## Findings (summary)

1. On the basis of audiometric and perhaps eardrum impedance measurements, a sound conduction disorder (a difference between the hearing losses determined by air-conduction and by bone-conduction of more than 15 dB at more than one frequency) has been

   - right □ excluded □ left
   - right □ confirmed □ left

2. Cochlear sensorineural hearing loss is

   - right □ unlikely □ left
   - right □ likely □ left

3. Hearing loss for numbers determined audiometrically, especially for the frequencies 500, 1.000 und 2.000 Hz was

   - right □ not confirmed □ left
   - right □ confirmed □ left

4. The plot of proportion of single syllables understood against loudness lies in the abnormal hatched area

   - right □ no □ left
   - right □ partially □ left
   - right □ entirely □ left

   The understanding of single syllables could not be determined because the patient does not speak the local language sufficiently well. The other examination results, especially the audiogram and the loss of hearing for numbers, suggest that the results of the test for understanding of single syllables would also be abnormal

   - right □ no □ left
   - right □ yes □ left

5. Given continued exposure to noise, even if hearing protection is worn, a further noise-induced increase in hearing loss is

   - □ unlikely
   - □ likely because

6. Diagnosis

7. Notification of an occupational disease □ no □ yes Date of notification □□□□□□□□

## Otoscopy

**external auditory canal**

- right □
  - normal
  - very narrow
  - moist
- left □

**eardrum**

- right □
  - normal
  - central defect
  - defect at the edge
  - state after an operation
  - scarring
- left □
3 Pure tone audiogram
right ear
 left ear

Person gave uncertain responses
WEBER at 500 Hz
right  med  left

4 Speech audiogram (only when the bone-conduction hearing loss at 2 kHz is already 40 dB or more in both ears)

Normal curves
numbers  single syllables

Speech recognition in %

Calculation of speech recognition in %:

- Speech sound level in dB: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
- Speech recognition in %: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
- Normal curves for numbers and single syllables

SISI at 1 dB in %
Explanations
The examination NOISE III is, according to G 20, necessary for persons for whom the occupational medical assessment “long-term concern about health” is being considered. It provides the basis for a more extensive otological diagnosis than is possible with the examination NOISE II.

If the responsible physician is not in a position to do the examination himself, he is to commission an ear, nose and throat specialist to carry it out.

The examination must be immediately preceded by a noise-free period (for recovery of hearing) of at least 12 hours.

Point 1.3 The hearing loss (HL) for numbers is considered to confirm the air-conduction audiogram if
\[(HL_{500Hz} + HL_{1000Hz} + HL_{2000Hz}) \times \frac{1}{3} \approx \text{hearing loss for numbers}\]

Point 1.4 Whereas the understanding of single syllables can rarely be determined when carrying out speech audiometry of foreigners, apart from those with a very good knowledge of the local language, the hearing loss for numbers can often be determined successfully. In such cases, the plot of the proportion of single syllables understood against loudness may be assumed to lie in the hatched area for the ear in question if
- the bone-conduction hearing loss at 2 kHz is more than 40 dB and
- the hearing loss for numbers is more than 25 dB and the pure tone audiogram reveals a local loss of hearing at high frequencies (valley or drop at high frequencies)

Point 3 The pure tone audiometer should meet the requirements of DIN EN 60645-1 class 2 and requires regular servicing. It is expedient to carry out the SISI test at the frequency for which the bone-conduction hearing loss is about 60 dB. Note: careful determination of the air-conduction hearing threshold is necessary before setting the listening level to 20 dB above the hearing threshold.

Point 4 The speech audiometer should meet the requirements of DIN EN 60645-2 class 2 and requires regular servicing. The test material should meet recognized quality control standards.

Point 5 The tympanogram or a copy of it should be included with this form. The range of auditory canal pressures used in the measurements is between –300 daPa and +300 daPa.