SUSTAINABLE DEVELOPMENT COMMITTEE

4 March 2009

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References:	P/2008/1873	00768/H/P24
Address:	Mogden Sewage Treatment Works	
Ward:	Isleworth	
Proposal:	Development of a new waste treatment stream, including sewage treatment plant, odour control units, re-profiling of existing embankments, landscaping and associated works, renewable energy generation (enhancement of existing CHP plant) and enclosure of existing West Side Works Primary Settlement Tanks.	
Received:	2nd June 2008	

1.0 8th December Sustainable Development Committee

1.1 At that meeting, members were advised that the application was probably acceptable subject to a robust S106 agreement. The 8 December report (consolidated with amendments) is attached as an appendix.

1.2 The view endorsed by the Committee was that the legal agreement needed to be detailed, to 'have teeth', to include arrangements for monitoring the works and to have appropriate means of interventions if things were not working satisfactorily, a 24/7 response service, and additional funding for mosquito control.

1.3 Members were particularly concerned over unacceptable odour levels, especially from the uncovered storm tanks and the sludge tanks (the were primary sources) and enforceability of provisions to mitigate odour if the works were approved.

1.4 Members were advised that planning approval would give the Council its only control. If it did not approve the development, the application would be called in or taken to appeal against non-determination and so taken out of the Council's hands.

1.5 It was agreed to defer the case for further negotiation on the S106 agreement. Officers were asked to report back on progress.

1.6 This report therefore updates the Committee on those negotiations.

2.0 Proposed Heads of Terms

2.1 In summary, the heads of terms proposed were:

- **Phasing:**
  - Commitment to a Phasing Plan to be agreed by the Council specifying various commencement and completion dates, and in the event that the Plan is deemed not feasible, to submit a report explaining 'why' with an alternative Plan for Council assessment.

- Bringing forward the following odour management works as early as practicably possible:

    1. Covering the west side rectangular primary settlement tanks and providing ‘zicker’ hydraulic scrapers

    2. Fixing the sludge digesters roofs so they cannot float, together with enlarging related pipes fitting safety valve(s), and a device(s) for measuring the volume of gas escape. In addition, regular production of a Sludge Gas Monitoring Report for review by the Council and for publication and setting up a manned 24-hour telephone hotline for dealing with public complaints

    3. Improvements to sludge handling/treatment works.

- **Odour Management, Reporting and Recording:**

  Preparation and implementation of a Management Plan for use, monitoring, cleaning and maintenance of the east side storm water tanks and hoppers and the sludge tanks, to be agreed by the Council. There would also be relevant recording and publication of full details of their use, maintenance and cleaning and a 24 hour manned phone helpline to deal with complaints. Also, following completion, in the event of unacceptable future odour occurrences, a commitment to a detailed scheme for and implementation of covering one or more of the uncovered storm tanks or an alternative proposal for Council consideration.

- **<u>Assessment of Management Plan Failures:</u>**

  Financial contributions to allow the Council to assess appropriateness of measures to address any failure of the management plan for the tanks that seeks to prevent use of the uncovered storm tanks beyond an agreed number of times and durations per year and for subsequent monitoring

- **Environmental Improvements:**

  £167,000 for improvements to the public right of way through the site adjoining the Duke of Northumberland River.

- **Gully Cleansing:**

  £50,000 for additional gully cleansing, and for the existing gully cleansing payment to the Borough (currently £20,000 per year, but reviewed periodically) to be included in the agreement.

- **Construction Management:**

  Implementation of a Considerate Contractors Scheme.

- **Mosquitoes:**

  Implementation of a Mosquito Management Plan.

- **Monitoring During Construction:**

  £150,000 for the Council to monitor the site during construction.

- **Monitoring After Construction:**

  Additional monitoring contributions following construction.

- **Employment Training:**

  Provision of local training and employment either training on site, or by an alternative financial contribution.

- **Additional Monitoring Equipment:**

  £11,750 for a Jerome monitor (measures odour) with £10,000 to maintain it.

3.0 Negotiations since the last Committee

- A series of meetings, discussions and correspondence has taken place since the December Committee. A number of revised versions of the draft Section 106 agreement has resulted. The current position is summarised as follows:

Issue	Current draft of S106 Agreement	Officers' comments
Phasing	TW to provide to the Council a detailed Phasing Plan before Commencement; to accord with agreed 'Phasing Principles'. The Owner will be required to implement and comply with the Phasing Plan provided. Where that Plan contains elements contrary to the Phasing Principles, these would need to be approved by the Council. The Phasing Principles are appended to the agreement and are designed to bring forward parts of the development that the Council wants carried out at the outset or hand in hand with other works. These principally relate to odour control such as the work to the Sludge Digesters. They include requirements to commence and complete certain works by the end of specific time periods In the Phasing Principles the following words are added: **1st Tranche** Commencement of: Sludge Digester Roofs including large diameter gas collection pipes; and Public Right of Way Information boards **2nd Tranche** By the end of year 1 to complete fixing no less than 2 digester roofs and associated larger diameter gas collection pipes.	TW wish to retain control of project management and have removed the requirement for the Council to approve the detailed Phasing Plan, but any departure from the Phasing Principles would have to be approved by the Council. This is acceptable in principle and gives sufficient reassurance that the project would be carried out in a way that ensures protection of residents' interests. In advance of meeting drawing up the Phasing Principles Plan, Thames have supplied a Phasing Principles Site Plan to show members and officers what is intended. For clarification, Thames are being asked to confirm that a written Phasing Principles Plan is to be provided under the terms of the agreement. Officers consider that this provides the reassurance needed in terms of securing a satisfactory outcome and is an acceptable basis for implementing the project. TW have now accepted that the obligation to complete the covering of the existing West Side Rectangular Primary Settlement Ranks within 3 years (having earlier insisted on 5 years) of commencement should be in the S106 agreement, albeit in the form of a requirement for its contractor to do this and subject to a 'force majeure' clause (i.e. if there is any overriding reason why this cannot be achieved, this is a reasonable justification for departing from the timetable). This

Phasing (cont'd)

3rd Tranche

To have installed the new west side effluent stream Odour Control Unit (OCU) and transferred flow from the existing west side rectangular Primary Settlement Tanks (PSTs) to the new covered PSTs with associated emissions treated through the new OCU.

By end of year 2 to have completed fixing no less than 9 digester roofs and related larger diameter gas pipes.

4th Tranche

By the end of year 3 to have completed fixing all digester roofs and associated pipes.

Completion of Public Right of Way Improvement.

The Owner's contractor shall as "so far as is reasonably practicable" require covering of the West Side Rectangular PSTs within 3 years, subject to a 'force majeure' clause' (i.e. acts of god, lack of materials, war) and to have carried out all "Odour Control Works" identified in the planning application regardless of whether they are part of the development.

time period is deemed to be acceptable and to be a good outcome for nearby residents.

TW have also asked that the obligation to complete the Development within 5 years be also subject to the 'force majeure' provision but would now apply to all Odour Control Works defined in the application. Previously, they had sought that this only apply to Odour Control Works for the new plant and not to the retro-fitting of existing equipment. Officers consider this to be a satisfactory improvement

Thames have agreed that (subject to 'force majeure') their contractor will be required to carry out the Odour Control Works within three years of the start of the contract

This proposed phasing is an improvement on Thames Water's initial position, where no guarantees were available. This would be a local benefit and it is considered to be a satisfactory outcome to the negotiations.

Odour Management, Reporting and Recording (Sludge Gas)	TW to apply a Sludge Gas Monitoring Plan (to be included in the agreement) which states: ● TW to carry out routine patrols of digester area not less than once a shift to identify and log gas leaks. ● When gas leaks occur, measures to manage this are included, either by isolating the source of the leak or by reducing the gas pressure by burning the gas in plant on site. ● TW to carry out and produce a monthly report detailing gas mass balance and correlation with boundary monitoring data. ● If Unacceptable Odour Occurrence arises, corrective measures under the Odour Management Plan (OMP) will be taken. ● Unacceptable Odour Occurrence is to be defined in the OMP. TW propose a method for this. ● Once the whole Development is operational to produce a monthly Sludge Gas Monitoring Report and publish it on the Internet no later than the end of the following month.	TW have accepted the Council's requirements for Sludge Gas Monitoring. However, a concern still remains that the extent of monitoring and measurement is not yet satisfactorily robust in that it does not cope properly with variations in wind direction. To achieve this, officers consider that extra H2S monitors are required (to provide a total of eight) and that the results from any one of these monitors (unless fewer is shown to be a workable option in conjunction with the other relevant assessment criteria would be enough on its own to trigger remedial action under the Sludge Gas Monitoring Plan and the Odour Management Plan. *This request has been put to Thames Water and a response is awaited.* Otherwise, officers now consider that the arrangements proposed for dealing with Officers are satisfied that, with these provisions, a satisfactory definition of unacceptable odour levels on which action can be taken will have been achieved. As the obligation to produce and publish the Sludge Gas Monitoring Plan only arises once the development is operational, further review of the criteria and relevant measures can be carried out in advance of implementation.

Odour Management, Reporting and Recording (Uncovered Storm Water Tanks Obligation)

A revised East Side Storm Water Tanks and Hopper Management Plan with the following key elements subject to certain provisos of:

- Using covered tanks first
- Emptying uncovered tanks first
- Inspecting tanks once every 12 hours
- Cleaning tanks after use
- Critical parts list and maintenance regime
- Pumping of Hoppers
- Odour monitoring

Many of the actions are subject to "where practicable" or "as soon as is practicable"

TW propose 'best endeavours'/obligations to comply with the management plan.

TW stipulate that in the event of use of the uncovered East Side Storm Water Tanks and Hoppers (SWTs), other than when one or more covered tanks are out of use for maintenance, repair, renewal or reinstatement, seven or more times in a year and this coincides with unacceptable odour occurrences as defined in the agreement they will seek funding from OFWAT for capital works, which include (if it represents good value for money and is a proportional response) covering one or more uncovered SWTs. If such funding is obtained TW will seek necessary consents and carry out works.

This aspect of the agreement deals principally with the other main Odour Control issue. The draft agreement provides for officers and Thames Water to agree practical measures of what is unacceptable odour at a later date*. However*, *officers have yet to agree with Thames what this might be and have yet to agree a form of words to deal with any failure mutually to agree a satisfactory measure. As things stand, Thames' proposed measure is not likely to be acceptable to officers. Discussions continue on the best form of words and the outcome will be reported orally at the meeting.*

Usefully, the agreement also now provides that Thames will accept an independent inspector's finding that such unacceptable odour has occurred, regardless of whether there have been any complaints from members of the public.

Negotiations have achieved a shorter time period between tank inspections from 24 hours (originally proposed by Thames) to once a shift (approximately every 12 hours) and specified the sequence of use of the uncovered tanks to ensure the lowest risk of unacceptable smells and therefore most effective protection for neighbours.

TW will not commit to covering an uncovered tank, unless they have received funding from OFWAT, and even then only if it is good value for money and is proportionate. Use of the uncovered tanks is not a 'Default Event'; it only becomes so if this correlates with an Unacceptable Odour Occurrence

Odour Management, Reporting and Recording (Uncovered Storm Water Tanks Obligation) (cont'd)

(this definition is yet to be agreed – see above). This is because Thames assert that use of a tank on its own may not cause unacceptable odour and, while undoubtedly there is a correlation, officers cannot contradict this.

Thames had set the number of times that the storm tanks would be used at nine per year. This well exceeded the four to six that they forecast and officers stated this to be an unacceptable threshold. Officers have achieved a reduction to seven, which is considered acceptable. At officers' prompting, Thames have also accepted that any use of the tanks for over four days at one time (and also resulting in unacceptable odour) would be treated as two occurrences, not one and that this would apply for each subsequent four-day period. This is a helpful concession.

Officers had sought an undertaking from Thames that the use of the tanks beyond this threshold would automatically trigger the covering of further tanks. Thames were unable to commit to this because of the need to obtain approval from the regulator, OFWAT, before they could make such a large capital investment, and their inability to guarantee that OFWAT would accept that such works were best value.
Officers have taken independent advice about Thames' stance on this matter from a water industry specialist.

He said "The operation of a major sewage treatment works will almost always give rise to some level of odour. The severity and impact of this will be

Odour Management, Reporting and Recording (Uncovered Storm Water Tanks Obligation) (cont'd)

dependent on the processes and equipment, the works operation, the local environment and the proximity and sensitivity of the local customers. The investment required to reduce odour levels to a point where they give rise to no significant complaints at any time is unlikely to be justifiable in the present regulatory and economic climate. It is also questionable whether such a level of odour treatment is possible with current technologies."

He then concludes that Thames' position on to the capital commitment that officers have sought is a reasonable one and that they would not likely be able to make such an investment without OFWAT's sanction, but that Hounslow should approach OFWAT directly about this when the time arises.

Therefore, officers recommend that the position set out in the latest draft of the agreement provides the best safeguard available against excessive future storm tank use, subject to resolving the difference relating to the definition of unacceptable odour.

Odour Management, Reporting and Recording (Telephone hotline)	Thames have agreed to provide telephone helpline service for customer complaints about operational sites	Officers had pointed out that there was no effective means of neighbours complaining to Thames about smells and that, as a result, many complaints may have gone unheard or have been submitted to the Council instead, and then transmitted onwards to Thames (which is clearly inefficient). Thames had responded that their customer helpline was intended for this purpose. On reflection, they agree with officers that it is not a user-friendly service for this specific type of complaint (since it does not have the necessary flexibility to accept and report such complaints) and accept the need for a dedicated facility to run alongside the existing one. Officers are satisfied with this outcome, which will be a significant improvement on existing arrangements.
Assessment of Management Plan Failures	Thames have not offered to meet the costs to the Council of monitoring these external effects of the development once it is operational	Members' views are sought
Public Rights of Way Improvements	Thames propose to carry out the Public Right of Way of Improvements instead of paying the Council to do the works.	Thames' proposal to carry out the works themselves is acceptable. Although TW have not, as hoped for, agreed to complete the Public Right of Way Improvements not affected by the works early on, apart from the information boards (to be commenced in the 1st Tranche). The phasing is not considered a 'deal breaker'.

Gully Cleansing	£50,000 Gully Cleansing Contribution only	TW will not document and formalise their current voluntary £20,000 annual contribution, but the proposal is acceptable.
Considerate Contractor Scheme	Agreed in principle	
Mosquito Management Plan	Agreed in principle subject to minor amendments	Officers are considering these, but it is thought that any issues can be easily resolved
Monitoring During Construction:	The agreement includes a sum of £150,000 payable to the Council to monitor the effects of the development	This is acceptable to officers
Monitoring After Construction.	Thames have not offered to meet the costs to the Council of monitoring the external effects of the development once it is operational	Members' views are sought
Employment Training	The agreement includes a sum of £125,000 payable to the Council to provide local employment training relevant to the development	This is acceptable to officers
Additional Monitoring Equipment	The agreement includes a sum of £21,750 payable to the Council to buy and maintain a Jerome Monitor to be used to monitor emissions from the site	This is acceptable to officers

Binding Dispute Resolution Clause	Binding dispute resolution not to cover matters of law or interpretation of the Agreement. Can be invoked by either party. If invoked by the TW, TW will pay experts costs. If invoked by the Council, expert costs will be borne as the expert decides. TW have proposed the various types of experts to be appointed for various disputes.	The Council's hope was that Thames would pay the Expert's costs in any event, however they have adopted this position, leaving the Council at risk of having to pay these costs. This is a potentially significant disincentive to enforcement action. However, it is the best result that can be achieved and, by use of planning conditions where relevant as a means of enforcement, this risk has been limited. Binding dispute resolution clauses tend to favour applicants. They lose the Council a degree of control and elements of discretion in its decision-making powers. With highly technical issues, as in this agreement, binding expert dispute resolution is probably necessary. That said, the expert might give very focused technical decisions, not accounting for important, wider community-based issues that the Council might want considered.

Enforcement of Agreement	TW propose alteration to the draft clause that in the event of a breach of an obligation in the Agreement they must not continue with until such obligation has been met. It is restricted it so it only applies where cessation or suspension of development is the <u>only</u> proportionate response and also restricted it to phasing, sludge for monitoring, considerate contractor, uncovered storm tank, public right of way or Mosquito Management obligations.	This Clause has been significantly diluted, it is difficult to determine in what circumstances it would bite and whether there would be successful enforcement through the courts. However, the Council can use S106 to obtain a Court declaration that TW are in breach of their obligations. This would damage Thames' public profile being a Public Utility Company and may be an effective deterrent. Alternatively, an injunction in respect breach of the obligations might be obtained. This would be difficult in respect of many of the obligations, because they require positive actions and are therefore difficult for Courts to enforce. Courts will not issue injunctions that are unenforceable. For this reason, officers have now placed some of the matters that were initially elements of the proposed agreement in planning conditions instead, or which a different enforcement regime exists

4.0 Conclusion

4.1 Overall, it is now anticipated that the proposed works would either improve neighbours' living conditions or leave them unharmed.

4.2 Negotiations with Thames Water have resulted in a proposal that officers consider has secured significant improvements for residents. Under the circumstances, officers now consider that the development can proceed and that the agreement and associated planning conditions provide appropriate safeguards that would overcome the potentially unacceptable effects for the local community that would otherwise be likely to accompany it. Moreover, the effect of the package of proposals now on the table is one that should offer improvements for residents when compared to the situation that exists now.

4.3 In summary, it is considered that the objectives laid out at the 8 December meeting have been met in the following ways:

- A satisfactory commitment to implementing a phasing plan that gives the Council a reasonable degree of control without unduly restricting the developer. This ensures that the aspects of the site works that the Council needs to see in order to secure early benefits for local residents would be brought forward as necessary.

- Early commencement of odour control works on existing plant.

- Improved monitoring by Thames, with publication of results, and maintenance of the storm water tanks (a major source of odour problems).

- Improved monitoring and maintenance of the sludge handling and treatment plant and a regime for dealing more effectively with gas escapes (a major source of odour problems).

- A better customer complaints facility giving direct access to people at Thames who will be responsible for recording such complaints.

- A commitment to seeking consent from OFWAT for future remedial works on site if the environmental situation deteriorates (based on definitions set by the agreement) after the completion of the development.

- Thames to carry out the desired improvements to the footpath through the site

- Extra gulley cleansing and other additional mosquito control measures

- Appropriate management of the development process to limit its effects on neighbours – in respect of project and contractor management and complaints, the control of mosquitoes during construction and the ability of the Council to monitor and respond to problems (including smell) arising from the construction process and the necessary management

of the sewage treatment processes that would be disrupted during construction.

- Local construction employment training.
- Capital contributions to monitoring gas and associated smells.

4.4 As it stands, the following objective has not been met:

- Providing the Council with resources to monitor and respond to failures in the Storm Tank, Odour and Sludge Gas monitoring plans and providing the Council with resources to monitor the general effects of the development *after construction*

  That said, on the applicant's submission, assuming the plant to be operating as they say it will, it would be expected that the monitoring requirements would reduce. Moreover, the provision of a properly designed complaints system by Thames would likely reduce the number of complaints that would need to be dealt with, in the first instance, by Council resources.

4.5 Additionally, officers and Thames have yet to agree on a basis on which unacceptable odour occurrences can be defined and measured (albeit that this is reserved in the draft agreement for later finalisation) – including appropriate monitoring points/receptors and, in the event of a failure to reach such agreement, how such an impasse could be resolved (e.g. by binding independent expert arbitration). It is necessary that this be properly settled before the agreement can be signed, but it is hoped that a mutually acceptable form of words can be arrived at before the meeting.

5.0 Recommendation

1 That members consider the outcome of negotiations on the S106 agreement and note outstanding differences between officers and the applicants.

2 If members do not consider the draft agreement to be acceptable, to instruct officers regarding any further negotiations prior to reaching a decision.

3 If members now consider the draft agreement to be acceptable:

That the Director of Environment or the Divisional Head of Regulatory & Development Services be authorised to grant planning permission subject to the following conditions and securing the above planning obligations by prior completion of an agreement or agreements made under Section 106 of the Town and Country Planning Act 1990 and/or other appropriate legislation, the exact terms of which shall be negotiated by the Divisional Head of Regulatory & Development Services on the advice of the Director of Legal Services.

The satisfactory legal agreement or unilateral undertaking outlined above shall be completed and planning permission issued by 9 April 2009 or such extended period as may be agreed in writing by either the Director of Environment, Divisional Head of Regulatory & Development Services or

Borough Solicitor. If the legal agreement or unilateral undertaking is not completed by 9 April 2009 or such extended period as shall be agreed in writing by the Director of Environment, Divisional Head of Regulatory & Development Services or Borough Solicitor, then the Director of Environment or Divisional Head of Regulatory & Development Services be authorised to refuse planning permission for the reason that the proposal should include planning obligations required to make the development acceptable in planning terms in accordance with Circular 05/05, Policy IMP 6.1 of the UDP and the Planning Obligations SPD providing for and securing of the planning obligations, as described in paragraph 8.3 of this Report.

In the event that the planning application is refused (for non-completion of s106 agreement within set timeframe or such extended period as may have been agreed by the Director of Environment, Director of Environment or Divisional Head of Regulatory & Development Services or Borough Solicitor), the Director of Environment or Director of Environment or Divisional Head of Regulatory & Development Services (in consultation with the Chair of Sustainable Development Committee) is hereby authorised to approve any further application for planning permission received within 12 months of the date of refusal of planning permission, which duplicates the planning application provided that a satisfactory legal agreement or unilateral undertaking is completed within any specified period of time.

1. A1a – *Time Limit – Three Years*

2. *Planting – native species only*

All planting on and around the site shall be of locally native plant species only, of UK genetic origin.

Reason. Use of locally native plants is essential to benefit local wildlife and to help maintain the region's natural balance of flora.

3. *Biodiversity Mitigation*

The development shall be carried out in accordance with the key mitigation measures for biodiversity set out in Table 20 of the Environmental Statement submitted with the application, and in accordance with detailed specifications, arrangements and timing details to first be agreed by the Local Planning Authority.

Reason. To ensure that the proposed mitigation is carried out as approved.

4. *Habitat Management and Creation*

The development shall not commence until a programme and specification have first been submitted to, and have been approved in writing by, the Local Planning Authority for the ongoing management of existing and creation of new wildlife habitats on the site and the permanent future retention of the habitats to the quality specified in that programme. The approved programme shall include timing details, shall be implemented on commencement of the development, shall continue for the period specified in the approved programme, and shall be monitored during the implementation period and

remedial measures taken as necessary to ensure that the objectives set out in the programme are achieved.

Reason. In the interests of local biodiversity and ecology.

5. *Dust Control*

During and following the relocation of materials and the recontouring of embankments, the material shall be kept damped down and compacted at all times to prevent excess dust generation prior to the development of significant vegetative cover.

Reason. In the interest of air quality and safety.

6. *Control of Light Spill*

External artificial lighting associated with the approved waste water treatment stream shall be directed away from the Duke of Northumberland River and shall be focused with cowlings, to minimise light spill from the new development into the Duke of Northumberland River.

Reason. Artificial lighting disrupts the natural diurnal rhythms of a range of wildlife using and inhabiting the river and its corridor habitat. The water body provides important habitat for wildlife. Duke of Northumberland River should be treated as recommended under the Institute of Lighting Engineers 'Guidance Notes for the Reduction of Light Pollution'.

7. *Land Contamination Measures*

Prior to the commencement of development approved by this planning permission (or such other date or stage in development as may be agreed in writing with the Local Planning Authority), the following components of a scheme to deal with the risks associated with contamination of the site shall each be submitted to and approved, in writing, by the Local Planning Authority:

1. A preliminary risk assessment which has identified: all previous uses, potential contaminants associated with those uses, a conceptual model of the site indicating sources, pathways and receptors potentially unacceptable risks arising from contamination at the site.

2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.

3. The site investigation results and the detailed risk assessment (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.

4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Reason. The Environmental Impact Assessment indicates that there are land contamination issues on the site, therefore additional site investigations need to

be undertaken to delineate the contamination and feed into the design of the remedial strategy. Any changes to these components require the express consent of the local planning authority. The scheme shall be implemented as approved.

8. *Contamination Measures Verification*

Prior to the bringing into operation of any part of the development, a verification report demonstrating completion of the works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met. It shall also include any plan (a "long-term monitoring and maintenance plan") for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action, as identified in the verification plan, and for the reporting of this to the local planning authority.

Reason. EIA indicates that there are land contamination issues on the site, therefore additional site investigations need to be undertaken to delineate the contamination and feed into the design of the remedial strategy.

9. *Contamination Monitoring Reports*

Reports on monitoring, maintenance and any contingency action carried out in accordance with a long-term monitoring and maintenance plan shall be submitted to the local planning authority as set out in that plan. On completion of the monitoring programme a final report demonstrating that all long-term site remediation criteria have been met and documenting the decision to cease monitoring shall be submitted to and approved in writing by the local planning authority.

Reason. The Environmental Impact Assessment indicates that there are land contamination issues on the site, therefore additional site investigations need to be undertaken to delineate the contamination and feed into the design of the remedial strategy.

10. *No Piling Without Prior Consent*

Piling or any other foundation designs using penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority, which may be given for those parts of the site where it has been demonstrated that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

Reason. To ensure that the piling design is protective of controlled waters.

11. *Contamination Investigation, Verification and Remediation*

Before the development hereby permitted commences:

a). The site shall be investigated by a competent person to identify the extent and nature of contamination. A detailed site investigation report shall be prepared and submitted to the Local Planning Authority. The report should include a tiered risk assessment of the contamination based on the proposed end use of the site. Additional investigation may be required where it is deemed necessary.

b). If required, a scheme for decontamination of the site shall be submitted to the Local Planning Authority, for written approval. The scheme must account for any comments made by the Local Planning Authority before the development hereby permitted is first occupied

c). The Local Planning Authority shall be notified immediately if additional contamination is discovered during the course of the development. A competent person shall assess the additional contamination and shall submit appropriate amendments to the scheme for contamination in writing to the Local Planning Authority for approval.

d) The agreed scheme for decontamination, including amendments, must be fully implemented and a written validation (closure) report submitted to the Local Planning Authority for approval.

Reason. Contamination is known or suspected on the site due to a former land use. The Local Planning Authority therefore wishes to ensure that the development can be implemented and occupied with adequate regard for public and environmental safety.

12. *Noise & Vibration Control*

The development shall not commence until details have been submitted to, and have been approved in writing by, the Local Planning Authority, demonstrating that the development will comply with the requirements of BS 5228:1997 Noise and Vibration Control on Construction and Open Sites, and the development shall only be carried out in accordance with the approved details.

Reason. To protect neighbours' living conditions.

13. *Maximum Noise from Plant*

Noise from new plant shall be 10dB below the ambient LAeq at residential properties.

Reason. To protect neighbours' living conditions.

14. *Delivery and Service Plan*

Development shall not commence, until a Delivery and Service Plan has been submitted to and has been approved in writing by, the Local Planning Authority. The approved plan shall be implemented only as approved.

Reason. To regulate daily freight operations in the interests of efficiency and sustainability and neighbours' living conditions.

15. *Construction Management Plan*

Notwithstanding any other condition of this consent, no work on the development shall commence, until a Construction Management Plan, dealing with all relevant environmental information relating to the site construction works, and to include hours of operation, phasing details of the development (including of the excavation/recontouring works), contractor's compound, environmental nuisance mitigation/ controls over dust, mud, dirt, noise, vibration, and lighting, temporary screening/bunding, and means of access and site delivery/traffic arrangements/routes and construction workers travel plan etc., has first been submitted to, and has been approved in writing by, the Local Planning Authority, and the Plan as approved shall only be implemented as approved. The Plan shall be prepared and implemented in accordance with Best Practice Guidance for the duration of the works.

Reason. To ensure that the environmental impacts of construction are appropriately mitigated, in the interests of environmental amenity and the free flow and safety of traffic.

16. *Mud and Dust Control*

During construction works an appropriate wheel-washing system shall be provided to remove mud, stones and any other extraneous materials from the wheels and chassis' of construction vehicles exiting the site and all loads of construction materials, excavation spoil or other such matter shall be fully covered in order to ensure that no material leaves the site attached to the vehicle which might subsequently be deposited on the highway. The exit from the wheel washing system shall be constructed from a hard, non-porous surfacing material and sited as far away from the exit to the highway as is possible given the constraints of the site and the surface shall be kept clean at all times. Waste water discharged from the wheel washing system shall be stored and disposed of on site and shall not be discharged into the public sewerage system without prior removal of soil, stones and any other suspended material. Suitable measures to minimise dust nuisance caused by the operations and to ensure that no dust or other debris is carried on to the adjoining properties shall also be provided in accordance with the guidance at http://www.london.gov.uk/mayor/environmental/air_quality/docs/construction-dust-bpg.pdf and site lighting shall be designed, positioned and directed so as not to unnecessarily intrude on passing drivers on public highways and so as not to direct light into any windows of properties outside the site. Start of works on site shall be notified to the Council's Community Environment Team on 020 8583 5070.

Reason. In order to safeguard the amenities of adjoining properties, the amenities of the locality, and highway safety, and to enable the Council to monitor work on site to ensure that it is carried out in a safe and neighbourly fashion for the above reasons in accordance with Policies ENV-B.1.1 (New Development), ENV-P.1.5 (Noise Pollution), ENV-P.1.6 (Air Pollution), and ENV-P.1.7 (Light Pollution).

17. *Renewable energy*

When it is first brought into use, the development shall comply with the terms of the Energy Statement submitted as part of the application and future energy use on site shall be met by on-site generation of renewable energy to not less than 40% of the on-site energy demand unless otherwise first agreed in writing by the local planning authority. In addition, prior to the development being brought into use, the developer shall carry out and submit to the local planning authority for approval details of a feasibility study into the installation and subsequent use of a micro-hydro turbine or turbines on the site and a timetable for installation and commissioning of the same if appropriate. If viable, and if approved by the Local Planning Authority, the turbine(s) shall be installed in accordance with the approved details and permanently retained.

Reason. In accordance with the applicant's submission, and to minimise the impact of the development and to contribute to meeting the renewable energy targets in the Mayor's London Plan.

18. *Sustainable Construction Scheme*

Notwithstanding the requirements of the Construction Management Plan, no development shall take place until details have been submitted to, and have been approved in writing by, the Local Planning Authority for a sustainable construction scheme, to comply with the "essential" standards for materials in the Mayor's Sustainable Design and Construction SPG. These being: - No use of insulation materials containing substances known to contribute to stratospheric ozone depletion or with the potential to contribute to global warming; - Minimal use of new aggregates; - Reduction of waste during construction and demolition phases and provision of a sorted waste stream on site where practical; and Use of reused or recycled construction materials wherever practicable.

Reason. In the interests of sustainability.

19. *Details of Cycle Parking*

The development shall not become operational until details of covered cycle parking stands and associated facilities for cyclist shall be submitted to, and have been approved in writing by, the Local Planning Authority, and the approved facilities have been implemented and made available for use.

Reason. In the interests of sustainable transport.)

20. *Details of Access*

No development shall take place, until details have first been submitted to, and have been approved in writing by, the Local Planning Authority of appropriate facilities incorporated into the detailed design of the proposed works to ensure that, notwithstanding the nature of the development, a level of accessibility which is reasonably practicable in the circumstances is achieved, and the development shall be implemented in accordance with the approved details.

Reason. In the interests of equality of access.

22. *Odour Control*

The development shall comply with the best practicable means to control and limit odours and, wherever practicable, to ensure that odour is identified at an early stage, and pro-active measures are taken to reduce the impact on off-site sensitive receptors. In addition, there shall be regular maintenance and monitoring and annual performance tests, and remedial work and retesting where appropriate, and updates of the Odour Management Plan, in accordance with details to be submitted to and to be approved in writing by, the Local Planning Authority, prior to the first bringing into use of the development.

Reason. In the interest of air quality.

23. *Odour Control Exhaust Monitoring*

Prior to the commencement of operation of the development hereby approved there shall be fitted to the exhausts from all odour control units hydrogen sulphide monitoring instruments with a resolution of 1ppb. These monitoring systems will measure and record outlet hydrogen sulphide concentrations at a frequency of not less than 1 reading per hour and the records of monitoring shall be maintained for a period of at least 24 months, and will be available for inspection by the Local Planning Authority. The instruments shall be maintained in working order.

The emissions monitoring systems shall be “calibrated”, by reference to the annual olfactometric tests described in Condition 26, so that the operators can set “alarm” hydrogen sulphide concentration levels for each of the odour control and stack emission releases to warn of deteriorations in abatement performance. The resulting hydrogen sulphide calibration calculations and emission limits shall be updated on an annual basis as further odour concentration data becomes available. The calibration calculations must be used to set limits which can be expected to detect odour emissions exceeding the emissions limits by no more than 20-25%.

Reasons: To enable the emissions from the development to be properly monitored so that any necessary remedial action can be taken promptly if emissions exceed target levels.

24. *Remedial Measures for Odour Control Exhaust*

In the event that any of the monitoring instruments fitted pursuant to Condition 23 show that hydrogen sulphide concentrations in emissions from odour control units exceed the concentration levels calculated in accordance with Condition 23 on three or more occasions within any period of 30 days, then the developer shall notify the Local Planning Authority and take appropriate remedial action within a further 30 days to bring hydrogen sulphide concentrations back within the levels specified in Condition 23 or to such other level as shall first be submitted to and agreed in writing by the local planning authority.

Reasons: To ensure emissions stay within acceptable limits.

25. *Compliance with Environmental Statement*

The development shall be operated at all times such that the odour emission rates of air (as defined in the Environmental Statement) released from the odour control units is maintained at or below the predicted levels specified in the Environmental Statement supporting the planning application received on 2nd June 2008. Emissions will be discharged to atmosphere through stacks as described (stack heights and air speeds) in the application.

Reasons: To minimise odour emissions from the development and their off-site impact in the local area

26. *Olfactrometric Testing of Odour Control Units*

The developer shall carry out olfactometric tests of the emissions from all odour control unit stacks and building stacks within the development at least annually in accordance with the methodology set out in Condition 27**.** The first such test shall be carried out within 30 days of first operation of the development. The Local Planning Authority shall be given at least 7 days prior notice of all testing and be supplied with the results of all testing within 30 days.

Reasons: *To ensure emissions stay within acceptable limits.*

27. *Olfactrometric Testing Methodology*

All tests pursuant to Condition 26 and Condition 28 shall be conducted in accordance with the following methodology. Three representative odour samples of treated/outlet air will be collected whilst the sewage and sludge treatment plants are operating under normal conditions. The odour samples collected shall be analysed in accordance with the BSEN 13725 standard techniques and an outlet odour concentration will be calculated as the geometric mean of the individual results for each of the three samples. Emission rates for each stack will be calculated by multiplying the outlet odour concentration by a measured air flow rate. The Local Planning Authority shall be given at least 7 days notice of all testing and will be supplied with the results of all testing within 30 days.

Reason: *To ensure emissions stay within acceptable limits.*

28. *Remedial Action Following Olfactrometric Testing*

In the event that the results of a test pursuant to Condition 26 shows that emissions are exceeding the levels set out in Environmental Statement supporting the planning application received on 2nd June 2008 for the development, the developer shall immediately take such steps as shall reasonably be required to ensure that emission levels are no higher than those set out in the application. Following the taking of such steps the developer shall immediately demonstrate compliance by further olfactometric testing (as provided for in Condition 26) and supply the Local Planning Authority with the results of the test as required by Condition 26.

Reasons: To ensure emissions stay within acceptable limits.

29. *Sludge Thickening Building Ventilation*

Before work commences on site, details shall be submitted to and shall be approved in writing by, the local planning authority to show that there will be a satisfactory level of general ventilation from the sludge centrifuge/thickening building exhausted to the atmosphere including discharge arrangements, velocity, odour concentration and airflow rate. The details submitted shall also include a specification for outlet odour concentrations to be assessed by initial commissioning tests (within three months of the plant becoming operational) and subsequently monitored by annual performance testing, and shall include remedial measures to be implemented if emissions exceed the agreed specification, so as to guarantee future performance in accordance with the details originally approved. The agreed specification shall be implemented before the development is brought into use. The Planning Authority shall be given at least 7 days notice of all testing and shall be supplied with the results of tests within 30 days. If abatement plant is installed and if the outlet odour concentrations exceed the design value in any commissioning or annual performance test, then the plant shall be repaired or rectified and re-tested with 30 days of the failed test, unless the 12 month period for installation of an additional or alternative abatement plant has been triggered.
Reason. In the interest of air quality.

30. *Control of Sludge Handling and Storage*

a). No temporary or permanent sludge/sludge cake liming, or any other mechanical or chemical treatment shall be carried out within the sludge cake store at any time without the written agreement of the local planning authority;

b) No temporary or permanent sludge/sludge cake liming, or any other mechanical or chemical treatment shall be carried out within the development other than as described in the application, and in any case shall only be carried out within fully enclosed and odour extracted and abated/mitigated facilities. No such sludge or sludge cake treatments shall be undertaken outside or in the open within the development; and

c). No sludge or sludge cake shall be stored, on a temporary or permanent basis, other than as described in the application, that is, within fully enclosed and odour extracted and odour abated or mitigated facilities. No sludge or sludge cake generated by the development shall be stored outside or in the open within the development or elsewhere within the Sewage Treatment Works and no sludge or sludge cake shall be stored outside or in the open within the development.

Reason. In the interest of air quality.

31 *Odour Abatement Plant Ventilation*

Before work commences on site, details shall be submitted to, and shall be approved in writing by, the local planning authority to show that there will be a satisfactory level of general ventilation from the odour abatement plant to be exhausted to the atmosphere including discharge arrangements, velocity, odour concentration and airflow rate. The details submitted shall also include a specification for outlet odour concentrations to be assessed by initial

commissioning tests (within three months of the plant becoming operational) and subsequently monitored by annual performance testing and shall include remedial measures to be implemented if emissions exceed the agreed specification, to guarantee future performance in accordance with the details originally so approved. The agreed specification shall be implemented before the development is brought into use. The Planning Authority shall be given at least 7 days notice of all testing and shall be supplied with the results of tests within 30 days. If abatement plant is installed and if the outlet odour concentrations exceed the design value in any commissioning or annual performance test, then the plant shall be repaired or rectified and re-tested with 30 days of the failed test, unless the 12 month period for installation of an abatement plant has been triggered.

Reason. In the interest of air quality.

32. *Odour Control Plant Commissioning Plan*

The new odour control plant shall not become operational until and unless a commissioning plan for each new odour control plant, to include details of an agreed performance specification, has first been submitted to, and has been approved in writing by, the Local Planning Authority, and the plant shall be operated only in accordance with the approved Plan.

Reason. In the interest of air quality.

Example of a suitable performance and testing specification:-'Outlet air from the odour abatement plant serving the (FACILITY) will be exhausted to atmosphere through (Discharge arrangements, e.g. 15, or 20m stack) at a velocity of at least 15 m/s, and with an odour concentration not exceeding 600 ouE/m3 (or 1,000 ouE/m3 to be defined) at an airflow rate not exceeding the design value of Y.Y m3/s. TWUL shall arrange for outlet odour concentrations to be assessed by initial commissioning tests (within three months of the plant becoming operational) and subsequently by annual performance testing. Each test to be based on triplicate samples of exhaust air collected while the plant is operating under normal conditions with at least X (example plant) and Y (example tanks) operating, and the samples will be analysed in accordance with the BSEN 13725 standard techniques. If the geometric mean outlet odour concentrations shall be re-tested after remedial works have been undertaken within 30 days. If the geometric mean outlet odour concentrations fail to meet the above limit, then the plant shall be re- tested within 30 days after remedial works have been undertaken. If the geometric mean outlet odour concentrations consistently exceed the design value (3 failures within 90 days) then TW will install additional appropriate abatement equipment or take measures to ensure the outlet air meets the agreed emission rates (XXX ouE/m3 at y.y m3/s) within 12 months. The Authority shall be given at least 7 days notice of all testing and will be supplied with the results of tests within 30 days. If the outlet odour concentrations exceed the design value in any commissioning or annual performance test, then the plant shall be repaired or rectified and re-tested with 30 days of the failed test, unless the 12 month period for installation of an additional or alternative abatement plant has been triggered.'

33. *Odour Management During Construction*

Development shall not commence until details of measures to maintain a stable odour environment while extension of the facility (e.g. by extension of any existing odour management plan to cover the construction area) have first been submitted to, and have been approved in writing by, the Local Planning Authority, and the development shall only be carried out in accordance with the approved details.

Reason. In the interest of air quality.

34. *Odour Mitigation Implementation*

No new plant shall become operational until and unless all agreed odour mitigation measures for that plant have first been put in place and are operating.

Reason. In the interest of air quality.

35. *Mosquito Management Plan*

Notwithstanding any information which has been submitted as part of the application, prior to the operation of any new plant approved as part of this development, a mosquito management plan shall be submitted to, and shall be approved in writing by, the Local Planning Authority, addressing any potential mosquito nuisance arising from any part of the new plant, and the plan as approved shall be implemented as approved.

Reason. To protect neighbours' living conditions.

SUSTAINABLE DEVELOPMENT COMMITTEE 4 March 2009

Addendum Report

Agenda Item 8 – Pages 74- 172

Mogden Sewage Treatment Works

6.0 Progress since drafting of the report:

6.1 Further revisions to the Draft S106 agreement have been produced and are broadly agreeable to both sides.

6.2 However:

- Officers have yet to agree with Thames on definitions of 'Unacceptable Sludge Gas Odour Occurrence' and 'Unacceptable Storm Water Tank Odour Occurrence' or a suitable form of words that would allow this to be agreed in future before the development can start *(see Pages 79-82 of main agenda).*

  Thames' current position involves a measurement regime for Storm Water Tank Odour that would be too onerous because of the number and frequency of measurement involved. Officers are discussing this with Thames and it is hoped that a more reasonable set of criteria or any alternative solution can be arrived at and mutually agreed in advance of the meeting.

  This is necessary in order to ensure appropriate control over future adverse effects should they arise.

- Nor have the sides agreed the use of a ring of H2S sensors round the digesters complex, rather than a single sensor as proposed by Thames.

  A single sensor is unacceptable, because it does not factor in the effect of wind variations and might therefore under-represent the seriousness of H2S emissions *(see Pages 79-82 of main agenda).*

  Officers consider that the use of more than one sensor is essential. Officers consider that eight are needed and Thames have yet to demonstrate why a lesser number would be sufficient to achieve this objective.

7.0 Corrections to proposed conditions

7.1 The proposed conditions *(pages 89 onwards of main agenda)* are not correctly numbered after condition 20. Conditions 22 (now 21 – see below) and 28 (now 27 – see below) have been redrafted. This revised wording is the subject of discussion with Thames Water and may be further amended.

7.2 Conditions 22 – 35 in the agenda report as recommended should now read 21-34.

7.3 New Condition 21 is now recommended as follows:

Odour Control

Prior to it first being brought into operation, the development shall comply with the best practicable means to control and limit odours and, shall ensure that odour is identified at an early stage, and that pro-active measures are taken to reduce the impact on off-site sensitive receptors by the implementation of the current agreed Odour Management Plan or such subsequent revisions that that shall first have been submitted to and approved in writing by the local planning authority. The plan shall include regular maintenance and monitoring and annual performance tests, and remedial work and retesting where appropriate, and the Odour Management Plan shall be reviewed annually and updated in response to the results obtained from these tests and (wherever practicable) to any other changes in industry best practice that may arise, in accordance with details to be submitted to and to be approved in writing by, the Local Planning Authority.

Reason. In the interest of air quality.

7.4 New Condition 27 is now recommended as follows:

Remedial Action Following Olfactrometric Testing

In the event that the results of a test pursuant to Condition 25 shows that emissions are exceeding the levels set out in Environmental Statement supporting the planning application received on 2nd June 2008 for the development, the developer shall immediately identify and take such steps as are required to ensure that emission levels are no higher than those set out in the application and, if the steps necessary cannot be carried out within seven working days of the completion of the test, shall notify the local planning authority of the nature of the proposed measures for completion of the work and the reason for that timescale. Following the taking of such steps the developer shall immediately demonstrate compliance by further olfactometric testing (as provided for in Condition 25) and supply the Local Planning Authority with the results of the test as required by Condition 25.

Reasons: To ensure emissions stay within acceptable limits.