Hot work permit for welding, cutting and related processes in areas with fire and explosion risks valid within the University of Bonn (except University Hospital Bonn (UKB) facilities), Annex 5 of the Contractor Guidelines, as of January 1, 2011 (DG)		
1.	Building (floor/room)	
2.1	Customer Subject area contact	⊙ University of Bonn—Section 4.3—Technical Facility Management ⊙ Bau- und Liegenschaftsbetrieb NRW _____
2.2	Contractor Name, address, phone	
3.	Work order	
4.	Work process	⊙ Welding ⊙ Soldering ⊙ Warming ⊙ Cutting ⊙ Flame straightening ⊙ _____
5.	Work duration	Date: _____ Time: from _____ to _____
6.	Measures for eliminating fire and explosion risks to be taken by Contractor before start of work	⊙ 6.1 Removing movable flammable substances and objects—if applicable, also dust deposits—in an area with a diameter of _____ m and, if necessary, also in adjacent rooms ⊙ 6.2 Covering immovable flammable substances and objects (e.g., wooden beams/walls/floors/objects, plastic parts) by suitable means and moistening them, if necessary ⊙ 6.3 Sealing openings such as joints, cracks, wall penetrations, pipe openings, channels, chimneys, shafts, against adjacent spaces by means of clay, plaster, mortar, damp soil, etc. ⊙ 6.4 Removing wall/ceiling cladding, such as dampening mats and insulation material ⊙ 6.5 Removing any and all explosive substances and objects—incl. dust deposits and containers with hazardous contents or residue ⊙ 6.6 Removing explosion hazards in piping ⊙ 6.7 Sealing immovable containers, equipment or piping containing flammable liquids, gases or dust, or which used to contain same, in conjunction with ventilation measures ⊙ 6.8 Ventilation measures according to Explosion Protection Guidelines (ExRL) in conjunction with measuring & monitoring ⊙ 6.9 Other measures: _____ _____ ⊙ **Addition/variance/special notes see "Additional notes"**
7.	Extinguishing agents to be kept at hand by Contractor at the work site	_____ x _____ kg fire extinguishers with ⊙ powder or ⊙ CO_2 ⊙ Ext. blanket ⊙ Mounted water hose ⊙ Bucket filled with water
8.	Fire alarm system (turned off by Customer at Contractor's request)	⊙ Turning off of line(s) _____ of the fire alarm system required – Requested by (name): _____ Time: _____ – Performed by (name): _____ Time: _____
9.	Fire watch to be provided by Contractor (turned on by Customer at the Contractor's request)	⊙ Not necessary since automated fire alarm system is present, turning on of line(s) _____ – Requested by (name): _____ Time: _____ – Performed by (name): _____ Time: _____ ⊙ Necessary during work; performed by (name): _____ ⊙ Necessary after work; performed by (name): _____ Time: until _____
10.	Alarm triggered	**Fire emergency phone number: 112** Location of nearest alarm _____ Location of nearest phone _____

11.	**Permit:** Work must not be started/performed until the above precautionary measures and the user-specific requirements of the on-site contact listed in the "Additional notes" have been implemented/complied with on-site. The instructions printed on the reverse have been acknowledged. The subject-area contact (Customer) instructs the Contractor to perform the work according to the requirements listed. Name of responsible subject-area contact (Customer) (in block letters): _____ Date and signature of responsible Customer employee: _____ Contractor warrants performance of the work according to the requirements listed. Name of Contractor employee with signing authority (in block letters): _____ Date and signature of Contractor employee with signing authority: _____

Additional notes for the hot work permit

Section _____ of the University of Bonn has named Mr./Mrs. _____ at the Institute _____ as the on-site contact for Customer. The on-site contact is authorized to give instructions to Contractor if required to avoid potential hazards. Work must not be performed unless the contact is available and must be scheduled with the contact in advance.

Customer and Contractor have been instructed by the on-site contact regarding the following potential user-specific hazards, as well as the corresponding safety measures and behaviors before the start of work:

- ⊙ In genetic engineering facilities (level S2 and above) and work areas according to the Radiation Protection Ordinance (*Strahlenschutzverordnung*), express written permission is required before the start of work.
- ⊙ All signs containing warnings, prohibitions and instructions as well as escape and rescue routes, optical and/or acoustical alarms and signals must be complied with.
- ⊙ Eating, drinking and smoking are prohibited in labs, internship rooms and workshops.
- ⊙ In case of accidents or contact with substances that have resulted in malaise or skin reactions, a physician must be seen or called using the emergency number; the contact must be notified accordingly.
- ⊙ Irregularities or potential hazards in the work area, such as spilled liquids, strong odors, escaping gas, etc. caused by damage, regardless of type, must promptly be reported to the on-site contact.
- ⊙ _____

The following measures have been agreed in addition to or in variance from section 6 and must be performed by the contact before hot work begins:

- ⊙ Chemicals (hazardous substances), compressed gas cylinders or equipment will be removed in accordance with section 6.1
- ⊙ Piping will be emptied, flushed, if necessary rendered inert, see section 6.6
- ⊙ _____

Date and signature of the above contact: _____

General rules for hot work

When welding or performing other hot work in areas with fire and explosion hazards, certain measures must be complied with and implemented. Hot work includes welding, cutting, soldering, warming, hardening, metal spraying and similar processes for working on metal using combustion gas, as well as electrical welding and cutting processes and thermite welding. Hot work also includes thawing, burning off, heating and other work using an open flame, tar boiling, grinding, cut-off grinding, working with hot air blowers and other work processes involving high temperatures. If the fire risk has not been completely eliminated for structural or operational reasons, work must not be started until Customer has issued a so-called hot work permit and the safety measures specified therein have been implemented. This can include e.g.

- hot work in areas with a high fire load; e.g., dust deposits, paper, cardboard, packaging material, textiles, fibers, insulation, wood wool, fiber board, wood parts; in case of longer heat exposures, also wooden beams
- hot work in areas with explosion risk; i.e. in areas that can have a hazardous atmosphere constituting an explosion risk; e.g., if there are flammable liquids (labs, hazardous substance storage areas), gases or dusts
- hot work outside the workshops and welding stations equipped for the purpose

Process steps

For hot work falling under the above conditions, the hot work permit printed on the reverse must be completed. The decision whether a hot work permit is required shall be made by the Customer. Before the work is performed, it will be coordinated between Customer, Contractor and the named contact from the University. The Customer will decide whether the University must name a contact.

1. Work site (floor/room): enter floor and room
2.1 Customer (subject-area contact)
2.2 Contractor: company name and address, names of company workers
3. Work order: brief description of work to be done
4. Work process: check or add process
5. Work duration: date and duration in hours or minutes

6. Measures for eliminating fire or explosion hazard: these measures shall be performed by the Contractor before the start of work. For areas at particular risk, e.g., areas where experiments are conducted, or hazardous substance storage areas, Institutes will name an on-site contact (see below).
7. Extinguishing agents: these must be kept at hand by the Contractor at the work site. Extinguishing agents provided by the University must not be used for this purpose.
8. Fire alarm system: turning off of alarm loops; the fire alarm system will be turned off by the Customer (subject-area contact) at the Contractor's request.
9. Fire watch: must be provided by the Contractor; requirement is waived if there is an automated fire alarm system.
10. Alarm triggered: location and type of triggers
11. Permit Name/signature of responsible Customer employee Name/signature of Contractor employee with signing authority

Hot work permit retention

The Customer shall keep all hot work permits issued ready in a centralized location until further notice; a copy shall automatically be submitted to the fire safety unit of the University (Section 4.5—Construction). The fire safety unit of the University of Bonn (Section 4.5—Construction) will monitor implementation by inspecting the hot work permits as part of the University Provost's control responsibility.