rates between 24 and 2400 g Lindane/ha. The collembola community was shown to be not even initially impacted at a rate of 240 g Lindane/ha. Comparing the NOEC from the two-generation study with the application rate being safe for the Collembola community in the TME the conservatism of the proposed intermediate tiered RA approach is assessed. A risk (TER 0.68) would still be indicated at an exposure of 240 g Lindane/ha (NOER in TME) even with an a priori TER trigger value of 1. The consideration of the potential for inherent recovery in an intermediate tiered risk assessment approach is a valuable tool to fill the gap between an overly conservative tier 1 and higher tier Collembola risk assessment for substances dissipating fast.

295 The chemical quality of urban soils in Glasgow, UK, with reference to anthropogenic impacts and current toxicologically-based soil guideline values. F. Fordyce, British Geological Survey / Geochemical Baselines and Medical Geology; S. Nice, B. Lister, B. O Dochartaigh, British Geological Survey. Until recently systematic data on the chemical quality of urban soils was lacking in many countries as traditional soil survey programmes focussed on rural environments. The advent of environmental protection legislation in the UK in the 1990s has driven the need for urban soil quality information to ensure healthy and sustainable environments. Since 1992, the British Geological Survey (BGS) has completed soil surveys in 27 UK cities under the Geochemical Baseline Survey of the Environment (G-BASE) programme. This included a survey of Glasgow and surrounding rural areas to link to a wider geoenvironmental assessment: the BGS Clyde and Glasgow Urban Super Project (CUSP). The survey provides an overview of land quality in Glasgow and is based upon the collection of 2and 4 per km^2 in rural and urban areas respectively. The samples are analysed for total concentrations of c.50 chemical elements by X-ray fluorescence spectrometry. Glasgow is Scotland's largest city and was a major industrial centre until the mid 20^{th} century. Much of this industry has now declined and the city is undergoing regeneration. However, the legacy of the industrial past remains. Results for 1381 urban and 241 rural soils reveal that concentrations of many metals are elevated in urban soils relative to the rural background regardless of the geological parent material. Elements that are commonly associated with anthropogenic pollution such as Pb, Sb and Sn show greatest enrichment in urban versus rural soils (2.6 – 3.3 times, based on median values). Median topsoil Cr (108 mg kg^{-1}) and Ni (47 mg kg^{-1}) concentrations in Glasgow are higher than in many other UK cities due to the presence of volcanic bedrock and history of metal processing in the city. In terms of toxicologically-based soil quality assessments, with the exception of Cr, only a small proportion of soils exceed the current UK human Contaminated Land Exposure Assessment (CLEA) residential Soil Guideline Values despite the city's industrial heritage – Cr (22%), Pb (5%), As, Cd, Ni (2%) and Se (0%). However, a much greater proporton exceed the proposed UK Ecotoxicity Soil Screeing Values – Cr (100%), Ni (94%), Zn (86%), Pb (30%), Cu (17%) and Cd (4%). The G-BASE data allow these thresholds to be evaluated in terms of typical soil element abundances to aid ecotoxicological assessments and inform policy.

296 Results from a Workshop on Ecological Soil Levels—Next Steps in the R.S. Wentsel, Exponent / Contaminated Sites/Resource Conserv; A. Fairbrother, Exponent, Inc. / EcoSciences. This paper presents the results from a workshop to develop a process for establishing ecological soil clean-up values (EcoSCVs) in the U.S. The goal of the workshop was to leverage advances from research conducted in support of REACH and the Australian risk assessment approaches by providing regulators with methods and processes to incorporate bioavailability, normalize toxicity thresholds, address food-web issues, and incorporate background concentrations. These recent major terrestrial research projects have significantly advanced our understanding of the behaviour and toxicity of metals in soils. Large data sets were developed that are useful for risk assessment of metals in soil environments, and were used by workshop participants as case studies in the development of the ecological standards for soils. Manuscripts from the workshop discussed bioavailability adjustments based on pH, cation exchange capacity, and organic carbon; application of leaching and aging factors; and consideration of the source and form of metals in the soil. Incorporation of soil microbial processes and a path forward for wildlife toxicity reference dose and food-chain modeling were also discussed in prepared manuscripts. In addition, one of the workgroups described the processes needed to gain regulatory acceptance as a directive or guidance by North American state and federal governments.