



First Uranium Corporation

NEWS RELEASE – April 21, 2008

FIRST URANIUM TO BUILD ACID PLANT TO SECURE FUTURE SUPPLY OF SULPHURIC ACID FOR ITS URANIUM PLANTS AT REDUCED COSTS

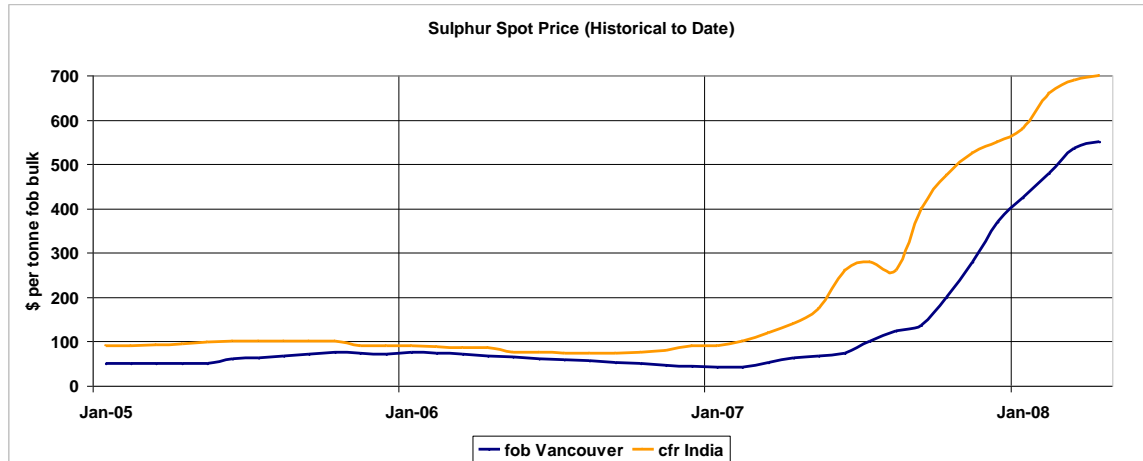
All amounts are in US dollars unless otherwise noted.

Toronto and Johannesburg – First Uranium Corporation (TSX:FIU, JSE:FUM) (ISIN:CA33744R1029) (“First Uranium” or “the Company”) today announced that, it will purchase and install an “off the shelf” acid plant to produce sulphuric acid to reduce the future costs and secure supply of acid required for its two uranium and gold mining projects in South Africa, the underground Ezulwini Mine (“Ezulwini”) and the Mine Waste Solutions tailings recovery project (“MWS”). At a projected cost of \$124 million, the acid plant will be installed at MWS, located in the Western portion of the Witwatersrand Basin approximately 160 kilometres South-West of Johannesburg. Based on an analysis of pyrite feed-stock potential from the MWS tailings dams, a preliminary technical assessment and a recent market analysis, the Company expects that it will take 19 months to procure and commission the acid plant with anticipated production beginning in January 2010. The company has secured its initial requirements for sulphuric acid in a market where acid supplies remain very tight. The company anticipates significant acid price increases that are expected to continue in the medium term, as acid prices are closely related to the market for sulphur which is also indicating tight supply and significant price increases.

RATIONALE

Reduced availability of electrical power in South Africa has caused cutbacks in the operation of smelters and other facilities that produce sulphuric acid as a byproduct. The reduced supply of acid, increases in the cost of elemental sulphur (which is used to produce acid) and increased demand for acid in the base metal sector and for fertilizer production have led to rapidly increasing global acid prices. The Company has assessed and confirmed the economic viability of constructing an acid plant to provide the required sulphuric acid for its operations to mitigate the effects of supply constraints and rapidly rising costs for acid.

Graph 1: SULPHUR SPOT PRICE COMPARISON



Notes for the Graph 1 and Tables 1 and 2:

- 1) 'fob' means "free on board" and indicates that the quoted price includes the cost of loading the goods into transport vessels at the specified location
- 2) 'cfr' means "cost and freight" and indicates that the cost of the goods and freight charges are included in the quoted price; while the buyer arranges for and pays insurance
- 3) as South Africa is a net importer of sulphur, local suppliers practice import parity pricing with industry recognized benchmark prices as shown

The long-term global outlook for the sulphuric acid ("H₂SO₄") market is based upon information from sulphur industry research and is primarily driven by the spot price for sulphur.

Table 1: INTERNATIONAL ACID PRICE FORECAST

	2008 \$/tonne	2009e \$/tonne	2010 – 2015e \$/tonne	2015-2020e \$/tonne
Tampa (cfr) consumer	250	175	80	80
Houston (fob)	260	175	80	80
Average H ₂ SO ₄ price	265	175	80	80

The forecast acid prices exclude the \$90 per tonne cost of transport from the South African port of entry to the Company's mining operations. Due to new uranium mining activity in this region, there is increasing local demand for sulphuric acid. This demand can only begin to normalize once additional acid plants have been commissioned.

Table 2: DELIVERED ACID PRICE FORECAST

Forecast	2008 \$/tonne	2009e \$/tonne	2010 – 2014e \$/tonne	2014-2020e \$/tonne
Average international H ₂ SO ₄ price -- fob Richards Bay, South Africa	260	175	80	80
Transport	90 ¹	90 ¹	90 ¹	15 ²
Total cost modeled	350	265	170	95

Notes:

- 1) Transport costs ex Richards Bay, South Africa
- 2) Assumes that enough local acid production will have started up by 2014 to reduce transport costs

Future price projections in South Africa, which indicate sulphuric acid costs ranging between US\$330 and US\$600 per tonne, have not taken into consideration acid demand at new mining projects, such as MWS, which will come on stream in the near term and approximately represent an additional 15% of current market acid supply.

Even assuming more conservative increases in acid costs, the Company expects that its investment of \$124 million in an acid plant, on its own, will have an internal rate of return (“IRR”) of 6%, an NPV of \$28 million and a payback of 11 years. The low-cost acid produced by this plant will improve NPV at Ezulwini and MWS as sulphur will be sourced from current operations at no cost.

THE ACID PLANT BUSINESS MODEL

Once the acid plant is completed, the Company will direct all of the pyrite currently produced as waste at the MWS tailings plant to the acid plant for the production of sulphuric acid, which will eliminate the need to source acid from third-party vendors. Since the planned production of the acid would be more than sufficient to supply both Ezulwini’s and MWS’s projected acid requirements, excess acid could be sold into the market at the then prevailing market rates. In addition, as the production of acid in the plant will be an exothermic reaction, there is the opportunity to generate a by-product of approximately four megawatts of power, which will be available to augment the power supply to Ezulwini and MWS.

“We are in a fortunate position to have access to pyrite which is currently being discarded as a waste product after we have removed the gold from the pyrite flotation concentrate at MWS,” added Gordon Miller, President and CEO of First Uranium. “While we believe that we have dealt with the current electrical power supply issues in a satisfactory way, it is but one of the important issues facing mining companies today. Consistent and reasonably priced acid supply is a fundamental requirement for our operations and the decision to build an acid plant will not only secure supply and protect us from rampant acid price inflation, it will also assist with future power requirements,”

ACID PLANT

The technical parameters used for this economic assessment are based upon test work and a preliminary assessment that has been conducted by MDM Engineering (Pty) Ltd during the past five months. The specification and procurement study is expected to be concluded within eight weeks. Of potential benefit to the installation of an acid plant is the fact that Simmer & Jack Mines, Limited, First Uranium's parent company, holds an existing license to produce acid at their Buffelsfontein Gold Mine under their Old Order Mining Right, which is in the process of being converted to a New Order Mining Right.

Table 3: PROJECT SPECIFICATIONS AND ECONOMICS FOR A 600 TONNE-PER-DAY ACID PLANT

Description	Amount	Unit
Tonnes of sulphur required per month	6,200	tonnes per month
Tonnes of tailings concentrate (pyrite) required per month	24,000	tonnes per month
Tonnes of acid produced per month	18,000	tonnes per month
Total capital	124	\$ millions
Total capital cost per total tonne of acid produced	31	\$/tonne
Operating cost of acid plant per tonne of acid produced	14	\$/tonne
Revenue per tonne of acid charged to Ezulwini and MWS	51	\$/tonne
IRR	6%	%
Long-term acid market price assumed for acid plant economics	95	\$/tonne
Payback	11	years
NPV	28	\$ millions

A standard plant with a sulphuric acid capacity of 600 tonnes per day has been chosen as the preferred size specification, which is more than sufficient to meet the Company's planned acid requirements. In addition, the plant would have the flexibility to adjust the process to achieve the desired sulphuric acid production regardless of the pyrite content in the tailings, which will allow the Company to fulfill its sulphuric acid requirements despite variances in the pyrite content from one tailings dam to the next.

The Company expects there to be a healthy market into which it should be able to sell any excess acid production.

Based on the current price projections for sulphuric acid, the Company expects the acid plant to operate at an incremental cost of approximately \$14 per tonne of acid, which will be reduced by credits received for the plant's by-product of electrical power discussed on page 3. The financial impact of the acid plant has been factored in the cash flow analysis below.

BENEFIT TO THE COMPANY'S MWS AND EZULWINI PROJECTS

The incremental benefits to the Company's MWS and Ezulwini projects are tabled below and also reflect the required investment in electrical power generation (announced in a separate release dated April 18, 2008), the rising costs of Eskom-supplied power in future years, the construction of an acid plant, the Company's current assumptions for the projects prices of uranium and gold and the projected currency exchange rate of the South African rand and the US dollar.

Table 4: ACID PRICES AT MWS

Description	MWS			
	November 2007 ¹	April 2008 Power & Own Acid	April 2008 Acid Exposed Conservative case	April 2008 Acid Market Downside case
Average H ₂ SO ₄ price (\$/tonne)	60	73.4 ²	114.6 ³	168.3 ⁴
Operating cost (\$/tonne)	2.5	2.9	3.2	3.4
NPV (\$ millions)	505	419	375	347

Notes:

- 1) The source of the November 2007 data was the 'Technical Report on the Pre-Feasibility of the Buffelsfontein Tailings Recovery Project, located at Stilfontein, North West Province, South Africa'
- 2) H₂SO₄ : Yr1 \$266 / tonne; Yr2 \$266 / tonne; Yr3 and beyond \$34.2 / tonne
- 3) H₂SO₄ : Yr1 \$266 / tonne; Yr2 \$266 / tonne; Yr3 –Yr6 \$170 / tonne ; Yr6 and beyond \$95 / tonne
- 4) H₂SO₄ : Yr1 \$266 / tonne; Yr2 \$266 / tonne; Yr3 and beyond \$200 / tonne
- 5) Average life of mine rate to exchange Rand to US dollars = 7.53
- 6) Average acid input cost of total operating cost for MWS = 23%
- 7) Average H₂SO₄ costs are a blend of the cost of contracted acid supply and the cost of the planned acid plant

Table 5: ACID PRICES AT EZULWINI

Description	EZULWINI MINE			
	May 2007 ¹	April 2008 Power & Own Acid	April 2008 Acid Exposed Conservative case	April 2008 Acid Market Downside case
Average H ₂ SO ₄ price (\$/tonne)	60	105 ²	168 ³	240.5 ⁴
Operating cost (\$/tonne)	55.6	73.35	74.3	75.4
NPV (\$ millions)	332	667	655	643

Notes :

- 1) The source of the May 2007 data was the 'Technical Report on the Preliminary Assessment of the Ezulwini Project, Gauteng Province, Republic of South Africa'
- 2) H₂SO₄ : Yr1 \$565 / tonne; Yr2 \$565 / tonne; Yr3 and beyond \$47.5 / tonne
- 3) H₂SO₄ : Yr1 \$565 / tonne; Yr2 \$565 / tonne; Yr3 –Yr6 \$ 170 / tonne ; Yr6 and beyond \$95 / tonne
- 4) H₂SO₄ : Yr1 \$565 / tonne; Yr2 \$565 / tonne; Yr3 and beyond \$200 / tonne
- 5) Average life of mine rate to exchange Rand to US dollars = 7.53
- 6) Average acid input cost of total operating cost for Ezulwini = 2.5%
- 7) Average H₂SO₄ costs are a blend of the cost of contracted acid supply and the cost of the planned acid plant

Table 6: ACID PLANT ECONOMIC ASSUMPTIONS AND VALUATION

ECONOMIC ASSUMPTIONS	Unit	Mar 2011	Mar 2012	Mar 2013	Mar 2014	Beyond Mar 2014
Currency exchange rate	(ZAR/\$US)	7.50	7.45	7.57	7.57	7.57
Sulphuric acid price (Market Outlook)	\$/tonne	170	170	170	170	95
Sulphuric acid price (Market High Case)	\$/tonne	200	200	200	200	200
PRELIMINARY ASSESSMENT VALUATION				Unit	Market Outlook	Market High Case
NPV				\$ millions	28	75
IRR				%	6%	13%

“We decided, with the full support of our Board, that, given our uranium price, gold price and exchange rate assumptions, our Ezulwini Mine and Mine Waste Solutions were robust enough projects to support our decision to supply our own electrical power generating capacity and invest in the business of producing sulphuric acid,” added Mr. Miller. “Our analysis of our peak funding requirements, taking into account the construction of new acid and power plants suggests that we would be required to draw down on a credit facility, on a short-term basis, from April 2009, until sales of gold and uranium increase to completely offset our capital needs. With gold prices at or above \$900 per ounce, revenue from our near- to medium-term gold production may mitigate any needs to raise any other forms of capital.”

Technical Disclosure

Historical technical disclosure in this new release relating to the Mine Waste Solutions tailings recovery project (“MWS” and formerly named the Buffelsfontein tailings recovery project) was extracted from a technical report entitled “Technical Report – Pre-Feasibility of the Buffelsfontein Tailings Recovery Project, located in Stilfontein, North West Province, Republic of South Africa” submitted on November 1, 2007, and was prepared by Daan van Heerden, B.Sc., M.Comm., Charles Muller, B.Sc, Pr.Sci.Nat, and Johan Odendaal, B.Sc., M.Sc., Pr.Sci.Nat all of Minxcon Pty Ltd. (“Minxcon”), Treavor Pearton, B.Sc Eng PhD, FGSA and Mike Valenta, Pr Eng, B.Sc., of Metallicon Process Consulting (Pty) Ltd. (“Metallicon”) each of whom is a “qualified person” under NI 43-101 and is independent of First Uranium.

Historical technical information in this news release relating to the Ezulwini Mine is extracted from a technical report entitled “Technical Report - Preliminary Assessment of the Ezulwini Project, Gauteng Province, Republic of South Africa” originally submitted on November 8, 2006, revised on December 5, 2006, January 31, 2007 and May 9, 2007 prepared in accordance with NI 43-101 by R. Dennis Bergen, P.Eng and Wayne Valliant P.Geo of Scott Wilson Roscoe Postle Associates Inc. (“Scott Wilson RPA”) each of whom is a “qualified person” under NI 43-101 and is independent of First Uranium.

The disclosure contained in this news release relevant to their respective contributions to Ezulwini, MWS and the acid plant has been reviewed and approved by Messrs. Bergen, van Heerden, Muller, Odendaal, Pearton, Valliant and Valenta.

The economic analysis contained in this news release is contained in the above technical reports and is based, in part, on inferred resources, and is preliminary in nature. Inferred resources are considered too geologically speculative to have mining and economic considerations applied to them and to be categorized as Mineral Reserves. There is no

certainty that the reserves development, production and economic forecasts on which the preliminary assessment contained in the technical reports is based, will be realized.

Cautionary Language Regarding Forward-Looking Information

This news release contains certain forward-looking statements. Forward-looking statements include but are not limited to those with respect to the availability of electrical power, the planned addition of owner-operated power generation, price of electrical power and sulphuric acid, the estimation of mineral resources and reserves, the realization of estimated pyrite content in the MWS tailings dams, the timing and amount of estimated future production, costs of production, capital expenditures, costs and timing of development of new deposits, success of exploration activities, permitting time lines, currency fluctuations, requirements for additional capital, availability of financing on acceptable terms, government regulation of mining operations, environmental risks, unanticipated reclamation expenses, title disputes or claims and limitations on insurance coverage and the timing and possible outcome of pending litigation. In certain cases, forward-looking statements can be identified by the use of words such as “goal”, “objective”, “plans”, “expects” or “does not expect”, “is expected”, “projected”, “assumed”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “does not anticipate”, or “believes” or variations of such words and phrases, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of First Uranium to be materially different from any future results, performance or achievement expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the actual results of current exploration activities, conclusions of economic evaluations, changes in project parameters as plans continue to be refined, availability of equipment, materials and fuel, possible variations in grade and ore densities or recovery rates, failure of plant, equipment or processes to operate as anticipated, accidents, labour disputes or other risks of the mining industry, delays in obtaining government approvals or financing or in completion of development or construction activities, risks relating to the integration of acquisitions, to international operations, to prices of uranium and gold, to price of electrical power and sulphuric acid. Although First Uranium has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. It is important to note, that: (i) unless otherwise indicated, forward-looking statements indicate the Company’s expectations as of the date of this news release; (ii) actual results may differ materially from the Company’s expectations if known and unknown risks or uncertainties affect its business, or if estimates or assumptions prove inaccurate; (iii) the Company cannot guarantee that any forward-looking statement will materialize and, accordingly, readers are cautioned not to place undue reliance on these forward-looking statements; and (iv) the Company disclaims any intention and assumes no obligation to update or revise any forward-looking statement even if new information becomes available, as a result of future events or for any other reason.

In making the forward-looking statements in this news release, First Uranium has made several material assumptions, including but not limited to, the assumption that: (i) consistent supply of sufficient power will be available to develop and operate the projects as planned; (ii) approvals to transfer or grant, as the case may be, mining rights will be obtained; (iii) metal prices, exchange rates and discount rates applied in the preliminary economic assessments are achieved; (iv) mineral resource estimates are accurate; (v) the technology used to develop and operate its two projects has, for the most part, been proven and will work effectively; (vi) that labour and materials will be sufficiently plentiful as to not impede the projects or add significantly to the estimated cash costs of operations; (vii) that Black Economic Empowerment (“BEE”) investors will maintain their interest in the Company and their investment in the Company’s common shares to a sufficient level to continue to support the Company’s compliance with 2014 BEE requirements; and (viii) that the innovative work on stabilizing the main shaft at the Ezulwini Mine will be successful in maintaining a safe and uninterrupted working environment until 2024.

Conference Call

First Uranium will conduct a conference call with investors to discuss the information in this news release at 10:00 a.m. local Toronto time and 4:00 p.m. local Johannesburg time on Monday, April 21, 2007. The conference call will be available simultaneously to all interested investors and news media.

Callers may dial 1 800 319-4610 (Canada and the US) or 0800 200 648 (South Africa). Callers from other international locations may call +1 604 638-5340 (Canada) or +27 11 535 3600 (South Africa). The call will be webcast at <http://services.choruscall.com/links/firsturanium080421.html> and an archive will be available through the same link shortly after the live event for 90 days.

A replay of the conference call will be available for 30 days. To access the replay, callers may dial 1 800 319-6413 (Canada and the US). Callers from other international locations may access the replay by dialing +27 11 305 2030 (South Africa) or +1 604 638-9010 (Canada). Access to the replay will require the code 2128, followed by #.

About First Uranium Corporation

First Uranium Corporation (TSX:FIU, JSE:FUM) is focused on the development of its South African uranium and gold mines with the goal of becoming a significant producer through the re-opening and underground development of the Ezulwini Mine and the expansion of the Mine Waste Solutions tailings recovery facility. First Uranium also plans to grow production by pursuing value-enhancing acquisition and joint venture opportunities in South Africa and elsewhere.

First Uranium Corporation

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