Level 1 High Powered Rocket (HPR) Certification allows the purchase and use of H and I impulse class motors (both solid and hybrid). There are specific F and G motors that also require said certification. Using a single motor with a total installed impulse of 160.01 to 640.00 Newton-seconds, or a rocket that weighs more than 53 ounces, has an average thrust of 80 newtons, or uses more than 125 grams of propellant. A motor that is not classified as a rocket motor under the NFPA would also require this certification.

In order to be eligible for the Level 1 high power certification, an individual must be 18 years old or more, with documents (such as birth certificate or driver’s license) to prove it. Also must be both a member of and in “good standing” with the National Association of Rocketry at the time of certification. The applicant will need some kind of evidence, though the NAR provides membership cards and membership to the organization get be obtained on their web page, where the option to join as an individual or an organization is available.

The NAR organization does not have any superiority over local authorities, so whatever laws or requirements wherever the applicant lives and operates, however an HPR certification and NAR membership are valid anywhere in america for up to one year (at which point it is renewable). The motor used for the certification attempts must be currently certified by the NAR, and legal to use wherever the applicant is.

The actual certification process consists of an initial application (shared in the google folder as a PDF labelled “HPRapp”), along with the construction and launching of a model rocket within the class that fits into the certification (i.e. an applicant for a level one certification would need to launch an H or a G class motor). This launch must be done in the presence of two people certified to the level for the which the applicant is looking to achieve, or one person with the certification above (i.e. for a level one certification, two level ones would need to be present, or one level two).

The launch must comply completely with launch site and FAA regulations regarding waivers or notification of appropriate parties. The individual vying for certification must demonstrate ability to build and fly the rocket (though kits can be bought online for $70-$130). After the flight is witnessed by the certification team members, said members will inspect the rocket to verify engine retention and check for evidence of flight induced damage.

The certification team then signs the certification sheet in appropriate sections and in the case of independent certification launches it is returned to the certifying individual, who then sends both the certification sheet and the card to the NAR headquarters, where their official certification and membership status will be updated. In the case of a certification being obtained at an officially sponsored event, the sponsors of the even will simply send the certification sheets and cards directly the NAR headquarters in bulk.

After the membership card is returned, a new certification card will be issued that displays both membership status and information, as well as the certification status of the holder. This card is valid for one year after the certification date or until the expiration of the NAR membership (the first to occur will determine this), and is renewed with the membership.

I could find no information concerning multiple people needing the certification. From my interpretation of the information, as long as the individual with the certification is the one doing the purchasing of rocket components and parts, and doing the official launching, we should not have a problem. The links from which i got the information compiled here are listed on the following page

1. Safety code:

<http://www.nar.org/safety-information/high-power-rocket-safety-code/>

1. General info:

<http://www.nar.org/safety-information/high-power-rocket-safety-code/>

1. Laws and regulations:

<http://www.nar.org/find-a-local-club/section-guidebook/laws-regulations/>

1. Level 1 HPR certification info page:

<http://www.nar.org/high-power-rocketry-info/level-1-hpr-certification/>