SECTION I - DNA TYPING RESOLUTION (Rev. 6-12)

- 1. The Association's commitment and right to verify parentage of Red Angus animals thus preserving the integrity of the pedigrees, is hereby affirmed.
- 2. That broad authority is vested in the Executive Committee of the Board of Directors and the Chief Executive Officer to continue the collection of DNA typing data which is to be maintained as a source of reference as related to further developments occurring from time to time in the technological area of parentage verification.
 - ➤ Effective July 1, 2012 only parentage results using SNP technology will be accepted. The National Office will review other technology results for parentage on case-by-case basis.
- 3. That a disclosure letter listing all information supplied by recognized DNA typing laboratories relative to parentage, shall be sent to the breeder and current owners of such animal or animals. Within, 30 days following such notification, a similar disclosure will be sent to the owner(s) of said animal's progeny.
- 4. That the RAAA has the authority to require DNA parentage on:
 - a. All bulls that are the source of semen for A.I. to be used from which the resultant calves are to be registered in the Red Angus Database. Parent verification is required to the extent that the parent(s) SNP parentage genotypes are on file at an approved testing facility. A copy of the DNA record on such bull must be on file with the Association as a requirement of progeny registration. DNA typing of bulls to be used as AI sires will be at the submitting party's expense.
 - b. Any random sampling from members': herds, animals exhibited at shows, entered in bull tests, promoted in the ARA magazine, or whose pedigrees are otherwise represented to the industry, such testing will be administered at Association expense.
 - c. All ET parents to be used from which the resultant calves are to be registered in the Red Angus Database. All donor dams being used for ET purposes must be DNA typed, except for donor dams that were flushed between June 1993 and June 1995 and are now dead. Parent verification is required to the extent that the parent(s) SNP parentage genotypes are on file at an approved testing facility. A copy of the DNA on such female must be on file with the Association as a requirement of progeny. DNA typing of animals to be used as ET parents will be at the submitting party's expense.
 - d. Whenever the eligibility for registration of any animal is in doubt because of uncertain or unknown parentage, DNA typing will be required by the Association, at the submitting party's expense.
 - e. Whenever the integrity of the pedigree of an animal registered in the RAAA database is questioned. A written protest must be submitted by the party questioning a pedigree's accuracy to the National Office, and be accompanied by full payment of the

protest fee (reference RAAA fee sheet). This fee shall cover all costs incurred through DNA parent verification of the animal's pedigree in question.

- a) In the event that the protest is upheld and the results of DNA parent verification exclude the reported parent(s):
 - The fee will be returned in full to the party who made the formal protest.
 - The pedigree of the animal in question shall be amended according to the parent(s) excluded through parent verification process below.
 - At their expense the owner of such animal will be given the opportunity to correct the pedigree through further DNA parent verification against other possible parent(s).
- b) In the event that the protest is not upheld and the results of DNA parent verification against other possible parent(s):
 - The fee will be retained by RAAA.
 - The animal's pedigree in question shall remain as recorded in the RAAA Database.
- f. If the sire or dam is excluded through parent verification:
 - The registration status of the animal(s) that do not type to a parent will be suspended pending resolution, including the status of all related progeny.
 - The parentage information submitted to RAAA and to the respective lab is correct. If alternative parent(s) is (are) possible, provide information to the respective lab.
 - Upon notification of a verified parent through DNA, the animal will be returned to registered status after the pedigree is corrected in the Database.

Failure to establish parentage of an animal through DNA typing for any reason results in said animal being subject to:

- The pedigree of the animal will be recorded with one of the following:
 - o An unidentified dam or sire in place of the excluded parent
 - o An identified multiple sire group
 - o An identified natural service sire or female without DNA parentage
 - o Rule of Repose
- This may result in category changes for the animal and all related progeny according to the rules and regulations of the RAAA Breeder's Guide.

RULE OF REPOSE: If the sire or dam of an animal registered with this association is found to be excluded after eight years from the date of registration of such animal in the Red Angus Association of America, and parentage cannot be established, the pedigree of such animal as shown on the records shall remain as recorded without change. (Add 6-05)

- 5. DNA requirements may be waived for any donor dam or AI/ET service sire where DNA parentage cannot be established for the following reasons:
 - an actual sample from the donor dam or AI/ET service sire cannot be obtained. **AND**
 - an inferred typing through progeny testing cannot be established by a DNA lab.

If such DNA requirement cannot be established then, as a requirement for registration, the resulting progeny:

- must be parent verified to the greatest extent possible.
- must be tested for OS by an RAAA approved facility to determine if the animal is a carrier or free.
- must be tested for NH, MA, AM and/or CA if said progeny's pedigree contains an identified carrier without an intervening tested free by an RAAA approved facility to determine if the animal is a carrier or free.

 (Add May-11)