

PROPOSED ADDITIONAL PLANT AND STRUCTURES FOR USE AS SLUDGE DE-WATERING FACILITY AT SOUTHEND WASTEWATER TREATMENT WORKS, STOCK ROAD, SOUTHEND ON SEA

1 SUMMARY

- 1.1 To consider the report of the Head of Planning Services regarding a consultation from Southend on Sea Borough Council for development within their administrative area. The report has significant environmental implications for Rochford District.

2 PLANNING APPLICATION DETAILS

- 2.1 The purpose of the proposed development is to provide plant and machinery on site at the sludge de-watering facility at Southend Wastewater Treatment Works (WWTW). The new plant will process sludge from the Southend and Rochford catchment area. The dewatering sludge cake (biosolids) will then be transported off site to a further recycling facility in sealed containers.
- 2.2 Southend WWTW currently operates in conjunction with Stambridge Sewage Treatment Works situated some 6km north of Southend at Great Stambridge. The two works process all of the waste water and sewage from the combined Southend/Rochford catchment area with a population equivalent of approximately 240,000 (Southend 205,000, Rochford 35,000).
- 2.3 The current working arrangement between the two treatment works was established in the mid 1990's when it was decided to make permanent a sludge treatment process called N-Viro, which had been trialed at Stambridge Sewage Treatment Works. This process mixed dewatered sludge cake with waste from cement kilns to produce a treated product suitable for use on agricultural land as a soil enhancer, in accordance with Government regulations. The N-Viro process was designated to treat the sludge from both the Rochford and Southend catchment areas, at the Stambridge Sewage Treatment Works at Great Stambridge.
- 2.4 In order to facilitate this process, a dual pipeline was constructed between the Southend and Stambridge works. The function of the pipeline was to transport sludge from Southend to Stambridge Sewage Treatment Works for the N-Viro treatment and then to transport the liquid portion of the biosolids from the process back to Southend for final treatment. This avoided the need for adjustments between the two works. The N-Viro process operated under a Waste Management Licence issued by the Environment Agency.

- 2.5 However, the N-Viro plant has been de-commissioned and removed from the works at Stambridge Sewage Treatment Works. Since the de-commissioning of the N-Viro process, severe operational problems have been experienced at Stambridge Sewage Treatment Works. These problems are mainly caused by odour generation arising from the volume of sludge transported in the pipeline from Southend to Stambridge. The odour generation is caused by the production of hydrogen sulphide gas, which is also, in part, responsible for prematurely corroding the plant at Stambridge, and also raising health and safety concerns for the workforce.
- 2.6 Since there is no longer a requirement to process Southend's sludge at Stambridge Sewage Treatment Works following the closure of the N-Viro plant, it will be more sustainable and cost effective to de-water the sludge at the treatment works where the majority of the waste arises, ie, Southend.
- 2.7 To facilitate this new process a number of new structures, plant and machinery will be installed on a vacant parcel of land in the north west corner of the existing Southend Waste Water Treatment Works. The new equipment will vary in size and some equipment would be contained within new buildings; the largest structure being 25m x 10m x 8.6m high.

3 CONSULTIES

- 3.1 **Technical/Engineers:-** No objections
- 3.2 **Head of Health and Community Care:-** Members will be aware that the treatment of sludge from Southend at Anglian Water's Stambridge Works has been a cause for concern to local residents.
- 3.3 It makes both environmental and economic sense for this treatment process to be carried out at the Southend Works and it is therefore recommended that Members inform Southend Borough Council of their support for this application.

4 MATERIAL PLANNING CONSIDERATIONS/IMPLICATIONS FOR ROCHFORD DISTRICT COUNCIL

- 4.1 The location of the existing sewage treatment plant and the size of the proposed new plant and machinery are such that they would not give rise to any material visual intrusion upon the Rochford administrative area.
- 4.2 It is considered that if the proposed works assist in the reduction in odour and an improvement in the air quality in and around the Great Stambridge area, then this would be beneficial to the wider Rochford District Council administrative area.

5 RECOMMENDATION

5.1 It is proposed that the Committee **RESOLVES**

That Southend on Sea Borough Council be advised that Rochford District Council wishes to raise **no objection** to the proposal.

Shaun Scrutton

Head of Planning Services

Background Papers:-

Relevant Development Plan Policies and Proposals

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