Internationally Standardized Reporting (Checklist) on the Sustainable Development Performance of Uranium Mining and Processing Sites

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Background

Good sustainability practice includes a whole of cycle approach from mining through use until final disposal

International standards (ISO 14001) require evaluation of the environmental impacts of suppliers as well as the operation itself

Life Cycle Analysis and Environmental Product Declaration assist in providing a “footprint” of the product for use up and down the cycle

This evaluation of uranium suppliers has been spearheaded by Vattenfall AB but other utilities like EDF also do it

Emerging utilities are also adopting the approach

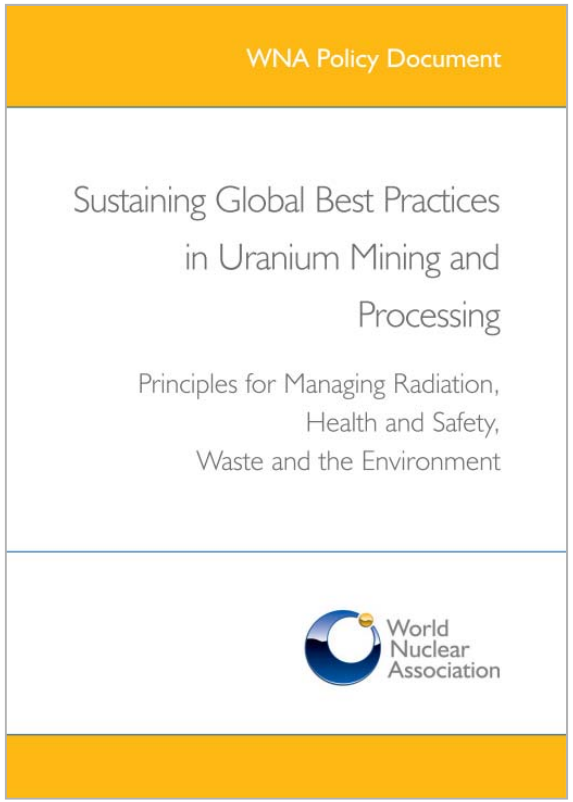
WNA Sustainability Guidance

WNA Policy Document: Sustaining Global Best Practices in Uranium Mining and Processing.

Within WNA membership, uranium mining and processing companies account for more than 90% of worldwide uranium production.

Increasing requirements by utilities to validate sustainable development aspects of uranium mining.

Desire by both utilities and suppliers to be consistent and efficient in the reporting of sustainable development indicators.



About the UMSWG projects

April 2011, creation of the Uranium Mining Standardization Working Group (WNA UMSWG) // 3 projects.

A core group of uranium mine operators: *Areva, BHP Billiton, Cameco, Paladin, Rio Tinto, Uranium One and WM Mining*.

Based on the WNA Policy.

Positive commitment of European utilities, led by *EDF and Vattenfall*.

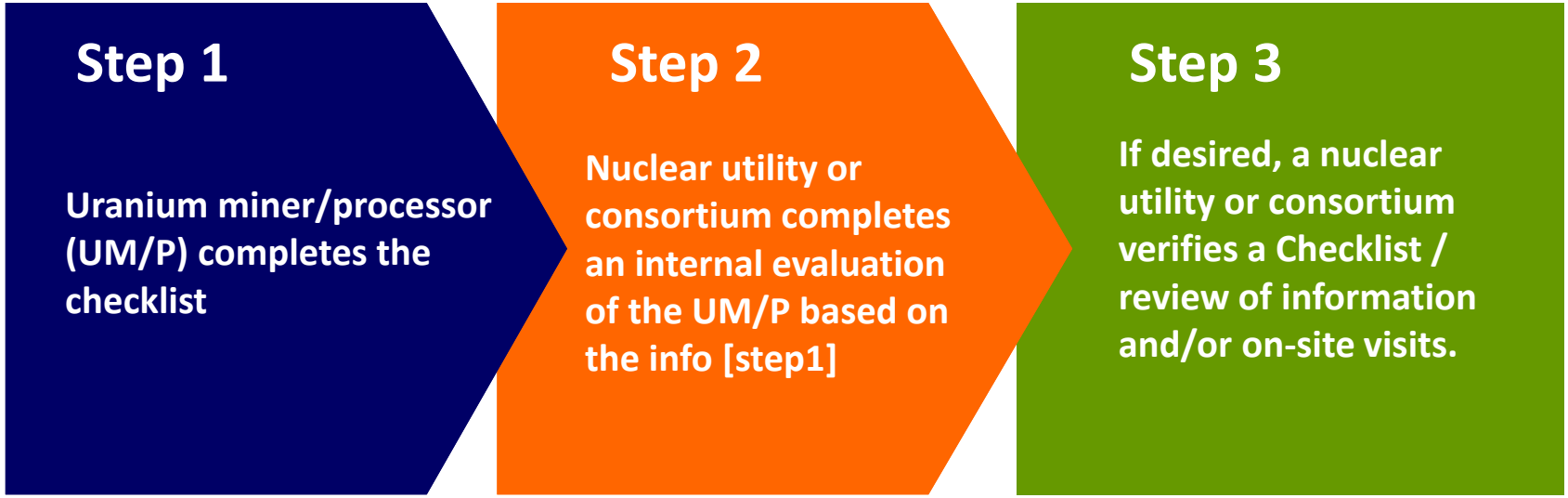
Final version of the checklist: on July 2012.

- **Goal: to establish an internationally standardized reporting between miners and utilities on the SD performance of uranium/processing sites.**

About the SD Checklist

An ‘Evaluation Tool’ to collect information from uranium miners: open data and/or on-site visits.

Evaluation Process in 3 steps (Checklist and Verification Procedure):



- **The Evaluation Checklist has been finalized after testing (Australia, Canada, Kazakhstan, Namibia).**

About the SD Checklist

11 categories + *link to the Global Reporting Initiative (GRI) indicators and subject matter:*

- *Section 1: Adherence to Sustainable Development*
- *Section 2: Management System*
- *Section 3: Compliance*
- *Section 4: Health, Safety and Environmental Protection*
- *Section 5: Social Responsibility/Stakeholder Engagement*
- *Section 6: Management of Hazardous Materials*
- *Section 7: Accidents and Emergency*
- *Section 8: Transport of Hazardous Materials*
- *Section 9: Systematic Approach to Training*
- *Section 10: Security of Sealed Radioactive Sources and Nuclear Substances*
- *Section 11: Decommissioning and Site Closure*

About the SD Checklist

WNA Sustainable Development Checklist

SECTION 11: Decommissioning and Site Closure

In designing any installation, plan for future site decommissioning, remediation, closure and land re-use as an integral and necessary part of original project development. In such design and in facility operations, seek to maximize the use of remedial actions concurrent with production. Ensure that the long-term plan includes socio-economic considerations, including the welfare of workers and host communities, and clear provisions for the accumulation of resources adequate to implement the plan. Periodically review and update the plan in light of new circumstances and in consultation with affected stakeholders. In connection with the cessation of operations, establish a decommissioning organization to implement the plan and safely restore the site for re-use to the fullest extent practicable. Engage in no activities – or acts of omission – that could result in the abandonment of a site without plans and resources for full and effective decommissioning or that would pose a burden or threat to future generations.

Action Items		Relevant Y/N	Achieved Y/N/OG	Supporting Documentation/ Data Submitted	Responsible Entity
11.1	**Site Closure Risk Assessment**: The company has conducted a site closure risk assessment for each of its uranium mining and processing sites. **(No GRI equivalent)**				
11.2	**Adequately Funded Closure Plan**: The company has an adequately funded closure plan for each of its uranium mining and processing sites that is developed during the establishment of the operation, is periodically reviewed and updated and is in accordance with local/national regulatory requirements. **(No GRI equivalent)**				
11.3	**Reclamation Programme**: The company has a reclamation programme appropriate to stage of the mine life cycle. The company engages local communities and relevant stakeholders throughout the closure and restoration process. **(GRI EN13; MM10; MM11)**				
11.4	**Employee Assistance System**: The company has an employee assistance system in place, such as assisting employees with job transfers after closure of a site. **(GRI LA11)**				
11.5	**Economic Sustainability**: The company supports a development plan that will contribute to the economic sustainability of communities following cessation of an operation. **(No GRI equivalent)**				

Advantages of the Checklist

For the Miner

- A well defined and consistent approach to customer audits
- Reduction in duplication and workload
- Same key data goes to all customers
- Can be a routine approach rather than an infrequent request

For the End User

- A consistent approach to assist assessment of the received data
- Ability to better compare between different operations
- Having a internationally standardised approach rather than a stand alone approach
- Ability to review the environmental performance of their suppliers and if necessary take appropriate action

Potential Future Directions

Development of Key Reporting Indicators for distributing the performance information externally

Sharing of selected data between utilities to reduce the burden of auditing for both miners and end users

Use of similar checklist to show the sustainability of other areas of the nuclear fuel cycle

Use of the data in the public domain to better show the whole of life cycle impact of nuclear energy

To sum up…

The Internationally Standardized Reporting Checklist on the Sustainable Development Performance of Uranium Mining and Processing Sites

A mutual and beneficial work between a core group of uranium miners and nuclear utilities…

An approach based on an long term experience, international policies and sustainable development principles…

A process to optimize the reporting mechanism, tools and efforts…

11 sections focused on the main sustainable development subject matters known at an operational and headquarter level.

The WNA will make available the sustainable development checklist for member utilities and uranium suppliers.

Utilities and suppliers are encouraged to use the checklist for sustainable development verification.

- **Information provided come from:**
  - **WNA. 2008. WNA's policy document *Sustaining Global Best Practices in Uranium Mining and Processing: Principles for Managing Radiation, Health and Safety, and Waste and the Environment.***
  - **WNA. 2012. Working Groups. Plans and Activities for 2012.**
  - **WNA. 2012. Internationally Standardized Reporting (Checklist) on the Sustainable Development Performance of Uranium Mining and Processing Sites**

Acknowledge Luminita Grancea, AREVA for the origins of these slides