as the already-high stakes for players in the marketplace will be dramatically increased.
- Imposition of the new requirements would place offset verification bodies in the role of de facto forest practice inspectors, dramatically increasing time requirements for site visits and for offset verification services, in general. The additional time burden would likely be greatest during the first year after adoption of the new requirements, as all parties involved in the marketplace would work to understand the meaning and intent of the new requirements. It is quite possible that the new requirement could likewise result in a substantive increase in the amount of ARB staff time necessitated to clarify the new requirements and review implementation of such. This may result in a compounding of an extant problem of insufficient ARB staff resources being committed to ARB's compliance offset program.

While SCS is not inherently opposed to the addition of new requirements to the Forest Offset Protocol, we are concerned that the addition of the proposed sweeping new requirements for sustainable long-term forest management practices may have a profoundly negative impact upon this relatively nascent market. The requirements for sustainable forest management practices, as included within the current version of the Forest Offset Protocol, were developed and vetted, and their implementation extensively "road-tested," under the Climate Action Reserve program. As SCS is not aware of any circumstances that would necessitate the proposed dramatic expansion to the present ARB ruleset, SCS respectfully

suggests that a measure of caution be applied and that the proposed new requirements be put over for further study before being incorporated into the Forest Offset Protocol.

Again, we appreciate the opportunity to provide comment and hope that our comments in this letter and in the table below will be helpful during the regulatory review process.

Sincerely,

Robert J. Hrubes, Ph.D.

Robert J. Hubes

Executive Vice President

Comments Regarding Verification Requirements of the Draft Revision to the Compliance Offset Protocol U.S. Forest Projects

#	Section(s)	Language	Comment
1	1.2(38)	"Professional Forester" means a professional engaged in the science and profession of forestry. For forest projects that occur in a jurisdiction that has professional forester licensing laws and regulations, a professional forester must be credentialed in that jurisdiction. Where a jurisdiction does not have a professional forester law or regulation, then a professional forester is defined as either having the	The professional forestry credentials from a jurisdiction (e.g. a CA Registered Professional Forester) should also be suitable for tribal lands since a SAF CF is allowed. In addition, jurisdictions that have a professional forester licensing law but it is not a requirement to practice forestry the professional forester credential should not be required. For example, in the state of Michigan, you do not need to be a "registered forester" to practice forestry; it is a
		Certified Forester credentials managed by the Society of American Foresters, or other valid professional forester license or credential approved by a government agency in a different jurisdiction. For forest projects that occur on lands held in trust by the United States for a tribe or a tribal member, or on tribally owned fee land, a Professional Forester with credentials managed by the Society of American Foresters, Tribal Forest Manager, Tribal Timber Sale Officer, Tribal or BIA Officer in Charge, or BIA Regional Forester is sufficient.	voluntary registration. It would be helpful for ARB to provide a list of the states which have a professional forester law or regulations so both OPOs and Verification Bodies are aware of the requirements.
2	3.1(a)(4)	(A)Harvest units that have less than 50 square feet of basal area retention must not exceed 40 acres in total area; (B)Open canopy harvest units, harvest units with an area of 3 acres or greater that have less than 50 square feet of basal area retention, must have a buffer area of forest vegetation containing at least 50 square feet of basal area retention must surround the harvest unit. The width of the buffer area must be a minimum of the area of the harvest unit, rounded up to the nearest acre, multiplied by 40;	SCS is concerned that the addition of this new requirement would be a major disincentive for projects outside of CA. Not only is this requirement extremely burdensome and time-intensive to verify, it does not stipulate an end time for the adjacency requirement. Please clarify how clause B of this requirement is to be met should surrounding areas be under a different ownership or be of a non-forest classification type.

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3	3.1(a)(4)	If harvesting occurs within the project area, meet the following harvest unit size and buffer area requirements	SCS is strongly opposed to the language of Section 3.1(a)(4), as it is opposed to any language restricting forest management practices beyond the sustainable forest management requirements already contained within the currently prevailing Protocol. These requirements, which originate in the Climate Action Reserve's Forest Project Protocol Version 3.2, were developed during a lengthy series of work group sessions with a diverse group of stakeholders that included major landowners, the environmental community, the agencies, non-governmental organizations and other interested parties (including SCS). The balanced series of requirements emerging from that process ensured appropriate environmental safeguards while also facilitating widespread participation (and, thus, GHG emission removal enhancements) across a variety of geographic locations, ownership categories and landowner objectives. By contrast, the requirements of Section 3.1(a)(4) would restrict forest management far beyond the requirements of the most restrictive state-level regulations (including the California Forest Practice Act and Rules), thus unnecessarily limiting marketplace access and introducing burdensome complications with no discernable benefit (environmental or otherwise).
			The requirements of Section 3.1(a)(4)(A) would impose an arbitrary opening size that is far smaller than the industry standard in many areas. The requirements of Section 3.1(a)(4)(B) would impose a buffer area that is from 330% (for a 10-acre harvest unit) to 891% (for a 40-acre harvest unit) as large as the harvest area itself. Moreover, unlike many comparable state forest practice regulations (which allow for "buffer" areas to be harvested after "green-up" has occurred, i.e., after the harvest unit is stocked with regeneration of a prescribed size and density), the draft revision would contains no such prevision, thereby requiring retention of the buffer areas in perpetuity. Such requirements can only be described as punitive. In many circumstances, harvests that leave a residual

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			basal area of less than 50 square feet per acre are completely compatible with sound forest management strategies, including management strategies that are geared at maximization of environmental benefits. For example, landowners may choose to implement such harvests in order to shift species mixes (including favoring species that provide better habitat for certain wildlife species) or accelerate development of late-successional forest structures, provide habitat for animals and plants that thrive in early-successional forested settings, in addition to meeting financial and other management objectives. SCS is aware of no reason that such management strategies should be disincentivized in such a dramatic fashion. Finally, imposition of the proposed requirements would place verification bodies in the role of forest practice inspectors and substantively (if not dramatically) increase the level of effort required for offset verification services. As outlined above, this increase in required verification effort would carry with it no discernable benefit. In summary, the requirements of Section 3.1(a)(4) constitute a completely unwarranted and unnecessary addition to the Protocol. It is recommended that
4	8.1(b)(2)(E) (2)	Verifiers must use professional judgment as determined by the Registered Professional Forester when assessing the basal area retention levels, size limitations, and buffer area requirements and may make determinations by visual inspection, if obvious, or sampling according to the following basal retention sampling guidance	"Registered Professional Forester" is not defined. Perhaps this was meant as a reference to "Professional Forester"? It is suggested that criteria for determination of when determinations can be made "by visual inspection". Verification bodies are likely to experience a high level of pressure to forego the time-intensive field sampling procedure set out in Section 8.1(b)(2)(E)(2), and, therefore, a high level of pressure to make determinations by visual inspection. Additional criteria would assist in ensuring that verification bodies provide the level of rigor in assessing these requirements that is required by ARB.

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5	8.1(b)(2)(E) (2)(a)	Establish a 2-chain systematic grid within each harvest unit or buffer area sampled.	It is not clear how many harvest units or buffers need to be sampled. The level of auditing time and assessment rigor will obviously vary widely, depending on the number of areas sampled, and so it is recommended that this be clarified.
6	8.1(b)(2)(E) (2)(c)	Navigate through the harvest unit or buffer area by selecting a course of successive sample points that initiate in the lowest stocked area and proceed to higher stocked points within the harvest unit;	It is unclear exactly what this language means. It is not clear what "lowest stocked" means. Even in the event that a definition is provided for this term, it will be impossible, in most cases, to precisely identify "the lowest stocked area". The instruction to "proceed to higher stocked points within the harvest unit" is meaningless as, by definition, all areas within a given polygon that are not "the lowest stocked area" of that polygon will be "higher stocked points". It is also unclear how this instruction is to be interpreted where a buffer area, rather than a harvest unit, is being inspected.
7	8.1(b)(2)(E) (2)(d)	Sampling must be conducted for basal area retention and performed using a prism, relaskop, or angle gauge using a basal area factor that will yield 6-10 trees on average at each sample point throughout the harvest unit	The language "on average at each sample point" is self-contradictory. The quoted language makes sense only with "at each sample point" stricken. With this modification, it is good general forest sampling advice, but it becomes challenging when written into a regulatory protocol. It may be difficult to identify, ahead of time, the basal area factor that will yield 6-10 trees on average throughout the harvest unit. It does not make sense to require the verification body to achieve something that may not be practicable to achieve.
8	8.1.1(c)(2)	When a carbon pool or combination of pools have been stratified into six or more strata for the purposes of estimating the forest project's inventory, the offset verifier must select a minimum of three strata, based on the offset verifier's evaluation of risk. The strata selected for sampling must represent a total sum of at least 50% of the total sum of carbon stocks measured in CO2e. Sampling of more than three strata may be required.	In practice, this language would mean that the lowest verification costs would always be ensured by selection of the three strata containing the highest total carbon stocks. As it is always important for verification bodies to keep verification costs competitive, verification bodies would therefore be under considerable pressure to consistently select the three strata containing the highest total carbon stocks. This would lead to the possibility that strata to be selected for sequential sampling could be reliably determined beforehand, which may well lead to negative unintended consequences. As SCS feels that successful implementation of the sequential sampling procedure on up to three strata (as is done under the currently prevailing Protocol) is

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			sufficient to attain a reasonable assurance regarding the quality of a forest inventory, it is recommended that these requirements be removed.
9	8.1.1(d)	Selection of stands must be based on the following	It is SCS' understanding that the procedures referring to "stands" within this section of the Protocol are optional and may be followed at the discretion of the verification body. However, this is not clear within the currently prevailing Protocol. It is suggested that this be clarified in the draft revision.
10	8.1.1(e)(2)	Verification plots must reflect the variability in tree species, heights, and diameters existing in the project area	In practice, this text may conflict with the requirement of Section 8.1.1(e)(4) that "Plots, or clusters, must be independently selected within a stand using a random or systematic design" (since a statistically sound random or systematic design may not result in a set of plots that reflects "the variability in tree species, heights, and diameters existing in the project area". As the most important thing is to retain statistical validity in the selection of verification plots, it is recommended that this requirement be removed.
11	8.1.1(e)(4)	If the offset project is not stratified for each applicable carbon pool, the offset verifier must allocate the plots or clusters on a randomized basis	It is unclear what this requirement means, or what it adds to the Protocol. It is suggested that this requirement be removed.
12	8.1.1(e)(5)	No more than 6 plots or clusters can be assigned to a stand, unless the groups of plots required for verification exceed the number of stands that exist for the offset project;	This language is confusing in its context within the draft revision. It should be moved in a manner that makes its linkage with Section 8.1.1(d) clearer.
13	8.1.1(e)(5)	The minimum number of sample plots varies by project size and number of strata (table 8.1).	It is recommended that the values in this table be reverted to those within the currently prevailing Protocol (see comment above about Section 8.1.1(c)(2)).
14	8.1.1(h)	For effective application of the sequential statistics in the field, the offset verifier must use their discretion to determine if the stopping rules have been met for each stratum	It is unclear what this language means, exactly, or what clarity it is intended to add. In SCS' experience, the sequential sampling test is typically carried out after at least the minimum number of plots have been sampled and after a number of additional plots have been sampled, as agreed to with the Offset Project Operator or Authorized Project Designee. Specific instructions on when to carry out the sequential sampling test

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			are not contained within the currently prevailing Protocol, and SCS is aware of no reason why they should be. So far as all other requirements are complied with, it should be the verification body's determination as to when to undertake the sequential sampling test. It is recommended that sub-section 8.1.1(h) be deleted.
15	8.1.1(h)(4)	The verifier may defer the determination until no later than the end of each day of sampling, which will include the full set of plots measured in that day.	It is unclear why any restrictions are being proposed regarding the timeline for carrying the sequential sampling process. In many cases, scheduling constraints preclude immediate implementation of the sequential sampling test (and a subsequent decision as to how to proceed). The requirement to carry out the decision at "the end of each day of sampling" would impose onerous, and costly restrictions where they are completely unnecessary. In some cases, it is not possible or recommended to complete a complex analysis after a long-day in the field. The priority should be for quality of quantification, not speed.