

# Who Determines a Quality Plastic Pipe Fusion and How is it Done?

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**national**grid



## How to Ensure the Quality of Plastic Fusion

- The fuser and the inspector must have NGA 7 days Initial plastic Technology training
- They require the following Operation Qualification courses OQ 49-52 B-F
  - Written exam every three years
  - Hands on skill test (requal) every year
- Every fusion has to be reviewed by the fuser and a qualified inspector (is part of Crew)
  - The fuser and inspector have to mark their ID on every fuse
  - We have a random cut out program (RCOP), collecting about 15-20 fuses a month. The fuses go to the materials lab for destructive testing and reported
- A qualified contractor oversight inspector randomly review fuses made by a contractor crew on top of their own review

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- In addition, QA/QC conducts random inspections of the work real-time
  - QA/QC also conducts a random re-dig program of the construction quality, this includes plastic fusions, about 100 digs a year by region
- If any fuse fails during the visual and or destructive testing, after the fuser and inspector have signed off:
  - We immediately pull the OQ of the both Fuser and inspector
  - Review his/her work over the last several months
  - Re Dig, review visually, and cut out any visually unacceptable fuse for lab testing.