### **Format for CV of Proposed Key Personnel**

Name of Personnel	Ms Ilona van der Kroef
Position for this assignment	Field coordinator
Nationality	Dutch
Language proficiency	Dutch: Mother tongue English: Full professional proficiency (C1) German: Poor (A1/A2)
Education/ Qualifications	<ul> <li>Wageningen University, Netherlands, MSc Earth and Environment (2017-2015)         Specialization Soil Geography and Earth Surface Dynamics (e.g. (Geo)statistical programming, Remote sensing, GIS, Soil Geography, stakeholder based prioritization, inventory techniques, environmental data collection, and Field Trainings, etc.)     </li> <li>Kansas State University, US, MSc Thesis (2017-2016)         Controls on Soil Organic Matter, and Soil texture patterns from landscape features in fire dominated tall grass prairie         Supervisors Dr.ir. CR (Cathelijne) Stoof &amp; Dr.ir. AJAM (Arnaud) Temme     </li> <li>Wageningen University, Netherlands, BSc Environmental Sciences (2015-2012)         Specialization Environmental Quality and System Analysis (e.g. Air quality, Environmental Technology, Environmental Policy Instruments, Environmental toxicology, Microbiology &amp; Biochemistry, Soil Pollution and Protection, Water Quality, etc.)     </li> <li>Massey University, New Zealand, Minor BSc (2014)         (e.g. Applied Ecology and Resource Management, Global Environmental Issues, etc)     </li> <li>Hanze Hogeschool, Netherlands, Propaedeutic BSc Biomedical laboratorial research (2012-2011)</li> <li>Key qualifications</li> <li>Ms. van der Kroef works as a consultant and technical employee on soil and groundwater quality. Her expertise is in the application of (innovative) measurement technologies to improve the assessment of contaminated site and environmental monitoring. She has experience with performing environmental monitoring, including groundwater sampling and hydraulic conductivity tests, in different landscapes (e.g., sampling of groundwater at the Northern Mountain Range of Trinidad and groundwater sampling at overburden dumpsite in Kosovo), including the testing of organophilic and analytical results against different legal frameworks. </li> </ul>
Professional certifications	<ul> <li>Workshop Soil Profile Image Analysis: estimating soil properties from digital photography</li> <li>Name of institution: Pedemetrics2017</li> <li>Date of certification: 18 July 2017</li> </ul>

Academic English and Presenting (C1 level)

- Name of institution: Wageningen 'into' languages
- Date of certification: February 2016

#### **Employment record**

From - To: 2018 – Present

Employer: TAUW bv, The Netherlands

Position held: Consultant on Soil and Groundwater

From - To: 2017

Employer: Leibniz-Centre for Agricultural Research (ZALF), Germany

Position held: Research on geophysical tools in soil science

From - To: 2017

Employer: Pedometrics2017, The Netherlands

Position held: Secretary

From - To: 2018-2015

Employer: Van der Kroef Ontruimingen, The Netherlands

Position held: Manager

From - To: 2012-2010

Employer: Citeq Biologics, The Netherlands

Position held: All-round employee

#### Experience/reference projects (list of selected projects):

#### 2021, UNDP, Provision of services on the preparation for site remediation at Aluminium Factory Podgorica

The overall project aim is to design the clean-up for the PCB storage site at the Aluminium Factory Podgorica (KAP) in Montenegro, as part of the project 'Environmentally Sound Management (ESM) of PCBs'. The site of approximately 7,000 m2 compromises several (empty) PCB oil tanks, barrels with PCB oil, PCB containing equipment. Unfortunately, these materials have been stored unsound, as a result, PCB concentration in the soil causes unacceptable human health risks. Ms. Van der Kroef held the non key position as site investigator and performed the following activities: coordination of the field investigation, reporting and drafting of investigation strategies, conceptual site modelling, reporting and advice on site assessment, risk assessment, and drafting Terms of Reference.

#### 2021-2020 UNIDO, Trinidad, Environmental Risk Management Plan of the Guanapo Landfill

The Guanapo landfill, located centrally in Trinidad and Tobago, is a pilot project for international good practise and knowledge on the implementation of Environmental Risk Management Programmes at non-engineered landfills in developing countries with a tropical climate. TAUW has investigated the risk mitigation options by assessing the human- and ecological risks of the site and the geohydrology. Ms. Van der Kroef held the position as field technician, field coordinator, and site Assessor. She supervised the installation of 25 monitoring wells, two monitoring campaigns leachate, groundwater and surface water, and field testing (i.e., falling head hydraulic tests and double ring infiltrometer tests).

## Employment Record/ Experience

Furthermore, she performed the following activities: sampling design, field capacity training workshop, conceptual site modelling, reporting and advice on site assessment, and risk assessment

• 2020, Multinational industrial client - fluorpolymer production plant in port of Rotterdam Area, The Netherlands, Soil and groundwater investigation PFAS and FRD

TAUW contracted for executing soil and groundwater investigation, geohydrological investigation, and remediation plan for a PFAS producing client. For this client, TAUW has a specialized team to execute the required investigations. Ilona's task is to coordinate and report preliminary and supplementary soil and groundwater investigations.

• 2020, Anonymous client, The Netherlands, Tier III Risk assessment at previous zinc galvanizing factory

TAUW performed several site investigations on a previous zinc galvanizing factory. Soil and groundwater severely contaminated with zinc and copper. Ilona performed a risk assessment to determine the human and ecological risks at the site.

• 2020-2019 World Bank, Kosovo, Overburden dump

Ms. Van der Kroef and team conducted a surface water, soil, sediment and groundwater investigation at a 100-hectare (ha) overburden dump and infilled mining area site in Kosovo. Chemical waste from an energy plant was dumped at the site. Ms. Van der Kroef performed the environmental monitoring, analyzed the analytical results against Dutch and local legal frameworks, and wrote the site investigation report.

- 2020-2019 TAUW, The Netherlands, developments of standard methods for investigating of Chromium VI at buildings and objects Since 2019, it is expected to investigate Chromium VI at buildings and objects prior to demolishing or refurnishing of it. At the moment, no Dutch Standard is in place for investigating Chromium VI in building materials. Therefore, it was necessary to develop standard operation procedures (SOP) within TAUW. Ms. Van der Kroef was lead employee in the development of the SOP.
- 2020-2018 Municipality Zaanstad, The Netherlands, soil, groundwater, and ecological investigation at gardens

The municipality of Zaanstad asked TAUW to assess the contamination levels and develop a remediation plan for gardens and playgrounds. Due to historical land use, a large area in the west of the Netherlands is heterogeneous contaminated with heavy metals. It was necessary to fast identify the scale of contamination and inform the community. Ilona have coordinated the soil and groundwater investigation. When health risks were unacceptable, a remediation plan, including ecological impact of the remediation, was developed. Ilona was contact person for the residents and attended several risk information workshops.

• 2020-2019 Province Noord-Brabant, The Netherlands, Vintage Swales
Stormwater runoff has severe negative and direct impact on the quality of
surface waters and groundwater. Stormwater runoff is therefore
temporarily stored in swales. As a result, it contaminates the topsoil with
among others heavy-metals and reduces the functionality of the swale.

TAUW developed an efficient methodology for determining contamination of metals in the topsoil and determine hydrological functionality. Ms. Van der Kroef's tasks consisted of the development of SOP using the XRF and double ring tests. She coordinated the soil and groundwater investigations of about 70 swales.

## • 2019-2018 Rijksvastgoedbedrijf, The Netherlands, soil, sediment, groundwater, and asphalt investigations

Rijksvastgoedbedrijf is the institute organizing the national real state of the Netherlands. TAUW have executed the soil, groundwater and asphalt investigation for these transactions from 2016 onwards. Ms. Van der Kroef conducted circa 20 sediment, soil and groundwater examinations for this client.

# 2017 ZALF, Germany, Digital mapping of buried soil horizons using 2D and pseudo-3D geoelectrical measurements in a ground moraine landscape

This research project was conducted to investigate the possibilities using geoelectrical measurements tool for soil stratigraphy mapping in ground moraine landscape. The overall aim of the project was to investigate the effect of soil erosion on SOC fluxes for agricultural landscapes. Ms. Van der Kroef statistically modelled horizon position and published the results. Kroef et al. Digital mapping of buried soil horizons using 2D and pseudo-3D geoelectrical measurements in a ground moraine landscape, European Journal of Soil Science, 17 may 2019, DOI: https://doi.org/10.1111/ejss.12842

#### 2017-2016 Kansas State University, USA, Controls on soil organic matter and soil texture patterns from landscape features in a fire dominated tallgrass prairie

This research project, part of Ms. Van der Kroef her MSc degree, investigated the effect of fire on soil-landscape relations at a tall grass prairie. The soil properties and soil-landscape relations were examined in a 183 ha frequently burned watershed and 83 ha rarely burned watershed in a tallgrass prairie, Kansas, US. Ms. Van der Kroef have collected over 100 soil samples and performed the laboratory analyses over 4-month period. She analyzed the soil samples on root mass fraction, stone fraction, SOM concentration, soil texture, and Caesium-137. Furthermore, she performed the statistical analyses and reported the results.

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experiences, and other relevant information about myself.

Signature of Personnel

8-10-2021
Date (Day/Month/Year)