Recycling site a sorry one (Maria Kagkelidou, Athens News, June 17, 2005)

Even though Athens is fast running out of landfill space, the city’s expensive recycling plant has yet to start operating properly. Even if it does open, it may never work properly, and the European Union is thinking of asking for its funding money back

MARIA KAGKELIDOU

NOMINALLY, Athens has the largest recycling plant in Europe and the third largest in the world. The plant should have been in operation since 2001 but it is only about to go into full-time trial operation this week. Should it fail during this critical period, Greece might be called upon by the European Union, which funded the plant, to return tens of millions of euros.

Eastern Attica Prefect Leonidas Kouris told the Athens News that EU representatives at Attica's regional council - of which he is a member - have started to broach the subject of fund returns. "Officials from the EU's Cohesion Fund have expressed grave concerns about the mechanical recycling plant at Ano Liossia and they have brought the matter up for discussion," he says. "The main problem they have with the plant is that it is not in operation. Other public works have been delayed and were over budget but they are functioning, so no questions have arisen," he explains.

Like everyone involved in the project, he is adamant the plant must work. "It is critical that the plant operates properly, as otherwise we might have to return part of the construction costs and that's on top of the 518 million euros Greece recently agreed to return to the EU due to construction faults in EU-funded projects during 2000-2003," points out Thanasis Margetis, deputy mayor of Spata and a member of the executive committee of the Association of Attica's Municipalities and Communities (ESKDNA) that manages the Ano Liossia landfill site where the plant is situated.
The recycling plant should have been completed by construction company ENVITEC - which was awarded the contract in 1997 - in 2001. It was estimated at the time that recycling almost a quarter of the 5,500 tonnes (1,200) of household waste Athenians produce every day would alleviate the landfill's burden and extend its lifespan by up to a year. The plant was also designed to compost 150 tonnes of sludge a day from the biological sewage treatment plant on the island of Psyttaleia, off the coast of Piraeus. This figure was later increased to 300 tonnes - approximately a third of Psyttaleia's daily output.

Delays, accidents and spiralling costs

Engineers have expressed concerns that the plant's equipment is not up to scratch.

However, only a minimal amount of waste and sludge has been processed so far, and the plant's operation has been suspended for the better part of the last two years. According to ESKDNA sources, this is due to a temporary shortage of funds and, more importantly, to a landslide accident in 2003. The landslide was caused by the Athens water and sewage corporation (EYDAP) dumping excessively runny sludge in the landfill and by changes to the landfill design to enable it to take more trash. As a result of the landslide, hundreds of tonnes of rubbish swamped the recycling plant, causing damages of up to 15 million euros.

On the funding front things had spiralled out of control much earlier. "Originally the plant was going to cost just over 40 million euros; this was later revised to around 50 million. It eventually cost 75 million euros," explains Philippos Kirkitsos, an environmentalist and president of the non-profit Ecological Recycling Corporation.
Is more money the answer?

Whether or not European officials will demand a rebate depends on whether or not the plant eventually functions. It is not yet certain this will happen without further investment. Engineers specialising in recycling techniques that have seen the plant, but who wish to remain anonymous, have told the *Athens News* that some of the plant's equipment is not up to scratch. "The developer wanted to save money and devised some of the machinery himself while the warranty of other equipment has already run out," a source close to ESKDNA told us. As a result the engineers claim that the conveyor moving the rubbish along the plant to be sorted is too narrow, the bio-cylinders are too long and the scrubbers that were meant to minimise the smell from the sludge processing do not work properly.

Margetis hopes this is not the case: "All this is technical and remains to be seen. We at the committee believe that the plant will function and that all basic problems have been overcome," he says.

The recycling plant's financial viability is also in question. "The plant has been completed and the damages have been repaired. But I don't think anyone can say for sure what will happen now, not even the developers. It has to start operating first, because past experience has shown that there are problems," Kirkitsos adds.

The first of those problems is lack of planning. No one is quite sure what will happen with the plant's output as either no plans have been made or previous plans have been overtaken by technological and other developments. "A lot will depend on the purity of the materials it produces. I visited the plant while it was operating on a trial basis and the materials were not pure enough. But I can't say they will not manage to achieve good enough standards during their normal operations," explains Kirkitsos. "For example, if they manage to produce 5 tonnes of quality aluminium a day as they plan, they can sell them for around 1,000-1,100 euros a tonne. But if the quality isn't good enough then they will end up in the landfill. We have to wait and see what happens," he adds.

Things don't bode well for other factory products either. The plan is for the recycling plant also to produce 110,000 tonnes of refuse-derived fuel (RDF) each year. This is made up of paper and plastic and could be used as fuel by the cement industry. According to Margetis, the developers have assured ESKDNA that the RDF can be sold, but Constantine Symeonidis, a chemical engineer responsible for the environmental policy of
the TITAN cement company, thinks these plans are unrealistic.

"Throughout the world the cement industry does not pay to burn the RDF. It is paid to do so. Cement factories are not landfills. We can burn pretty much everything but it has to be processed in a certain way to fit the specifications of our equipment or our equipment has to change. To give you an example, we had to invest around 3 million euros for our installations to be able to burn used tyres in an efficient way," he explains to the *Athens News*.

Symeonidis is not certain how much his company will have to charge the recycling plant to accept its RDF for burning. "It depends. I have to examine the final RDF product, to see a sample. I have been waiting for one for over four years, I think, but I have yet to see anything. In the meantime technology has moved on. We used to ask for the RDF in pellet form and now we are looking for it to be handed over as confetti," he says.

RDF is not the only product that the plant's future management might have problems disposing of. Even if all goes according to plan, plant managers might find there is no market for its compost product. "A market had yet to be found for the compost. Of course it could be used for quarry rehabilitation but in this case the product might not be profitable," confirms Margetis.

This problem might be compounded by environment ministry's plans. Psyttaleia produces over 700 tonnes of sludge a day and, according to Piraeus Prefect Yiannis Mihas, over 140,000 tonnes have piled up on the island, bringing its facility dangerously close to capacity. The sludge can't go to the landfill cells for fear of further landslides, so the ministry has come up with a plan to compost - with a different technique - between 400,000 and 600,000 tonnes of sludge. This will also be used for quarry rehabilitation and to cover abandoned landfills.

Despite doubts about the viability of the recycling plant, rumours abound that the developer, ENVITEC, is giving ESKDNA a hard time in order to ensure that they are awarded a contract to manage the plant. The company was contacted by the *Athens News* but refused to comment. For its part, ESKDNA remains tight-lipped about this but its union representatives have stated categorically that they will not allow this to happen.

*ATHENS NEWS*, 17/06/2005, page: A04