

GUIDELINES FOR CONTRACTORS EXECUTING WORKS ON THE UMICORE SITE IN HOBOKEN

Umicore ensures safety, health and environment. On the basis of the legislation and years of experience many regulations have been drawn up applying to any individual wanting to access the Umicore site in Hoboken.

Below you, as contractor, will find a summary of the main guidelines. These guidelines are binding for all contractors Umicore takes on, and their employees as well as their subcontractors. Therefore they are also part of the contractual agreements.

If the contractor does not or inadequately comply with his obligations or agreements, Umicore as such can - as provided in the Act on Well-Being dated 04/08/1996, Art.9 - take the necessary measures relating to the well-being of his employees for the account of the contractor.

The Umicore organisation has only one single safety objective: avoiding safety incidents and therefore it wants to use any incident to learn from it. Umicore is convinced that these guidelines can help contractors to deal appropriately with safety, health and environment on our Umicore site.

We would like to thank you in advance for complying with these guidelines.

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1. UPMR company policies

1.1 QEHS policy

1.1.1 WHY

“We care for a sustainable future”. Our focus is on the development of sustainable business operations and processes.

It is the joint responsibility of all UPMR employees to think and act in a qualitative, efficient, healthy and environmentally-friendly way on behalf of the future of the entire plant and our stakeholders.

1.1.2 WHAT

The Business Excellence, Environment and Safety & Health departments support all services in an aligned and coherent way in order to realise this vision.

The care for general well-being and the QEHS objectives we achieve by focussing on three important issues:

- **MAN:**

Stimulate our employees' personal ownership to control any QEHS risk and use any QEHS opportunity in line with our values of Commitment, Care and Cooperation.

Invest in education and training to align our employees' skills with the needs of our plant.

Actively and constructively involve our contractors in the realisation of our QEHS policy with priority to creating a safe working place.

- **METHOD:**

We manage our activities according to the ISO9001:2015 (Quality), ISO14001:2015 (Environment) and ISO45001:2015 (Safety and Health) care systems.

For this purpose we devote time and attention to embedding continuous improvement in our company culture. We regularly audit and review our processes, engage in dialogue with our stakeholders and comply with the continuously developing legislation.

- **MACHINE:**

Ensure safe and environmentally-friendly installations by designing, realising, operating, maintaining and modifying in an accountable and risk-based way.

1.1.3 HOW

From three domains:

BUSINESS EXCELLENCE

Our key principles for realising customer and stakeholder satisfaction are

1. Leadership and commitment
2. Doing the right things in the right way (first time right)
3. Effectiveness over activity – focus on the objective
4. Quality in every employee's perception

HEALTH & SAFETY

Under the motto "Because everybody wants to get home without an accident" we undertake to:

- Always use our common sense and be caring for each other – "Heart and mind go hand in hand " Principle
- Reflect on what we do before we do it – "Safety first and speed next" Principle
- Consistently adhere to general and service-specific agreements – "Unity in Diversity" Principle
- Personally invest in working safely, day after day – "Safety is not without obligations" Principle

In doing so, we help each other to do better all the time – "We grow by talking to each other" Principle through:

- Raising our thumb for what we do well
- Systematically talk to each other respectfully about what can be improved
- Open-mindedly receiving feedback so that we ourselves can grow

In addition, in line with the 'Umicore Way', employees' optimum health is of strategic importance for UPMR as a condition for achieving the company objectives.

ENVIRONMENT

We pursue minimising the impact of our activities on local residents and the environment by working according to these ground rules:

1. We restrict our emissions of metals, harmful substances and greenhouse gases as much as possible, minimise the use of raw materials, energy and water and see to safe products.
2. We loyally comply with the legal stipulations and work according to good practices.
3. We work with an ISO 14001 accredited environmental management system and pursue continuous improvement of our environmental performance.
4. We contribute to closing the materials cycle by recycling metals and valorising waste products.
5. We enter into dialogue with all our stakeholders, in particular local residents and the authorities.

1.2 Contractor Safety Management

We monitor the safety policy of contractors by asking for a number of documents for checking via the Onyx One notification system. In order to be able to prove such a safety policy, we expect contractors to have at least a VCA [SCC] certificate at business level.

The most important mandatory documents are:

- Policy
- JAP/GPP [Annual Action Plan] [Overall Prevention Plan]
- Safety statistics
- VCA [SCC] certificate
- Quality certificates

In addition, we expect the contractor to always pay attention to safety while working on the site by:

- Drawing up a risk analysis for the works on the site.
- Immediately reporting safety incidents to the site management concerned; the investigation into the incident also starts straightaway and requires reporting within 24 hours after the incident.
- Communicating all other safety topics to contractor management.
 - contractor.hoboken@eu.umicore.com

1.3 Subcontractors / temporary workers / working students

If the contractor wants to deploy subcontractors, temporary workers or working students, he is always obliged to submit it for approval to the Umicore site supervisor. The latter decides, either or not after advice from the Internal Department for Prevention and Protection at Work (IDPPW), to either or not admit the individuals involved. After approval subcontractors can be deployed up to a 1st level.

The minimum age for working at Umicore is 18.

It is the contractor's task to follow up and coordinate the work of his subcontractors. He checks whether his subcontractors are compliant with the legislation and ensures that all his subcontractors know and adhere to the agreements. In addition, he ensures that his subcontractors execute the subcontracted works with suitable work equipment and the appropriate protection.

However, the contractor remains accountable and liable for his subcontractors at all times.

1.4 Language

All employees of the contractor and his subcontractors have to have good basic knowledge of Dutch, French, English or German. If this is not the case, it has to be clearly agreed beforehand and approved in mutual consultation. At least the contractor's site supervisor should speak one of these languages and be able to communicate to the contractor's employees all risks and measures to be taken.

Umicore demands that for each separate working team the contractor's (co-working) foreman can be addressed and express himself in one of the four languages.

1.5 Smoking, alcohol and drugs

There is a general smoking prohibition on the entire Umicore Hoboken site that has to be observed by everybody. The zones where limited smoking is allowed (only during the lunch break) are specifically indicated and are always in the open air.

Alcoholic drinks and drugs are completely forbidden on the entire site. Therefore any (sub)contractor's employee must not be under the influence at the start and during execution of the works.

1.6 Photography and filming

According to the Communication Group guideline, third parties are not allowed to use photographic material or footage for commercial purposes. Exceptions can only be made after prior approval from the Communication manager.

External use for marketing purposes by a contractor:

The photographic and visual material can only be taken by a professional photographer or cameraman, either via Umicore as such or via the external party, accompanied by a Umicore employee. Communication Department has to check the images before the person who took the photographs/footage leaves the site. If necessary, Communication Department will also involve the manager of the department in question.

External use for professional purposes by a contractor (e.g. drawing up a tender, study, etc.)

The use of a photographic or any other camera has to be reported beforehand to Internal Security department. The 'Permit for using visual material' must be signed and send by e-mail to the Manager of Communication Department and the Internal Security Manager.

The 'Permit for using visual material' can be approved for a period of maximum one year. If required it can be prolonged.

The person taking the photographs/images has to be accompanied by a Umicore staff member at all times. Before the person taking the photographs/images leaves the site, the visual material has to be checked by the department manager, Communication Department or by Internal Security.

1.7 Violations of the regulations

The Umicore contact person is generally the site supervisor unless established differently in the contract. If a Umicore site supervisor is faced with violations of the regulations, he will first make a verbal remark. In case of non-compliance with verbal remarks or in case of grave errors written notification will follow. Not only the site supervisor, but also the other Umicore employees have a duty to be observant in order to adjust unsafe situations and violations of the regulations.

If there is no response to the verbal or written notification, Umicore may proceed to remove or to having removed the person or firm in question.

In case of a serious offence the person or firm involved can be removed from the Umicore site immediately. This removal for reasons of infringements of safety, security, health and/or environment cannot give rise to financial compensations from Umicore to the contractor in question. On the contrary, the contractor remains responsible for securing the agreed planning.

1.8 Applicable legal regulations

ARAB [General Regulations for Labour Protection] and Codex about the Well-being at Work and in particular:

- The Royal Decree "Working equipment" dated 12/08/1993
- The Act on Well-being dated 04/08/1996
- The Royal Decree "Temporary or Mobile Building Sites" dated 25/01/2001

AREI [General Regulations for Electrical Installations]

VLAREM, VLAREA and VLAREBO [Flemish Regulations on Environmental Permits, Flemish Regulations on Sustainable Management of Material Cycles and Waste Products, Flemish Regulations on Soil Remediation and Soil Protection]

GDPR

2. Site security, identification and circulation

2.1 Registration before the start of the works (pre-reception)

Registration of a contractor occurs through the online tool Onyx One (www.onyxone.com). Onyx One works with a number of obligatory fields and the possibility of uploading the required documents. This procedure runs according to the next steps:

The contractor receives an invitation e-mail with a registration link, with which he can enrol his company in Onyx One. Once registered, the contractor has to complete a number of steps:

- Complete and submit the company qualification: these details are evaluated and approved by Umicore.
- Subcontractor invitation: after approval the contractor can invite his subcontractors.
- Complete and submit personal qualification: the contractor has to register his own employees (on his payroll) in the tool and complete their details.
- Assignments: they are drawn up by Umicore. As soon as a subcontractor has been approved in Onyx, the contractor also has to delegate his assignment to the respective subcontractor.
- Allocation of personnel to be enrolled: the contractor has to register his employees on an assignment so that they get access to our site.



Step 0	Registration in tool	By contractor management (CM)
Step 1	Complete company qualification + Submit company qualification	By (sub) contractor validated by CM + prevention Invite subcontractor
Step 2	Complete personal qualification + Submit personal qualification	By (sub) contractor
Step 3	Assignments	By UPMR work planner
Step 4	Allocation of personnel to be signed on	Delegate assignment to subcontractor By (sub) contractor
Step 5	Physical reception at office OO (gate B)	

All personal details made available to Umicore via the Onyx One registration tool will be used legitimately by Umicore only for the purposes of guaranteeing the safety and security of its staff and buildings and in accordance with Umicore's privacy policy; more information: <http://www.unicore.com/en/privacy-and-cookie-policy/>.

The costs of this registration can be found under: <https://www.onyxone.com/plans>. For 2018 and 2019 these will still be borne by Umicore.

Personnel employed by a foreign employer, who come to execute works, have to have a Limosa notification (document L1). The electronic registration has to occur beforehand via www.limosabe.be and to be uploaded in the Onyx One web platform at the personal qualification of the employee concerned.

Personnel employed by a foreign employer within the European Economic Area (EEA) also have to carry the A1 form.

Personnel employed by an employer from outside the European Economic Area (EEA) have to have a work permit.

The contractor is responsible for timely registration of his own people and his subcontractors and for supplying the correct forms.

2.2 Reception on the first working day

2.2.1 Employees on the site

At the first reporting the contractor's or subcontractor's employees have to present themselves at gate B within normal working time (06:00 h - 22:00 h). Here the required formalities around registration are fulfilled. In exceptional cases registration during the weekend is possible, on condition of prior consultation with and approval of the Umicore site supervisor.

When reporting the employee must be able to identify himself at the request of the security officer.

On their first working day at Umicore employees receive a general safety introduction on the basis of a "safety-health-environment" presentation. They must also pass a theoretical safety test. Subsequently they obtain a personal badge which is valid for a maximum of one year. The introduction is available in the following languages:

Dutch	German	French
English	Italian	Spanish
Portuguese	Polish	Romanian

2.2.2 Employees in CA and IS

At the first reporting the contractor's or subcontractor's employees have to present themselves at the CA reception within normal working time (07:30 h - 18:00 h). Here the required formalities around registration are fulfilled. In exceptional cases registration during the weekend is possible, on condition of prior consultation with and approval of the Umicore site supervisor.

When reporting the employee must be able to identify himself at the request of the receptionist.

On their first working day at Umicore employees receive a general safety introduction on the basis of a safety form. Subsequently they obtain a personal badge which is valid for a maximum of six months.

2.2.3 Badge

The employees receive a personal identification and reporting badge (after signing a receipt). The badge has to be worn clearly visibly at all times. It is strictly personal and must not be used for a colleague to provide access or for signing on.

They can enter the plant with the badge. Access is pre-programmed, depending on the location of the works to be executed.

At the end of the works the badge must always be handed in at the CA reception or Internal Security Gate B.

2.3 Access to the plant

2.3.1. Vehicles

Vehicles can only enter the plant via gate D. Access is only granted to vehicles transporting materials or which are fitted out as 'mobile works shed'. The driver has to report to security gate D. Here he will receive a vehicle badge, which has to be visibly displayed in the vehicle at all times.

The vehicles must always be parked in the indicated or allocated parking zone in agreement with the Umicore site supervisor. Unauthorised parking is not permitted for reasons of safety.

Movements at the plant site have to be reduced to a minimum (only functional movements). The driver of each vehicle wears suitable clothing and the required PPE for accessing an industrial site (provided with fireproof, if required, high-visibility clothing, preferred colour orange) that he will wear at all times.

In case of access outside of gate-D opening times (from 6:00 to 18:00 hours) or in weekends vehicles have to use gate A. However, Internal Security will always perform a check-up here.

2.3.2. Employees

All employees enter the site either via the turnstile at gate B or gate D and must not drive into the plant with the driver via gate D. At gate D a special bicycle rack has been provided for parking bikes. It is prohibited to access or leave the site via crossing 1 or 2.

During the works all employees have to be properly recognisable by means of the company name on the helmet and/or working clothes. The personal badge is also always worn in a visible way.

2.3.3. Materials delivery

All vehicles and lorries carrying equipment have to drive into the plant via gate D. Without an Umicore reference (Umicore site supervisor – contractor) no equipment for third parties can be delivered.

Passengers under the age of 18 are not allowed into the company.

Animals are not permitted on the site or in the car parks.

The contractor informs the Umicore site supervisor in time of the arrival of materials.

The Umicore site supervisor notifies Internal Security.

The unloading and storage location is always determined by the Umicore site supervisor.

2.3.4. Tools and equipment

All work equipment has to comply with the legal requirements and is clearly marked, so that ownership is indisputable.

Checks by Internal Security of executors and/or vehicles on leaving the plant are possible. Exiting transports are always accompanied by a contractor's person in charge.

2.3.5. Local traffic and signage

- There is a general speed restriction of 30 km/ h and an overtaking prohibition.
- All vehicles have to drive with dimmed lights.
- The signage has to be observed.
- Passageways and exits have to be kept free at all times.
- Parking is only allowed in the provided spaces.
- The Belgian traffic code applies.
- Seat belts are mandatory on our site.
- Our Internal Security performs speed checks.

Loading and unloading can only take place from 7:15 and 15:45 h on working days. Beyond these times access can only be allowed on condition of prior agreement of the Umicore site supervisor.

Vehicles (such as forklifts, excavators, lorries, etc.) intended for the transport of goods must not be used for transporting individuals (e.g. to go and eat in the canteen).

Contractor's company bicycles can be used for movements on the site. They have to be in order in accordance with the Belgian traffic code and must not be electrically driven.

Parking C has to be used for parking vehicles that do not have to be inside the company.

2.4 Use of Umicore materials

Every contractor provides his own materials, tools and protection equipment, unless differently agreed in the contract with Umicore.

Basic personal protective equipment (PPE) is always for the account of the contractor. The basic PPE consists of helmets, glasses, P3 dust mask, working gloves and safety shoes. This standard PPE may also be provided by us at Umicore tariffs.

Twice a year an overview of the PPE used will be submitted to the contractors and where necessary it will be invoiced.

Specific task-oriented PPE is made available by Umicore: payment will be based on misuse and vandalism. Forklifts (property of Umicore) can only be made available with a driver, on condition of prior approval by the Umicore site supervisor.

Specific PPE taken from Umicore must not leave the site in any circumstances whatsoever. This PPE is only intended for use on the site. If during an exit check a violation is found, the necessary sanctions will be taken. In case of recidivism access to the site may be refused.

2.5 Working times

The Umicore Hoboken site is accessible from Monday to Friday from 6:00 to 22:00 hours. Works outside of these times have to be applied for, reported to and approved by the Umicore site supervisor and be recorded in Onyx One.

We emphasise that contractors have to keep to all legal regulations, including those concerning the maximum number of working hours per day/week.

Umicore permits a maximum of 12 hours' presence per working day on the site. In addition, there should be a minimum of 11 hours' rest per 24 hours and minimum one period of 35 consecutive hours' rest per week. If deviations are desired, they should first be reported to and approved by Umicore management, Umicore's IDPBW and/or the competent authorities. This can only occur in case of securing the installation or mitigating an environmental incident.

3. Safety on the site

3.1 Evacuation alarms – Emergency exits

There are two kind of evacuation alarms in the departments:

1. Local service alarm with in-house evacuation
 - This has a pulsating tone.
 - All works have to stop and everybody goes to the evacuation location.
 - Evacuation locations have been defined per department and are communicated at registration.
 - The intervention leader's instructions have to be observed.

2. General service alarm with full evacuation
 - This is a continuous tone.
 - All works have to stop and everybody goes to the evacuation location.
 - Everybody goes to one of the four official evacuation locations on the site.
 - The intervention leader's instructions have to be observed.

In addition, there is also a general plant alarm whereby the signal is transmitted by the plant siren (and speaking siren). The evacuation is identical to that of a general service alarm.

If you are in a vehicle, put it on the side of the road, stop the engine, close the windows and turn of the fan. Wait for the arrival of the intervention team.

Every first Thursday of the month there is an alarm test.

If a contractor's employee notices a local fire, he promptly warns an Umicore employee in the immediate vicinity or calls the in-house emergency number 6300, or with a mobile the number 03 821 63 00.

There are Umicore extinguishing agents at various locations on the site. Every individual can use them in case of emergency, but only if the person in question has the necessary knowledge about their use. The individual undertakes to always report the use of this extinguishing agent to the Umicore site supervisor.

Emergency exits are indicated at various locations. The contractor's employees, on entering a building, undertake to always verify what the regulations are and where the emergency equipment (extinguishing agents, emergency showers, eye rinsers, etc.) and the gathering place in case of evacuation are located.

3.2 Zoning

The entire site is divided into four different zones:

On entry of each department these zones (except for the neutral zone) are indicated on a map with associated required PPE.

Neutral zone: no hazard, so no additional protection required.

- Car park, central administration, zone from gate A-gate B to Pevo, laboratory turnstile to laboratory entrance
- Closed shoes and fluorescent vest or coat mandatory

Green zone: limited hazard

- Closed shoes and fluorescent vest or coat mandatory

Orange zone: hazard present, so standard PPE

- Cover arms and legs (working clothes)
- Helmet, safety glasses and safety shoes mandatory
- In certain circumstances: dust mask, earplugs (as indicated)

Additional PPE according to the permits

- Cover arms and legs (specific working clothes)
- Helmet, safety glasses and safety shoes mandatory

3.3 Use of materials by the contractor

For all products brought in (hazardous products and preparations) the contractor has a recently updated European SDS (Safety Data Sheet). These products and their SDS are listed beforehand and sent to the Umicore site supervisor and Safety Department to enable assessment of the risks and to discuss any adjustments.

3.4 Use of approved work equipment

The contractor has to submit a recent inspection report for electricity distribution boards (not more than 1 year old) from an approved inspection institution before the former are connected with the Umicore electricity supply. As regards the electricity board, the contractor will take into account the fact that the general grid within the site is an IT grid without distributed neutral conductor.

Work equipment has to comply with all legal and regulatory stipulations on the subject. They have to be used in safe conditions. When work equipment is brought in which has to be inspected regularly by an approved institution, a recent inspection report without infringements has to accompany the equipment. This is also valid for hoisting equipment and accessories, ladders, scaffolding.

4. Personal hygiene and well-being

4.1 Work clothes

The contractor provides appropriate work clothes for his employees in accordance with the risks of the work to be executed and the risks Umicore communicated to him.

In any case the contractor ensures that his employees' forearms and legs (long trousers – long sleeves) are protected at all times and that they wear safety shoes (type S3).

The contractor also provides his employees with high-visibility (fireproof if required) clothing (slipover or actual clothing - preferred colour orange). This is always worn during movements within the site.

Preferentially – but certainly in case of dirty work - the contractor provides a work coverall or similar work clothes worn over normal clothing that can be removed when his employees want to have their meals.

4.2 Use of Umicore facilities

The dressing rooms and showers are available to all employees at the Umicore site (contractors have to shower in Pevo bis). The lockers are allocated by staff from Personnel Provisions Department. All contractors/temporary workers can obtain a personal locker, provided that they pay a guarantee of € 10. Everyone in the building has to adhere to the guidelines of the departmental staff. Umicore makes these facilities available and therefore expects everybody to take care of them.

The contractors can also use the recreation rooms.

4.3 Eating and drinking

Eating and drinking are not allowed at the workplace or in vehicles.

Money can be loaded onto the access badge to pay for drinks, food and sweets from the vending machines. At the end of the works the balance can be recovered via Personnel Provisions Department.

The contractors' employees will get access to the canteen in the personnel provisions building at gate B, open 24/7, and to the warm mess at gate A, Monday to Friday from 10:30 to 13:30 and 17:00 to 18:30 h.

During standstills we ask you not to use the canteen from 11:30 to 12:45 h to avoid large crowds.

The contractors' employees have to keep to the customary rules for proper behaviour and hygiene and observe the following agreements:

- Wear dust-coats in the canteen
- See to personal hygiene
- Always use trays
- Wear shoe covers over work shoes

Nobody can enter the canteen with soiled clothing; this clothing always has to remain outside the canteen. The contractor's employees can take hot or cold meals in the mess for an adapted price. Rolls and soup are distributed at the same prices.

4.4 Use of personal protective equipment

Wearing the required personal protective equipment (such as helmet, glasses, safety shoes) is always mandatory when executing works that are explicitly mentioned on the work permit and on locations where it is indicated by local signs or pictograms.

Umicore takes care of safety, health and environment. Correct use of PPE is very important in this context. As a rule it is the contractor's responsibility to make available the correct **standard* PPE** to his employees. Only in exceptional cases this PPE can be supplied by Umicore.

If in exceptional cases the contractor does want to use PPE from Umicore, it will be charged to the contractor.

The current Umicore tariffs will be charged, which consist of a direct-costs section and an indirect-costs section.

PPE will be invoiced on a six-monthly basis (January & July).

***Standard PPE** means: helmet, glasses, P3 dust mask, work gloves, work suit and safety shoes

Standard PPE	Description	Standards
Shoes	High safety shoes (S)	EN ISO 20345:2011
Glasses	Safety glasses (mechanical risks)	EN166: 2001
Work suit	Flame-retarding work suit	EN ISO 11612:2008
Helmet	Safety helmet (Thermoplast or Duroplast)	EN397
Dust mask	FFP3 mask	EN149:2001
Gloves	Leather work gloves	EN388:2003

Umicore supplies the PPE for company-specific risks. They are always mentioned on the work permit.

4.5. Risk prevention

Accidents, first aid and near misses on the site have to be reported to Umicore's IDPBW via the Umicore site supervisor. In every case an investigation has to be carried out in cooperation with Umicore staff (site supervisor and/or IDPBW) and Umicore has to be notified of the prevention measures taken.

In compliance with the stipulations of the Royal Decree dated 24 February 2005, in case of a serious accident as described in the RD the contractor undertakes to call on cooperation of the Umicore prevention department for the accident investigation. These accident reports have to be submitted to the Directorate General for Supervision of Occupational Well-Being – supervision of chemical risks department.

4.6 Health

The involved contractor's company physician can always contact the Umicore company physician for consultation concerning the specific medical follow-up during the works.

The Company Medical Department is located near gate B.

On the basis of their medical examination card the contractor's employees have to be able to prove that they are medically fit for the work to be executed. For example, drivers of mobile vehicles and attendants of cranes and hydraulic lifts have to be able to prove their suitability. The medical examination card must not be more than one year old.

Depending on the nature and the duration of the job, additional targeted examinations can be performed by Umicore's Company Medical Department. Umicore can take this decision at any time and inform the contractor, e.g. during the discussion of the task-risk analysis. The contractor's company physician can ask for the results of the examination via the Umicore company physician at all times.

In case of accidents or illness in working time the contractor's employees have to go to Umicore's Company Medical Department. There the required measures for care and/or treatment of the injuries will be taken. If necessary the contractor's employees are referred to their general practitioner and/or a hospital.

4.6.1 Biomonitoring

Umicore's Company Medical Department may carry out a biological monitoring campaign on the basis of the works planned.

All employees deployed for a safety-critical task (determined beforehand via Task Risk Analysis) will undergo extra screening for metals (As, Pb) in urine and/or blood:

- before the works start
- during the works: at the end of the task that took several days or at the end of each working week (always at the end of a shift)
- after the works have been finished and before leaving the site

For biomonitoring employees present themselves at medical department in clean condition and tidy clothes.

Umicore will bear the costs of all laboratory tests, provided that the employees involved take part in the entire process (before-during-after). In case of refusal to participate in part of the whole process, the costs for the entire process will be charged to the employer of the individual concerned.

People who refuse to take part in the screening will be removed from the site/works site.

The following threshold values will be used in assessing the blood and urine analyses:

- lead in the blood: PbB 30 µg/dl
- arsenic in the urine: AsU 30 µg/gCr

Employees whose threshold values are exceeded during the works will – either or not temporarily – be removed from the works site in consultation with the contractor's site manager.

The contractor's company physician will be notified.

For that reason any enterprise executing works on the works site on behalf of the contractor will communicate the details of the former's company physician to Umicore before the works start.

The Umicore company physician will only use the anonymous group laboratory results to evaluate any preventive measures.

The contractor undertakes to communicate any exposure risks to his company physician, so that the latter can thoroughly screen the contractor's employees beforehand.

5 Safety at work and on the works site

5.1 Start-work meeting/risk analysis

Before the start of the works the contractor will (as legally obliged) draw up a written risk analysis of the works to be executed. In it the contractor will define which preventive measures have to be provided to execute the works in a safe way. In his risk analysis he will also incorporate the specific risks at the workplace and associated measures regarding first aid, fire fighting, evacuation and any additional medical check-ups.

This risk analysis and the planned preventive measures will be send digitally to the site supervisor and prevention department: contractor.hoboken@eu.umicore.com. The Umicore site supervisor will evaluate these and ask for any adjustments.

For major works the contractor will be invited to a general introduction meeting before the start of the works. Depending on the size of the project or the work to be executed IDPBW, Environmental Management Department, project engineers, site supervisors and the contractor's corresponding departments may be invited. At this meeting the practical agreements about safety, health and environment will be discussed and laid down.

It is the contractor's task to inform his employees of the agreements concluded, the specific Umicore risks and associated safety measures. The Umicore site supervisor and IDPBW are obliged to verify – by means of random samples – whether this actually happened.

5.2 Employees reception

The Umicore site supervisor will accompany the contractor from the entrance to the workplace and again briefly explain the general safety agreements. If the contractor works with varying employees, Umicore will only see to the initial reception. The changed personnel has to be received by the contractor's site supervisor. If subcontractors are called in, the contractor's site supervisor also has to see to the reception. At the workplace/works site the specific risks, safety measures and practical agreements will be gone through and discussed in a work start-up meeting/toolbox. An example is available in Annexe 6.1. Afterwards all contractor's employees sign the form and thus declare to have understood all general and specific agreements concerning safety, health, hygiene and environment and will strictly comply with them in executing the works. A copy of this form is given to the site supervisor. Any additional costs because of the time devoted to the introduction meeting and/or work start-up meeting must be clearly described in the price quote, but cannot be invoiced afterwards anymore.

The specific reception occurs per work site or workplace where contractor's employees are working. Without the approval of the Umicore site supervisor and without a new specific reception the employees cannot be employed on a different work site.

To avoid misunderstandings it is important that communication on safety agreements occurs in a language that everybody understands. This means that at least the contractor's person in charge/site supervisor preferably has command of the Dutch or English, French or German language. He is responsible for ensuring that all his employees and subcontractors are instructed in a language they understand.

5.3 Work-site layout and work-site fence

If use of the facilities is not required, the contractor sees to the infrastructure to be legally provided for his own and his subcontractors' employees. The infrastructure also comprises a canteen, toilet facilities and dressing room. The location and size of the work-site layout are determined in consultation with the Umicore site manager. All site infrastructure must have been inspected according to the legal obligations. The way in

which electricity, water, toilet facilities and telephone are connected and the sharing of the costs are discussed beforehand with Purchasing Department and the Umicore site supervisor.

Every work site will be provided with a sound lockable fence, unless otherwise agreed with the Umicore site supervisor. If barrier tape is used, it will always be of the 'red-white' type.

Without explicit prior written approval of Umicore, no activities are allowed on Umicore sites beyond the contractual context between Umicore and the contractor.

5.3.1 Work zones

Work zones are zones in which logistic activities are executed by the department's own staff and the associated transport, therefore there is only work traffic. This work zone can only be accessed by people and vehicles required for the operations.

Third parties can execute works in a work zone provided that:

- there are correct agreements with the Umicore site supervisor
- the work zone is clearly demarcated in the operational area
- a reflecting vest is worn

5.3.2 Blocking passageways

Adapted demarcation, consisting of fencing/planks/chain/cones, etc., is required for all works. It must always be provided by the contractor.

If in fitting out the work site or in the course of the works the passage for pedestrians, cyclists or vehicles is blocked, it has to be discussed with the Umicore site supervisor and the Umicore person in charge of traffic safety (03 821 64 09) in order to install the necessary rerouting. Closing a passageway without clear signage is not allowed; the signage indicates a safe alternative route.

5.3.3 Permanent use of the areas (contractor park)

In consultation with Umicore areas can be occupied permanently to organise the activities. Installing containers and closed work spaces have to be agreed with the person in charge at Umicore. The contractor personally assumes responsibility for his equipment and for locking the work spaces. Utilities are supplied by Umicore.

The equipment has to be stored and the work equipment organised according to the 5S principles. The person in charge at Umicore will regularly audit the area in accordance with these principles.

The contractor park contains the necessary toilet facilities for the contractor's employees. Every contractor will participate in checking these facilities on a rotating basis. Defects or problems can be reported to the Umicore person in charge at any time.

In the contractor park a recreation room for the contractor's employees was set up as well.

5.4 Behaviour on the work site

5.4.1 Safety supervision

The contractor is fully responsible for safety supervision during the works. We expect the contractor to adjust and report unsafe situations or actions. If in check-ups by Umicore deviations are found, Umicore will intervene and it will be immediately reported to the site supervisor.

5.4.2 Follow-up of the works by the Umicore site supervisor

The contractor has to take into account all preventive and corrective instructions from the employees in charge. This cannot result in additional costs for Umicore. If various companies are executing works at the same time, a Umicore employee is assigned beforehand as coordinator who controls the overarching planning.

5.4.3 Reporting duty

Before the start of the works the contractor has to report to the department concerned. Here he will be registered in the departmental reporting register. This results in a clear overview of the works in the department with the external staff present. After finishing the work/or on leaving the department he has to get signed out. Before signing out, it is the contractor's responsibility to undertake the necessary steps to leave the work site behind in an orderly and safe way.

5.4.4 Permits for the works

No work at all can be started by a contractor without the required permits. Before the works are started, the permit is signed by all parties involved. The conditions of the permit should be strictly observed. The permits have to be at the location of the works at all times. A permit is only valid for the works mentioned, the dates given and maximum one team shift. If the circumstances change during the works, a new permit has to be applied for.

The potential permits are described below:

1. Works permit

This permit is issued by the department, at the reporting location, and guarantees safe execution of work on machines, installations or installation components. It contains a list of the necessary measures that the executors have to comply with (such as devices to be locked, according to the current procedure). In addition this permit also contains a Last Minute Risk Analysis, a last safety check that has to be filled in on site just before the works start to prevent unexpected risks. The permit has to be signed by all employees.

For high-risk works the LMRA will be filled in on site together with the department.

2. Fire permit

This permit lays down the conditions in which flammable work can be executed and is part of the works permit.

3. Access permit

On the one hand this permit describes the safety measures to access a confined space and on the other hand it imposes the measures to be taken. Beforehand a TRA (Task Risk Analysis) must always be drawn up. The manhole security has to report to the in-house fire brigade (personnel provisions) at every start of his shift.

4. Excavation permit

This permit describes the procedure to enable safe excavation works, without damaging underground conduits or electricity cables.

5.4.5 Working on own installations

No works permit has to be applied for when working on the contractor's own machines, installations or components of installations at Umicore. However, it can only occur if there is no impact for employees or installations. Subcontractors who execute these works are enrolled as visitors and are under permanent supervision and responsibility of the contractor himself.

5.4.6 Working at height

For all works higher than two metres shields have to be used. Scaffolding must be in regulatory order. For construction use has to be made of the "Umicore standard for scaffolding", which can be obtained on request. Scaffolding has to be re-inspected every week and for all scaffolding it is required that a (standard) calculation note can always be presented. During scaffold construction and dismantling a harness belt must be worn. No adjustment whatsoever (even temporarily shifting a plank) can be performed by unauthorised persons. At every access it is the employee's responsibility to check whether the scaffold has been inspected and is in good condition.

Work on ladders is forbidden. They can only be used to bridge differences in height. If there are no alternatives, this has to be first approved by Umicore's Prevention Department.

When using aerial work platforms/articulating/scissor or telescopic lifts it is always mandatory to wear a harness belt. Transferring from an aerial work platform is not allowed. If there are no alternatives, this has to be first approved by Umicore's Prevention Department.

When a scissor lift or aerial work platform is used, the work zone has to be demarcated with traffic cones. When the scissor lift or aerial work platform is moved, signage always has to be checked/moved. It is not permitted to block passageways (see point 5.3.2).

During hoisting it is the rigger who guards the risk zone and stops unauthorised persons.

5.5 Waste disposal

It is the contractor's duty to take care of tidiness and order on the work site.

If the various contractors are present on the work site at the same time, the contractors will discuss with each other how they can jointly see to tidiness and order.

In case of non-compliance with tidiness and order, Umicore can have the work site cleared for the account of the contractor in question.

5.5.1 Demolition work

In the price quote it will be clearly described which materials can be recycled and taken away by the contractor. The price setting for the work takes this into account.

On acquiring waste products, he will assume full responsibility from the moment the products are loaded on to his vehicles (or those of his subcontractors). He personally takes care of any required dumping formalities.

5.5.2 Construction/renovation work

Here the same principles apply as for demolition work.

The contractor producing waste is personally responsible for its removal. For longer-term works the contractor sees to the installation of containers for selecting various small waste products (canteen waste, wood waste). All associated costs are for the account of the supplier. All packaging materials have to be recycled by the contractor in conformity with the applicable stipulations. If desired, Umicore can take care of scrap removal.

The use of hazardous products has to be reported to the Umicore site supervisor. (see also point 3.3).

On condition of consultation with the Umicore site supervisor, disposal of stone rubble and soil can be done at an indicated location within the plant or at the landfill site.

No waste material whatsoever can be buried in the ground.

5.5.3 Painting work

The contractor personally ensures removal of all residual materials (blasting grit, diluents, empty paint packaging, brushes, etc.).

If possible a solution will be sought for special desires (request via Umicore site supervisor).

5.5.4 Disposal of waste outside of the company

For the disposal of waste material or scrap the transporter always has to have a fully completed disposal form issued by the Umicore site supervisor on the advice of the environmental coordinator. Disposal is covered by the OVAM regulations concerning the reporting duty.

Only in writing can the environmental coordinator allow exceptions to these general stipulations.

5.5.5 Final clearing of the work site

At the end of the assignment all site rooms and residual materials brought along by the contractor are cleared. Discarded materials will be treated as waste or scrap. The resulting supplementary costs will be invoiced.

5.5.6 Water-pollution prevention

No other liquid products (e.g. oil products, organic fluids, diluents, etc.) can be poured into the in-house sewer system.

Spilled fluids (oil, fuel oil, etc.) on hardened surfaces have to be cleared straightaway with absorbent material (so no flushing into the sewer). The absorbent material can be obtained from the Umicore site supervisor.

5.5.7 Air-pollution prevention

It is strictly forbidden to burn anything whatsoever on the work site.

The discharge of combustion gases from heating appliances for work-site rooms etc. has to occur at minimum 1 m above the surrounding work-site rooms.

The exhaust gases from vehicles and other machines have to comply with the legal stipulations.

Idle running of the engine (vehicles) is not allowed.

5.5.8 Soil-pollution prevention

Spilled products that may cause soil or ground-water pollution must be cleaned immediately. Via the Umicore site supervisor these incidents have to be reported to the Environmental Management Department.

5.5.9 Noise-nuisance prevention

The contractor undertakes to strictly observe the existing legislation relating to noise nuisance caused by building-site machines (e.g. the RDs dated 1/7/86).

Activities causing noise nuisance are forbidden from 19:00 to 7:00 h.

5.5.10 Repairing damage to roads and gardens

Before breaking up roads or gardens for the agreed works, the contractor will contact the site supervisor well in advance to discuss who does what and when.

On closing the site the roads and gardens have to have been restored.

5.5.11 Use of the waste recycling centre

The waste recycling centre can be used for removing waste. It should always be applied for at the Pevo services field coaches.

During standstills additional containers can be installed. Applications should go via the work planner.

6 Annexes:

6.1 Work start-up meeting

