Overview of IFC’ scope of review

IFC’s environmental and social review of this project included:

- Discussions with Novomet management at their head office in Perm to review environmental, health, safety (EHS) and labor practices
- Site visits to the electric submersible pumps production facility in Perm as well as service bases in Nizhnevartovsk (Russia) and Cairo (Egypt)
- Visit to the site in Perm where the foundry and cable production plants will be located
- Discussions with Novomet clients in Nizhnevartovsk (Matyushkinskaya vertical) and Cairo (Petrobel)
- A review of EHS information provided in response to IFC’s environmental and social questionnaire and information obtained from follow-up discussions
- Discussions with plant and service base management (including the Chief Engineer, EHS specialists, Public Relations (PR) and Human Resources (HR) specialists
- A review of labor documentation (e.g., labor statistics, HR policies and procedures)

Project Description

Headquartered in Perm, Novomet (“Novomet”, the “Group” or “Company”) was established in 1991 by the staff of the Republican center for Powder Metallurgy Engineering and Technology. The Company is the second largest Electric Submersible Pump (ESP) producer in the Russian Federation (24% market share) and fifth largest producer globally (6% market share). ESP’s are designed to pump oil from wells that are up to 4 km deep under extreme conditions.

At the moment the Group has their own manufacturing plant (“Novomet Perm”) which is situated in Perm on two individual sites and produces various products including ESP units and water production and injection systems. An ESP typically consists of pumps, motors, protectors, gas separators, filters, scale preventers, sand traps, valves and intakes. The technological process includes mix (powder) preparation, cold pressing, details assembly; heat treatment of assembled blanks in shielding nitric-hydrogen gas environment; assembly of submersible motors, electric submersible centrifugal pumps, filters, gas separators and reservoir pressure maintenance systems; and technological equipment. Novomet Perm’s has two plants in Perm: (i) a production facility where pressing and heat treatment is conducted in Shosse Kosmonavtov; and (ii) an assembling and testing facility, located in Ryazanskaya.

Novomet channels its sales mostly through direct sales and leasing though in 2002 a service enterprise for service and repair of equipment was established. The Group provides a comprehensive set of services including routine maintenance and full repair. Currently Novomet operates 7 service centers in Russia (“Novomet Service”) in Western Siberia, Orenburg and Saratov regions and the Commonwealth of Independent States (CIS) in Kazakhstan and Azerbaijan, and there are subsidiaries in Egypt and Colombia (center for disassembly). As of May 2013 Novomet serviced 5,029 wells equipped with Novomet's equipment in Russia and CIS. New subsidiary service centers are planned for commissioning by June 2014 in Colombia, Ecuador, Argentina, Romania, Indonesia and Iraq.
The major investments are planned for Novomet's expansion, include: (a) refinancing short term debt of $30 million;, (b) working capital injection ($10m) and, (c) expansion of international service operations ($15m). Aside from the above Novomet is also planning to develop a new foundry and cable production plant in an industrial zone in Perm within 2 existing buildings. The project is in the design stage and will not be financed by IFC.

During the previous few years Novomet reconstructed the two manufacturing facilities in Perm whereby equipment has been modernized manufacturing techniques and materials have been improved.

**Identified applicable performance standards**

PS1: Assessment and Management of Environmental and Social Risks and Impacts
PS2: Labor and Working Conditions
PS3: Resource Efficiency and Pollution Prevention
PS4: Community Health, Safety and Security

**Environmental and social categorization and rationale**

The focus of the proposed investment involves expanding existing operations and the development of new foundry and cable production plants in an industrial zone. Thus this is a Category B project according to IFC’s Environmental and Social Sustainability Policy and the associated impacts and risks are limited and generally site-specific.

Key issues include: (i) the capacity of Novomet to identify, assess and manage EHS risks and impacts associated with its overseas activities and construction and operation of new foundry and cable production plants; (ii) labor and working conditions; (iii) occupational health and safety (OHS); (iv) management of wastes and hazardous materials; and (vi) exposure to radiation. Actions have been defined in the project Environmental and Social Action Plan (ESAP) to address these issues and ensure compliance with IFC’s Performance Standards and the applicable World Bank Group (WBG) EHS Guidelines.

**Key environmental and social issues and mitigation**

**Policy and Management Systems**

Novomet management has defined its commitment to continuous improvement of EHS performance in its corporate quality and HSE policy and considers these issues as part of their corporate strategy. Novomet Perm, Novomet Service (in Russia, Kazakhstan and Azerbaijan) as well as the service bases in Colombia and Egypt have developed and implemented EHS management systems certified against ISO 14001 and OHSAS 18001. EHS management systems in Mexico, Ecuador, Argentina, Indonesia and Romania are being developed currently and Novomet has prepared detailed action plans for each international service base. In accordance with these plans Novomet aims to complete ISO 14001 and OHSAS 18001 certification audits for these operations by the end of 2013. Furthermore, Novomet will develop and implement EHS management system for its planned foundry and cable productions plants aligned with ISO 14001 and OHSAS 18001. In respect of quality, all Novomet’s products are ISO 9001-certified.

**Identification of risks and impacts**

The regulatory requirements of the Russian Federation stipulate conditions and procedures for Environmental Impact Assessment (EIA) including a definition of projects that are subject to EIA’s. Novomet has undertaken an EIA for the new foundry and cable production plant in accordance with Russian legislation requirements and this EIA has been submitted for
approval to the authorities. An EIA for the service base in Cairo was developed and approved by local authorities some 6 months previously.

Based on its internal EHS management systems and associated procedures Novomet Perm and Novomet Service have carried out a detailed identification and assessment of EHS risks and necessary mitigation measures have been defined accordingly. Subsequently, annual EHS plans are developed to support adequate implementation of the EHS management systems. For further enhancement of EHS risk management the Company will undertake similar identification of EHS risks for international service bases and EHS mitigation measures and plans will be prepared accordingly.

**Emergency Planning**

Visited facilities have firefighting equipment in place and fire response teams have been trained. The facilities are designed in accordance with the recommendations of the local Fire Protection Regulations. All buildings were noted to have emergency routes and exits, fire extinguishers, hydrants, smoke detectors and alarms, as appropriate.

The plants have to comply with a detailed system of regulatory requirements on emergency response and have detailed documentation supporting their approach to emergency preparedness and response. In addition, Novomet has developed an internal procedure on actions of employees in case of industrial incidents and emergencies. A Fire Protection and Emergency Response Procedure was available at visited sites and includes documentation on various potential fire emergency situations and work instructions on fire protection. Internal fire drills are carried out regularly. Similar Fire Protection and Emergency Response Procedures will be developed and implemented for Novomet’s foundry and cable production plants.

**Organizational Capacity and Competency**

EHS personnel have been appointed in all Novomet facilities and EHS staff of Novomet Perm support Novomet Service by means of regular visits and overall guidance on EHS issues. Currently, international service bases are unsupported by the broader group and are self-sufficient in terms of day-to-day EHS management.

Each Novomet plant employs an EHS specialist responsible for permitting, supervision, reporting and monitoring activities. Internal and external training of employees on environmental aspects and OHS hazards are conducted on a regular basis. External training of employees in charge of EHS management are budgeted on an annual basis and conducted in accordance with the plan. Service bases in Russia and CIS reports to Novomet on implementation of EHS plans, wastes generated and disposed, accidents, injuries and fatalities. As referred above Novomet will develop EHS procedures for its overseas locations and reporting on EHS performance of service bases and its contractors will be addressed accordingly.

To further strengthen its EHS practices, Novomet will appoint a corporate EHS manager with responsibility and authority for all EHS matters across all overseas operations. This will ensure sufficient management support and resources to support EHS management at the level of the overseas subsidiaries allied to a consistent approach to such.

**PS2: Labor and Working Conditions**

*Human recourses policies and procedures*

Currently the Group employs approximately 4,530 employees. About 62% of employees are employed by Novomet Perm and 35% by Novomet Service in Russia and CIS, while 120 employees are employed by the overseas subsidiaries. More than 30% of Novomet
employees are female. Hiring is conducted in accordance with the national labor law. Novomet Perm and Novomet Service have internal procedures specifying employee rights under national law on hours of work, compensation and wages. In addition, the Corporate Code of Conduct stipulating key principles on non-discrimination and anti-money laundering has been established. Novomet (Egypt) has developed a subsidiary level HR Policy to ensure compliance with local law. The Group will also develop HR Policies for its Russian and overseas operations to specify rights of employees consistent with PS 2 (including but not limited to non-discrimination and equal opportunities, rights to form labor unions, labor rights in case of retrenchment), and establish a grievance process to provide alternatives for employees to raise concerns other than to immediate supervisors; once established, this process will be formally communicated to all employees. In addition, the HR policies will address HR related issues associated with management of contractors to ensure its compliance with PS2 requirements.

Retrenchment
Implementation of the Novomet investment program will not cause any staff number optimization which could result in job losses. Nevertheless, the Group will develop the Corporate HR Policy and will address approach to be followed in case of retrenchment as referred above.

Occupational health and safety (OHS)
Russia and CIS countries have a very comprehensive OHS legislative system and the Novomet Perm and Novomet Service implement various mitigation measures to ensure compliance with this. The OHS organizational structure is centralized for all operations in Russia and CIS countries, while OHS organization in overseas facilities is decentralised. A labor protection engineer is appointed at each facility with the main responsibility being on day-to-day support on OHS. Internal OHS inspections are carried out regularly (once a week) and compliance with OHS requirements is considered when reviewing worker bonuses. A medical station has been equipped in Novomet Perm and is open 8 hours per day; in addition first-aid kits are available in workshops and service bases. First aid training is provided to Novomet workers on regular basis by the medical station employees.

Key OHS hazards of the Group activities are mainly associated with traffic operations, movable machinery, work with electricity and work on oilfields. As prescribed by Russian law, Novomet Perm carries out attestation of workplaces once per five years. The attestation includes air quality measurements, noise, vibration, lightning and microclimate. In accordance with the conducted measurements, the major hazardous factors are lightning, noise and vibration which levels that are higher than national exposure limits. Based on measurement results additional mitigation measures are implemented and compensation is provided (including additional payments, extra annual leave days, milk) to employees engaged in potentially harmful activities (information on compensation is available in workshops). To further improve its OHS performance Novomet will develop OHS inspection checklists for each facility in Russia, CIS and overseas to ensure the key issues (e.g., usage of Personal Protective Equipment (PPE), safe behavior, etc.) are properly addressed and recorded during regular internal inspections.

Novomet continuously shares OHS related lessons-learned by means of publishing posters on recent accidents occurred at the client’s oil and gas fields and measures to be taken to avoid similar incidents. In each workshop there is an information display where OHS/medical/emergency contact information is published, furthermore information on actions to be taken in case of emergency is visible. Each service base in Russia and CIS reports key data on OHS on monthly basis. Such reports include detailed data on employee and contractor injuries. Novomet will further expand its current practice on OHS reporting to overseas operations.
In accordance with the legal requirements, the plants in Perm as well as service bases in Russia and CIS have developed labor protection guidelines which are prepared for each employee and regularly updated in case of any change in technological process. The guidelines include such sections as training requirements, instructions on work commencement, workplace conditions, requirements on usage of PPE and actions in case of emergency and fire. Novomet will carry out internal inspections to identify areas where additional signs on usage of PPEs are required and display such signs where required.

Most of the protective measures implemented by the plants and service bases are focused on the use of PPE and proper training of employees in order to ensure tasks are carried out in a safe manner. Training in OHS is strictly regulated by the Russian and CIS legislation. There are various regulations that set requirements for initial, regular (internal and external) and job specific training. New employees receive initial basic health and safety and fire protection training. Regular OHS training covers various issues including the storage and handling of flammable materials, lifting operations and working at heights. Personnel, working with hazardous materials, are subject to annual HSE training, testing and briefing (once per three months). In addition, personnel involved in installation/ maintenance/ dismantling of ESPs at oil fields are required to follow the EHS rules of relevant clients.

Occupational accidents and incidents are reported to the country authority by the Group. Novomet Perm and Novomet Service maintain an accident log and investigate all accidents as prescribed by law. The lost time injury frequency rate at Novomet Perm is 0.89(per 1 million man-hours worked) in 2012 which is lower than industry benchmark (USA 2008 data for electrical equipment manufacturing - 4.0).

The Group uses suppliers and contractors on regular basis. OHS management of Novomet’s contractors is performed in accordance with the internal procedure on contractors’ management and contractors are required to be in compliance with Novomet’s HSE policy and guidelines. OHS staff are regularly invited during tenders conducted by Novomet to evaluate the extent of which OHS is addressed in tenderers. Novomet has carried out OHS risk assessments for works conducted by contractors in Russia and CIS and the implementation of mitigation measures is monitored by Novomet. In addition, Novomet monitors completion of required OHS training by contractors. For contractors and suppliers which will be involved during construction phase of its new plants Novomet will require these contractors and suppliers to include the requirement to comply with the requirements of PS 2 including that related to OHS to contract specifications.

PS3: Resource Efficiency and Pollution Prevention

Resource, Energy Efficiency and Greenhouse Gases
Novomet implements various energy efficiency initiatives such as application of power saving lighting, zonal lighting switch off, replacement of outdated technological equipment by equipment with lower power costs per production unit and thermal insulation of electrothermal equipment.

Measures aimed at resource efficiency includes application of units for recycling of liquid production wastes (lubrication oil, oil products and mixtures) which will lead to waste reduction by 80-90%.

Monitoring of energy and water consumption is performed by the Power Engineering Department. This monitoring data is used for planning of activities for reduction of resources consumption.
Based on fuel consumption by vehicles, grid electricity purchases and natural gas used for all operations, the total CO2 emissions for the company’s operations is 25,734 tons of CO2 per annum. Considering current initiatives of the Company to reduce GHG emissions, a significant increase of GHG is not anticipated as a result of the project.

A new initiative of Novomet focuses on producing energy efficient ESPs which have a higher efficiency than standard equipment. A high efficiency is achieved by using permanent magnet motors and motor and pump power reduction also decreases cable and surface equipment losses with general current reduction.

**Air emissions**

Significant air emissions at the Novomet's facilities are mainly associated with metal shaping, thermal treatment, surface preparation, metal coating, and painting operations. The major types of air emissions are dust, NOx, carbon monoxide and ferrous oxide. Novomet has equipped its facilities with air filtration systems (e.g. cyclones) where relevant. Novomet is planning to further strengthen its approach and monitor quality of atmospheric air in waste storage locations in 2013. Ambient air quality is regularly monitored by authorities and national limits are not exceeded. The compliance information for Novomet's operations is based primarily on calculated emission levels and ambient air quality at the edge of the buffer zone. As per the ESAP regular monitoring of air emission levels at point sources of significant process emissions will commence and remedial measures will be identified for those which are not meeting the WBG EHS Guidelines.

**Waste Management and Hazardous Materials Handling**

Novomet has obtained all necessary permitting documents for wastes handling. Wastes are collected separately (solid wastes, industrial wastes, liquid wastes and medical wastes). Most industrial waste streams such as metal scrap, used oil and paper are recycled. None recyclable solid waste streams such as oily cloths, oily contaminated sand, domestic and construction wastes are disposed at licensed landfills. Wastes from the respective departments are transported to specially equipped area for wastes storage. From this area wastes are transported to special organizations for further neutralization, recycling or disposal as applicable. Used oil, solvents and waste paper are collected by specialized companies and transferred for further processing. Used lubrication fluids, detergents, containing oil products are recycled by separation of water and dissolved substances with distillation/evaporation. As a result the volume of liquid wastes has reduced by 80-90% and the distillate is used for production of new lubrications. Hazardous waste streams (e.g., used mercury lamps) are handled by licensed contractors. The HSE department records wastes handling flows and such data is used for planning of activities on reduction of wastes volume. Persons in charge of wastes handling are assigned in each department and they have obtained certificates for handling of wastes and keep records on wastes generation.

Equipment of wastes storage locations though does require further modernization such ensuring appropriate containment development. Novomet will further improve its waste management practice and develop and implement wastes management procedures for its production plants and service bases in Russia, CIS and overseas aligned with the WBG EHS Guidelines.

Diesel (stored as a reserve fuel as required by law) is stored in an aboveground storage tank and bunded. Hazardous materials (e.g., paints, solvents) are stored in small quantities in leakproof containers with a nameplate in workshops. Safety certificates, containing information on implementing applicable measures on occupational safety are considered when developing internal safety guidelines. Special containers for storage of spills are installed in warehouses. To formalize the above Novomet will develop and implement procedures on hazardous materials management aligned with the WBG EHS Guidelines.
**Hydrology, Water consumption and Wastewater Management**

None of the Novomet production facilities are water intensive, except for the metallurgical operations, though these use closed loop cooling systems to reduce the water usage. Water is supplied via the municipal systems in the areas where the facilities are located.

Sanitary wastewater from the production plant and some Russian and overseas service facilities is disposed of via the municipal waste water treatment system sometimes together with the limited industrial waste water from production. Novomet Perm carries out frequent analysis of its waste water before it is delivered to the municipal treatment facilities to ensure it is within the norms these facilities can accept for treatment. Discharge limits for treated waste water in Russia is more stringent than that defined by the WBG EHS Guidelines. Novomet Egypt collects industrial wastewater in septic tanks on-site which are planned to be further collected by external service providers.

Novomet will develop and implement wastewater management procedures for all locations equipped with on-site wastewater storage tanks.

**Radiation**

At some Novomet service bases radiation from ESPs is detected as a result of transference when in the field. Once radioactive material is detected, an authorized agency comes to collect and dispose of the radiated material. Novomet will develop a corporate level procedure in respect to handling of radioactive equipment aligned with the WBG EHS Guidelines.

PS4: Community Health, Safety and Security

In accordance with Russian legislation various industrial facilities with potential negative environmental and health impact need to be separated from residential areas with sanitary protection zones (SPZ). In compliance with these requirements the location of residential and recreation areas within a SPZ is prohibited and the concentrations of pollutants at the boundary of a SPZ is not to exceed the ambient air quality standard concentrations which are more stringent than the WBG EHS guidelines. Reportedly, Novomet is in compliance with these maximum permissible concentrations though this is to be confirmed via the emissions monitoring to be undertaken as defined above. The dimensions of the SPZ are equal to 100 meters for production plants in Perm and no residential buildings are located within the SPZ of Novomet. Service bases are located in industrial zones with no residential areas in close proximity.

Security at Novomet facilities is provided by unarmed guards.

The Group will establish methods for control and communication of environmental and social aspects associated with current operations and in doing so develop a Stakeholder Engagement Plan (SEP) for its activities. The SEP will also define the approach to communications associated with development of new service bases and include a community grievance mechanism to be applied at all operations.

**Clients Community Engagement:**

Novomet is one of the largest employers in Perm and has been sponsoring various social events in the city. Novomet cooperates with charity organizations and provides supports for children with severe diseases. Furthermore, the Company supports kindergartens, veterans of wars, schools and sport activities.

**Local access of project documentation**
This Environmental and Social Review Summary document and companion ESAP will be made available on the World Bank’s Info Shop and will be published in Russian on the corporate web-site of Novomet at www.novomet.ru. In addition, the documentation will be available at the Novomet facility in Perm. Novomet will also publish an advertisement in a local daily newspaper providing notification of the availability of the documentation for review.

Also, for more information, enquiries and comment about the Project and local access of documentation please contact:

Polina Plotnikova
Novomet
395, Shosse Kosmonavtov
614065 Perm Russia
Tel.: +7 342 299 75 99
Email: plotnikova@novomet.ru