(HAE-028352) AGREEMENTS REGARDING WORKING IN (CONTAMINATED) SOIL

Notes:
- Various minor additions to text
- 6.1 protocol for taking soil samples
- 6.2 types of soil survey

1. PURPOSE

Ensure that activities in contaminated soil and the transport thereof are carried out in accordance with the prevailing environmental legislation.

When carrying out earthworks, eliminate the risk of exposure to hazardous substances (or reduce it to an acceptable level) by taking into account the prevailing health and safety aspects and adhering to the measures. The measures are taken in response to the following exposures routes/hazards:
- Inhalation
- Absorption via the skin
- Ingestion via the mouth
- Danger of fire and explosion
- Confined spaces (intoxication)
- Other hazards (collapse/cave-in, use of machinery and electricity)

2. SPHERE OF APPLICABILITY

This procedure is applicable to all earthworks (all activities involving treatment and processing; e.g. decontamination work, digging wells/trenches, loading/unloading, etc.):
- In uncontaminated soil of housing class or lower;
- In contaminated soil and contaminated groundwater;
- Working with dredging spoil and sludge (excluding spoil from a purification plant) falls under the CROW 132 system
- Ballast bed and road paving

3. LEGISLATION

Because the entire site (within the boundary shown in drawing has50722is suspect as regards soil contamination, the activities must be carried out in accordance with the assessment guidelines of BRL SIKB 7000 and the associated implementation certificates. -The health and safety aspects of working with contaminated soil and groundwater are set out in practical terms in CROW publication 132.

4. PROCEDURE

Before the activities are carried out, the applicant should always draw up a Health and Safety Plan for the design phase (appended in table 2), after which the schedule of work must be followed in order to protect health, safety and the environment.

4.1 Risk classification

In accordance with the work schedule, the risks must always be determined with reference to the toxicity (T class) and inflammability (F class) before the activities commence.

To determine the risk class, one can use the T and F class calculation on the CROW website (www.crow.nl/publcatie132). This is determined by the HESQ department, by the Health, Safety and Environment advisor and, in his absence, by the Safety Officer.

The lower the toxicity, the lower the T class (goes from basic class to class 3T).
The presence of CMR (Carcinogenic-Mutagenic-Reprotoxic) substances results in a classification of 3T.

There are two F classes, 1F and 2F, depending on inflammability.

This applies, of course, to activities where the contaminants are known. If they are not known, the most serious risk classes are assumed: 3T and 2F.

4.2 Managing the risks

Effective measures or provisions must be put in place to prevent or limit negative effects. These measures could include:

- Wearing suitable work clothing and other personal protective equipment
- Education and instruction
- Deployment of experts
- Medical examination
- Measurements to monitor the ambient air quality
- Keeping a logbook
- Use of an overpressure filter and climate control system on manned machines and vehicles

All the applicable measures, which are dependent on the outcome of the risk class calculation, are described in the aforementioned CROW 132 document.

4.3 Work schedule

This work schedule serves as a guide for all soil-related activities.

werkschema v2.pdf

The statutory deadlines for reporting and signing off are shown below.

meldingen uitvoering sanering.pdf

The necessary work and excavation permits must also be obtained before starting work.
See also HAE-026168 Work Permit System and HAE-026861 Excavation Permit

4.4 Activities that can be carried out in accordance with the framework decontamination plan

beschikking raamsaneringsplan 2(

An example of a design phase Health & Safety plan is shown below; a plan of this type must be drawn up and submitted on receiving instructions for all soil-related activities.

V_G plan ontwerpfase voorbee

4.5 Calamities

If the safety of people or elements of the factory is endangered, one may deviate from the work schedule in consultation with the HESQ department.

4.6 Groundwater extraction

Before commencing discharges, one must first present a sample to the lab in order to determine whether there is any pollution. A 250 ml sample pot (available from the lab) must be furnished with a label showing the location, date, contact person and telephone number. If groundwater is to be extracted, this must be notified or a permit must be requested, depending on the quantity to be extracted (see appended schedule for groundwater extraction 2011). The site is located in an area that is not vulnerable.
If in doubt as to whether it is a fresh water or salt water area, or regarding the quantities, ask the HESQ department.

Schema voor grondwateronttrekkir

The HESQ will take care of the notification/request.

The extracted water must be monitored with a flow rate meter and discharged into a sand box; the discharge requirements are not to be exceeded.

The requirements are laid down in regulation 6 in water permit WTW6836-RWS_SCV-2012_3875 for the discharge of waste water and cooling water into the Ghent-Terneuzen canal, or otherwise in the permit for indirect discharge 12021177/WA12.051 (regulation 4, discharge of groundwater).

5. MEDICAL EXAMINATION

See HAE-028436.

6. SOIL SURVEYS

6.1 Soil survey protocol

If there is uncertainty regarding the quality of the soil, the following measures must be taken when collecting soil samples:

- 'Light' package PPE
  - ✓ Decontamination overall
  - ✓ Work gloves
  - ✓ Chemically resistant boots (decontamination boots)
- Cordon area off in proportion to the risk with tape, barriers, beacons and cones.
- And of course the mandatory PPE which applies to the entire site and specifically to certain areas (within the blue zones).

6.2 Types of soil survey

'Indicative survey', for one's own information, is something we often use ('due to absence of information regarding the environmental quality of the soil at a certain place', e.g. in connection with safety or disposal destination); is often bespoke work.

'Formal soil survey (subject to certificate)', e.g. in connection with an application for an integrated physical environment permit for new building. With surveys of this type it is obligatory to say something about (among other things) the completeness of the survey, that often leads to recommendations...

During the discharge, a sample must always be taken in order to check whether this requirement is satisfied. If it cannot be satisfied, one must contact HESQ about the further measures to be taken.

This information must be submitted to HESQ after the work has finished, in accordance with the appended example.


aanvang bronering.jpg

Remember that it takes 2 weeks to process the notification and 8 weeks to process a permit application.