

<b>Committee:</b> Strategic Development	<b>Date:</b> 8 <sup>th</sup> November 2007	<b>Classification:</b> Unrestricted	<b>Agenda Item No:</b> 8.1
<b>Report of:</b> Corporate Director Development & Renewal		<b>Title:</b> Special Planning Considerations	
<b>Case Officer:</b> Michael Kiely		<b>Ref No:</b> PA/05/00421	
		<b>Ward(s):</b> Bethnal Green North	

## 1. DEVELOPMENT DETAILS

<b>Location:</b>	33-37 The Oval London E2 9DT
<b>Existing Use:</b>	Vacant land/construction site – former industrial use
<b>Development:</b>	Demolition of existing building and redevelopment to provide a five storey building comprising 3 Use Class B1 (business) units on the ground floor with 14 flats above (6 one bedroom, 6 two bedroom and 2 three bedroom flats).
<b>Drawing Nos:</b>	001A, 002B, 003B, 004B, 005, SK006 & 007 plus design & access statement and sunlight & daylight report
<b>Applicant:</b>	Neptune Group
<b>Owner:</b>	Warren Tyler
<b>Historic Building:</b>	No
<b>Conservation Area:</b>	No

## 2. SUMMARY OF MATERIAL PLANNING CONSIDERATIONS

- 2.1 This report considers the risks associated with the development at this location that was given planning permission without proper consultation with the Health and Safety Executive (HSE), a statutory consultee under the General Permitted Development Order (GDPO). After considering an independent assessment of the risks (the Atkins Report at Appendix C together with HSE's comments, Appendix D and Atkins' responses, Appendix E), the report concludes that the nature and level of risk does not over-ride the planning benefits of the development to justify serving an order under either S97 or S102 of the Town and Country Planning Act. This decision is not seen as setting a precedent for future decisions due to the very special circumstances that surround it. It is considered desirable to secure measures that would mitigate some of the risks through negotiation with the developer. These can be secured using powers under S106 of the Act to enter into planning obligations.
- 2.2 The conclusions arrived at in the Atkins Report (and in this report) are not seen in any way as setting a precedent for future planning application decisions in this type of locality as they relate to a discrete set of circumstances limited to a particular site and do not address how the Council will assess future applications.

## 3. RECOMMENDATION

- 3.1 That the Committee resolve to not use the powers in S97 or S102 of the Town and Country Planning Act 1990 (as amended).

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### LOCAL GOVERNMENT ACT 2000 (Section 97) LIST OF BACKGROUND PAPERS USED IN THE DRAFTING OF THIS REPORT

Brief Description of background papers:	Tick if copy supplied for register	Name and telephone no. of holder:
Application, plans, adopted UDP. draft LDF and London Plan	✓	Michael Kiely 020 7364 5257

3.2 That the Corporate Director Development & Renewal is delegated power to negotiate a legal agreement with the developer to secure the obligations described in paragraph 8.30 of the report.

## 4. BACKGROUND

### Site and Surroundings

4.1 The site lies on the western side of The Oval, has a frontage of 22m, a depth of 25.5m and a site area of 0.056 hectares. It used to contain a single storey building that occupied most of the site and was used as a timber furniture manufacturer's. That building has been demolished and the development permitted under PA/05/00421 is currently under construction. The ground floor of the proposed development comprises 3 B1 (office/industrial) units. The remaining 4 floors of this 5-storey development provide 14 residential units: 6 x 1 bedroom, 6 x 2 bedroom & 2 x 3 bedroom. The immediate area is generally commercial in nature however the wider area has a significant residential population.

4.2 To the north of the site is a 2-storey building used as a printer's. To the south of the site is a 2-storey building used as a household furniture manufacturer's.

4.3 To the west of the site are the Bethnal Green gasholders operated by National Grid (NNG). The site occupies an area of around 150m x 150m (2.25 hectares). It includes 4 gas holders of the cup and grip water seal type, each of which consists of a series of co-axial cylinders which are able to rise and fall depending on the quantity of gas to be stored. Each cylinder is sealed against the next one by a series of water-filled troughs which are replenished as each seal drops back into the bottom cylinder, which acts as a reservoir. The details of the gas holders are as follows:

- No 1            4 lifts            26 t capacity
- No 2            2 lifts            19 t capacity
- No 4            3 lifts            78 t capacity
- No 5            3 lifts            92 t capacity

4.4 The typical operational profile for a gas holder is that they are only used in the winter months (for 6-7 months) and, when used, are filled from approximately 22.00 hours to 06.00 hours and emptied from 06.00 hours to 22.00 hours.

4.5 In addition to the gas holders, there is pipework connecting this storage to the main gas network. Most of this pipework is 90cm diameter and is buried, although there are some smaller sections of 60cm and 75cm diameter above ground. There is around 600m of pipework on the site above and below ground, together with a number of valves. These valves are mostly situated to the west of the site. Indeed, the closest approach of any overground pipework to the site boundary adjacent to the development at 33-37 The Oval is around 70m. The gas holders and much of the pipework are at low pressure, although there is some of the distribution pipework which is up to around 7 bar.

### Planning History

4.6 Address: 33-37 The Oval, London, E2 9DT

Application Number: PA/06/01393

Proposal: Demolition of existing building. Redevelopment to provide a five storey building for use as 2 Class B1 (business) units on the ground floor with 14 flats above (6 one bedroom, 6 two bedroom and 2 three bedroom flats).

Decision: Withdrawn by applicant on 13<sup>th</sup> April 2007

Application Number: PA/06/01329  
Proposal: Submission of details pursuant to condition 2a (facing materials), 2b (external lighting), 2c (landscaping) and 6 (contamination) of planning permission dated 15<sup>th</sup> December 2005, reference PA/05/421  
Decision: Permitted on 26<sup>th</sup> September 2006

Application Number: PA/05/00421  
Proposal: Demolition of existing building and redevelopment to provide a five storey building comprising 3 Use Class B1 (business) units on the ground floor with 14 flats above (6 one bedroom, 6 two bedroom and 2 three bedroom flats)  
Decision Permitted on 15<sup>th</sup> December 2005

#### 4.7 Address: Bethnal Green Holder Station, Marian Place, London, E2

Application Number: PA/02/00453  
Proposal: Continuation of Hazardous Substances Consent following a change in control of part of the land.  
Decision: Permitted on 26<sup>th</sup> June 2002

Application Number: PA/00/01825  
Proposal: Continuation of Hazardous Substances Consent (relating to change in control of part of site)  
Decision: Permitted on 22<sup>nd</sup> January 2001

Application Number: PA/00/01466  
Proposal: Installation of a 15M high extendable and shareable telecommunications tower associated cabins in 2.5m high fenced compound  
Decision: Permitted Development

#### **Recent events**

- 4.8 Planning permission PA/05/00421 was processed and determined (permission was granted on 15<sup>th</sup> December 2005) without consultation with the HSE, as required by the General Development Procedure Order. This came to HSE and NGG's attention past the time when they could challenge the decision in the courts. A decision at a site to the north (5-10 Corbridge Crescent), where a similar error occurred, was challenged by National Grid on 12 June 2006 and the decision was eventually set aside by the High Court On 6<sup>th</sup> June 2007. The Council did not contest that challenge.
- 4.9 In response to a design rethink for 33-37 The Oval, a revised application (PA/06/01393) was submitted on 1<sup>st</sup> August 2006. The opportunity was taken by officers to negotiate an amendment to this new scheme to address a requirement from National Grid for there to be no development within 18m of the holders. This distance is recommended by the Institute of Gas Engineers Code of Practice SR4 Edition 2 and represents the distance needed for gas leaking from an installation to rise and dilute with air so that it is no longer capable of being ignited. That amendment was secured. On consultation, National Grid no longer objected to the development, however the HSE maintained their objection. (It should be noted that HSE's view is that the distance of 18 metres is now out of date and that flammable clouds can exist in certain circumstances for up to 80 metres from the side of a gasholder, however 18 metres remains the industry's position). The Council's Strategic Development Committee considered the application on 16<sup>th</sup> November 2006 (Committee report attached as Appendix A) and resolved to grant planning permission.

- 4.10 As required by Circular 04/2000 the HSE were notified of our decision before it was issued. HSE considered this case to be exceptional enough, particularly because of the significant level of risk, to request the Secretary of State to call-in the application for her own determination. She agreed to that request. This would have resulted in a public inquiry, however the applicant withdrew the application, and consequently the application was incapable of being called-in.
- 4.11 By now work had commenced on site to construct the amended scheme (PA/06/01393). However, in view of the call-in and withdrawal of the application, the frame that was formed has been altered to enable the original scheme (approved under PA/05/00421) to be constructed. Work is currently underway on site to implement PA/05/00421 with completion expected around spring 2008.
- 4.12 In view of the concerns of the HSE about safety in relation to this development, an independent assessment of the risks associated with the nearby gas holders was commissioned by the Council. This was carried out by Atkins Oil & Gas and is attached at Appendix C. This report is as a result of consideration of the Atkins report.

## **5. LEGAL POSITION**

- 5.1 Despite the admitted failure of the consultation process, PA/05/00421 remains valid and capable of implementation unless and until quashed by the courts. Any attempt to challenge the lawfulness of the permission by judicial review is now out of time. While the court does have power to extend time, it very rarely exercises this power and would be reluctant to do so in the absence of a compelling justification.
- 5.2 Accordingly, the developer has a valid planning permission to develop the site and that is his present intention. Any development which accords with that permission will be lawful.
- 5.3 The Planning Act does give local planning authorities powers that may be used in these circumstances. These powers are also available to the Secretary of State.

### **Revocation or modification powers**

- 5.4 Section 97 of the Act gives a local planning authority the power to make either a revocation or a modification order to amend a planning permission PA/05/00421:
- (1) If it appears to the local planning authority that it is expedient to revoke or modify any permission to develop land granted on an application made under this Part, the authority may by order revoke or modify the permission to such extent as they consider expedient.*
  - (2) In exercising their functions under subsection (1) the authority shall have regard to the development plan and to any other material considerations.*
  - (3) The power conferred by this section may be exercised—*
    - (a) where the permission relates to the carrying out of building or other operations, at any time before those operations have been completed;*
    - (b) where the permission relates to a change of the use of any land, at any time before the change has taken place.*
  - (4) The revocation or modification of permission for the carrying out of building or other operations shall not affect so much of those operations as has been previously carried out.*
- 5.5 Because the development has already commenced, section 97(4) would exclude the making of a revocation order against any works already carried out. A modification order could still be made against permitted operations that have yet to be carried out.
- 5.6 The power is discretionary. The Council is under no duty to make a modification order. In deciding to make an order regard must be had to the development plan and to any other

material considerations. The order would effect a modification at the time it was made subject to it being confirmed by the Secretary of State. The developer could, however, oppose the order under section 98 of the Act and be afforded an opportunity to be heard by the Secretary of State.

- 5.7 Were a modification order to come into effect compensation would be payable by the Council to the developer under section 107 of the Act. The compensation would cover any expenses incurred in carrying out the work which is rendered abortive (including the preparatory work such as plans) and any other loss or damage directly attributable to the modification order.

### **Discontinuance powers**

- 5.8 Section 102 of the Act gives a local planning authority the power to make an order requiring the discontinuance of a use or the alteration or removal of buildings or works that are completed:

- 1) *If, having regard to the development plan and to any other material considerations, it appears to a local planning authority that it is expedient in the interests of the proper planning of their area (including the interests of amenity)—*
  - (a) *that any use of land should be discontinued or that any conditions should be imposed on the continuance of a use of land; or*
  - (b) *that any buildings or works should be altered or removed, they may by order—*
    - (i) *require the discontinuance of that use, or*
    - (ii) *impose such conditions as may be specified in the order on the continuance of it, or*
    - (iii) *require such steps as may be so specified to be taken for the alteration or removal of the buildings or works,*

*as the case may be.*
- (2) *An order under this section may grant planning permission for any development of the land to which the order relates, subject to such conditions as may be specified in the order.*
- (3) *Section 97 shall apply in relation to any planning permission granted by an order under this section as it applies in relation to planning permission granted by the local planning authority on an application made under this Part.*
- (4) *The power conferred by subsection (2) includes power, by an order under this section, to grant planning permission, subject to such conditions as may be specified in the order—*
  - (a) *for the retention, on the land to which the order relates, of buildings or works constructed or carried out before the date on which the order was submitted to the Secretary of State under section 103; or*
  - (b) *for the continuance of a use of that land instituted before that date.*
- (5) *Any planning permission granted in accordance with subsection (4) may be granted—*
  - (a) *so as to take effect from the date on which the buildings or works were constructed or carried out, or the use was instituted, or*
  - (b) *in the case of buildings or works constructed or a use instituted in accordance with planning permission granted for a limited period, so as to take effect from the end of that period.*
- (6) *Where the requirements of an order under this section will involve the displacement of persons residing in any premises, it shall be the duty of the local planning authority, in so far as there is no other residential accommodation suitable to the reasonable requirements of those persons available on reasonable terms, to secure the provision of such accommodation in advance of the displacement.*
- (7) *Subject to section 103(8), in the case of planning permission granted by an order under this section, the authority referred to in sections 91(1)(b) and 92(4) is the local planning authority making the order.*

- 5.9 Again the power is discretionary and the Council is under no duty to make such an order. In deciding to make an order regard must be had to the development plan and to any other material considerations. An order can be framed to have the same effect as a modification order.
- 5.10 Any order has to be confirmed by the Secretary of State and the owner of the land affected, the occupier of that land, and any other person who will be affected by the order (eg a mortgagee) can challenge it at a public inquiry.
- 5.11 Were a discontinuance order to come into effect compensation would be payable by the Council under section 115 of the Act. The compensation would cover depreciation of the value of the land and disturbance in enjoyment of the land.
- 5.12 It is therefore the case that the power exists under the Planning Act to remove the development in its entirety if the planning considerations justified such a decision. Compensation would be payable whichever power (section 97 or 102) was considered appropriate.

## 6. POLICY FRAMEWORK

- 6.1 For details of the status of relevant policies see the front sheet for "Planning Applications for Decision" agenda items. The following policies are relevant to the development:

### Unitary Development Plan 1998 (as saved September 2007)

Proposals:	SVCA	Strategic View Consultation Area
Policies:	DEV1 & 2	General design and environmental requirements
	DEV3	Mixed use development
	DEV4	Planning obligations
	DEV50	Development and Noise
	DEV51	Contaminated Land
	DEV53	Hazardous Development - conditions
	DEV54	Hazardous Development - consultations
	HSG7	Dwelling Mix and Type
	HSG9	Density
	HSG13	Internal Standards for Residential Developments
	HSG15	Development Affecting Residential Amenity
	HSG16	Amenity Space
	T16	Traffic Priorities for New Development
	T21	Pedestrian Needs in New Development

### Interim Planning Guidance for the purposes of Development Control

Proposals:	CP50	Strategic View Consultation Area
	C6	Development Site (refer AAP)
Core Strategies:	CP1	Creating Sustainable Communities
	CP4	Good Design
	CP11	Sites in Employment Use
	CP19	New Housing Provision
	CP21	Dwelling Mix and Type
	CP22	Affordable Housing
	CP25	Housing Amenity Space
	CP41	Integrating Development with Transport
Policies:	DEV1	Amenity
	DEV2	Character and Design
	DEV3	Accessibility and Inclusive Design
	DEV4	Safety and Security

DEV10	Disturbance from Noise Pollution
DEV15	Waste and Recyclables Storage
DEV16	Walking and Cycling Facilities
DEV22	Contaminated Land
DEV23	Hazardous Development & Storage of Hazardous Substances
EE2	Redevelopment/ Change of Use of Employment Sites
HSG1	Determining Residential Density
HSG2	Housing Mix
HSG3	Affordable Housing Provisions in Individual Private Residential and Mixed-Use Schemes
HSG7	Housing Amenity Space

### **Supplementary Planning Guidance/Documents**

Residential Space Standards

### **Spatial Development Strategy for Greater London (London Plan)**

3A.2	Borough Housing Targets
3A.4	Housing Choice
3A.6-8	Affordable Housing
3B.4	Mixed Use Development
3C.1	Integrating Transport and Development
3C.21	Improving Conditions for Cycling
4A.17	Dealing with Hazardous Substances
4B.3	Maximising the Potential of Sites

### **Government Planning Policy Guidance/Statements**

PPS3	Housing
PPG24	Planning and Noise

**Community Plan** The following Community Plan objectives relate to the application:

- A better place for living safely
- A better place for living well
- A better place for creating and sharing prosperity

## **7. CONSULTATIONS**

7.1 The HSE, National Grid, Government Office for London and the developer have been consulted on an earlier draft of this report. Their views are set out below.

### **HSE**

7.2 HSE's role in the land use planning system is to provide local authorities with advice on the nature and severity of the risks presented by major hazards (such as the Bethnal Green Gas Holder Station) to people in the surrounding area so that those risks can be given due weight, when balanced against other relevant planning considerations, in making planning decisions. (DETR circular 04/2000)

- HSE has serious concerns regarding the significant level of risk to occupants of the 5 storey development at 33-37 The Oval, E2.
- If HSE had been consulted on this development prior to the granting of planning permission, HSE would have strongly advised against the granting of planning permission and if the Council was minded to grant planning permission against HSE's

advice it would have asked the Secretary of State to 'call in' the application for their own determination.

- HSE notes that under the Council's planning policies (Adopted Unitary Development Plan, Policies DEV 53 and DEV 54), 'Development near to these (hazardous) installations (e.g. the Bethnal Green Holder Station) should not go ahead if it exposes large numbers of people to increased risk.' and that in the 'Conclusions' section of this report, the Council accepts that the development at 33-37 The Oval would result in an increase in the level of risk.
- In HSE's opinion, Atkins Oil and Gas have underestimated the risk to occupants by at least a factor of 5. This means the risk of fatality would very probably be 60 chances per million (cpm) per year risk of death or more.
- HSE's long standing view of risk follows that reached by a Study Group of the Royal Society on the topic of Risk Assessment, published in 1983 and in HSE publications since then, that considers a risk of <1 cpm risk of death is negligible and 100 cpm (1 in 10,000 per annum) unacceptable for members of the public who have risks imposed on them in the wider interests of society. HSE recognise that in practice, most industries do much better than these limits and the risk to members of the public from work activity are much lower.
- Comparison of the risk to the occupants of the development with other benchmarks such as the annual risk of death for employees from working in the construction or manufacturing industry are misleading as those risks are willingly tolerated by the individuals for direct benefit from that employment.
- An individual risk of approximately 60 cpm in this case is very high and approaches an unacceptable risk level for a member of the public.
- The apartment block is within the hazard range of nearly all the major accident scenarios predicted by Atkins Oil and Gas, HSE and National Grid (The operator of Bethnal Green Holder Station). In HSE's opinion there would be minimal opportunity for escape and evacuation for the occupants of the 5 storey development and hence in the event of an incident multiple fatalities would be expected (up to 46).
- The impact of the proposed mitigation measures is considered to be minimal on the calculated risks. The difficulties in conservation and enforcement of these measures over time mean their contribution to any impact on the safety of occupants cannot be assured hence in HSE's opinion; such measures should be given very little weight in the committee's decision.
- According to National Grid records, last year there were two major gas releases from holders in London. In 1977 a major gas escape from the Bethnal Green Holder Station caused the closure of Liverpool Street Station.
- In HSE's opinion, 33-37 the Oval is an inappropriate location for a 5 storey apartment block and the safety of its occupants should be a significant material consideration for the committee and sufficient to support revocation or discontinuance of the existing planning permission.

7.3 HSE have also submitted a commentary on the Atkins report which is appended as Appendix D. A response to this from Atkins Oil and Gas is also attached at Appendix E.

### **National Grid**

7.4 National Grid's comments are limited to the potential impact of a development on the holder station and they do not consider or cover risk to the proposed development or surrounding area in the event of a major accident at the holder station, which they consider to be the responsibility of HSE.

7.5 With regard to the impact of the development on the holder site they recommend that the development accords with the provisions of the Institute of Gas Engineers document SR4. This recommends that no source of ignition be permitted within approximately 18 metres of a gas holder and that buildings, lighting, etc should not be erected closer than 18 metres to a gasholder. They have noted the proposal does come within 18 metres and have noted



the suggested mitigation measures. However, they consider that these are unlikely to prevent potential sources of ignition within 18 metres of the holder. As such they recommend, as a minimum, that changes are made necessary to ensure consistency with IGEM document SR4.

- 7.6 National Grid also commented on the report at Appendix A, which they consider did not, in parts, accurately reflect their representations. However that report relates to a different application.

#### **Government Office for London**

- 7.7 No comments received.

#### **The Developer**

- 7.8 No comments on the report but has confirmed willingness to enter in the legal agreement specified below in paragraph 8.31.

### **8. PLANNING CONSIDERATIONS**

- 8.1 As explained earlier in the report, planning permission exists for a development at 33-37 The Oval against which a statutory consultee (the Health and Safety Executive) has raised an objection on the grounds of safety. That body was not consulted as required by the GDPO during the processing of the application. The permission cannot now be challenged due to the passage of time. The Council therefore should consider (on the basis of the development plan and any other material considerations only) whether to take any action. The action available to the Council is as follows:

- To issue an Order either under section 97 (revocation or modification powers) or under section 102 (discontinuance powers) of the Planning Act
- To negotiate changes to the development with the developer to mitigate any residual risks
- To take no action

- 8.2 In order to enable the Council to consider what is the right course of action, independent professional advice was obtained on the risk issues raised by the development from a qualified expert (the Atkins Report at Appendix C). Legal advice from Counsel has also been taken.

- 8.3 In making a decision on the planning merits, the circumstances resulting from the implementation of PA/05/00421 must create an unacceptable level of danger in order to justify serving an Order. If the development, either as permitted by PA/05/00421 or as amended through negotiation, is acceptable in the particular circumstances at the Oval then there would be no need for the Council to take any further action.

- 8.4 If the development permitted under PA/05/00421 was constructed there would be relatively minor implications with respect to the Council's function in determining future planning applications. Each case has to be treated on its individual planning merits. Such development on the site would not be likely to set a precedent for development elsewhere. It would not prevent the local planning authority considering future applications on their merits.

#### **Summary of advice received on risk assessment**

- 8.5 The system used by the HSE to assess risk when considering planning application consultations (known as PADHI) is based upon consideration of individual risk, although HSE is currently considering ways in which they can also address societal risk issues around certain major hazard installations which are surrounded by significant populations.

Their preliminary list of 54 such sites has included the gas holder installation at Bethnal Green. The Atkins report therefore considered both individual and societal risk.

- 8.6 Previously under the PADHI system, HSE as a statutory consultee had to be notified about specified development within the consultation distance of a notifiable installation (eg a gasholder site for which the consultation distance was, until 2006, 60m from the edge of the gasholder). They would look at each case and provide advice in the form of either “advise against” or “do not advise against” within the 21 day period given to reply.
- 8.7 The new system seeks to automate the process by having what is known as “standing advice”. However at about the same time as this change in methodology, HSE has also reviewed the risks associated with gas holder sites. This has resulted in much wider consultation zones for these installations (see map attached at appendix B). The development at 33-37 The Oval was also within the previous 60m consultation zone.
- 8.8 At the centre of the new consultation system is a matrix with distance from hazard against nature of the development resulting in either “advise against” or “don’t advise against” the development. There are 3 zones: inner (about 80m), middle (about 200m) and outer (about 280m), where the distances in parentheses relate to the largest gas holder on the Bethnal Green site, and are measured from the edge of the holder. There are 4 types of development. The following is just an illustration of them (the PADHI model has a more detailed definition):
- Development Type 1 Low density uses such as warehousing and industry where there are low numbers of people
  - Development Type 2 Low density housing: < 40 dwellings per hectare (the Council hardly ever builds at this density in Tower Hamlets)
  - Development Type 3 High density housing: > 40 dwellings per hectare
  - Development Type 4 very large or sensitive developments – eg sports stadia (high nos of people) or care home (hard to evacuate)
- 8.9 The implication of this new regime in Tower Hamlets is that there is effectively a 200 metre zone around all gas holders within which the HSE will “advise against” most residential development. Such an area (10.31 hectares in the case of Bethnal Green, when the area of the holder site is deducted) could hold between 2,480 and 4,480 dwellings given the Public Transport Accessibility Level of the area (PTAL 5) and development plan density policies (ie between 240 and 435 dwellings per hectare). If say only about a quarter of the area was capable of redevelopment and this was advised against by the HSE and Tower Hamlets followed this advice, between 620 and 1120 new dwellings could be lost and given recent trends in development densities, this is likely to be at the upper end of this range or even beyond it. The Council has 4 such installations in the Borough. This is a significant issue in terms of housing provision; representing nearly 18 months provision of new housing in the Borough.
- 8.10 The site at 33-37 The Oval is located within the Inner Planning Zone of the adjacent Bethnal Green gas holder site. The basis of the HSE ‘Advise Against’ decision has therefore been assessed in relation to the actual risks at the development site. Detailed information concerning the site and its operation has been used, together with the appropriate publications from HSE, to provide a list of credible potential major hazard accident scenarios from the site. The consequences of the scenarios have been calculated using standard methodologies, and the results matched, where possible, with information supplied from the National Grid Control of Major Accident Hazards (COMAH) report. Event frequencies have been estimated based both on recommendations of HSE, and also on interpretation of available accident statistics. The combination of consequences and frequencies has enabled the risks to be calculated, and the predictions match closely to the expectations based upon HSE’s Planning Zones.

### Individual Risk

- 8.11 The individual risk of fatality at 33-37 The Oval is estimated by Atkins Oil and Gas to be around 12 cpm (chances per million per year) for a typical residential population. That means that a person can be expected to be fatally injured as a result of an accident at the gasholder site every 80,000 years. The results of this assessment are therefore clearly consistent with the screening process which is applied within the PADHI process: ie this value is high compared with the level at which HSE would Advise Against for any development containing more than a few people.
- 8.12 In order to help understand the level of risk at the proposed development, it is worthwhile to compare it with historical data on the other risks to which people are typically exposed. HSE's "Reducing Risks, Protecting People" document provides some data on the risks to which people are routinely exposed. Some of this information is reproduced below, in terms of risk of fatality as annual experience per million, or chances per million per year (cpm).

	Risk as annual experience per million	Risk as annual experience
Annual risk of death (entire population)	10,309 cpm	1 in 97
Annual risk of cancer	2,584 cpm	1 in 387
Annual risk from all types of accident	246 cpm	1 in 4,064
Annual risk from all forms of road accident	60 cpm	1 in 16,800
Construction	59 cpm	1 in 17,000
Agriculture, hunting, forestry and fishing	58 cpm	1 in 17,200
Manufacturing industry	13 cpm	1 in 77,000
<b>The development</b>	<b>12 cpm</b>	<b>1 in 80,000</b>

- 8.13 These risks can be compared with the additional annual risk for the most exposed people at the proposed development of up to about 12 cpm (once in 80,000 years) due to major accidents. For example, the annual risk of death for the most exposed person would increase by about 0.12% (from 10,309 to 10,321 cpm), and this increase would be less than a twentieth of the risk of dying in all types of accident. HSE point out that comparing voluntarily accepted risks with imposed risks is misleading. However, there are few other ways in which the numbers can realistically be put into context.
- 8.14 The individual risk is therefore not intolerable (100cpm), but is above what could be described as negligible (1cpm) or broadly acceptable.

### Societal Risk

- 8.15 In addition to the above individual risk, it should be remembered that the worst case accident, involving a major fireball, could theoretically result in large numbers of people being affected in a single incident, although the likelihood of such a very severe event is very low (probably of the order of less than once in 120,000 years). This possibility of multiple fatalities may be regarded as a greater concern than the individual risks of around 12 cpm.
- 8.16 The report by Atkins Oil and Gas at Appendix C demonstrates that the societal risk associated with the Bethnal Green gas holder site is not at present exceptionally high for a typical COMAH site. It has also been shown that the societal risk would not increase to an intolerable level if the proposed development were to be allowed. The potential for a precedent being set by allowing this development is a possible concern, as further such developments could result in a significant increase in societal risk. This development

represents a 32% increase, which would imply that only 3 such developments would be required before the societal risk was almost doubled.

- 8.17 The question of precedent in planning is well established. In the strict legal sense, it does not operate in planning decisions. The dominant principle is that all planning decisions must be taken on their individual merits. The existence of a comparable decision on another site, or even the same site, may set up an expectation that a similar decision will be taken on a current application, but it does no more than that. If circumstances have changed or there are material differences, then the decision maker is entitled to come to a different conclusion on the merits of the case. Given that this decision relates to a very particular set of circumstances at this site (including previous procedural issues and the fact that the decision is taken in regard to section 97 or 102 of the Act, rather than the determination of a planning application) any decision is not seen as in any way setting a precedent for the determination of future planning applications and would not indicate how the Council will assess future applications.
- 8.18 HSE has identified in CD212 the Bethnal Green Gasholder as being amongst the 54 or so of the 1130 COMAH sites in the UK that may require explicit consideration of societal risk. HSE is of the view that the location of this development places it within the range of nearly all the potential major accidents from the closest gasholder. In the event of a serious incident, the likelihood that it would lead to multiple casualties is high. They therefore state that as no criteria has yet been agreed as to what is considered acceptable or not in terms of societal risk, any statement implying acceptance or otherwise of societal risk should not be made.

#### Conclusions on the assessment of risk

- 8.19 It is therefore clear that, when considering potential individual developments close to major hazard sites, both individual and societal risk need to be considered. In some cases, robust calculations of these risks may show them to be below some 'broadly acceptable' level, as defined by HSE. Conversely, they may be shown to be intolerable in all circumstances. Between these levels (as is the case for the proposed development), the acceptability of the risks, either individual or societal, can only be judged by balancing the calculated risks with the socioeconomic benefits (both for the hazardous installation and for developments in the vicinity). Ultimately, although HSE provides advice, it is for the planning authority to make such judgements, taking account of factors such as:
- nature and scale of benefits to the local / wider community
  - provision of jobs / employment
  - contribution to GDP and local taxes
  - consistency with local development plans
  - views of the public
  - etc
- 8.20 and balancing these benefits against the risks in terms of:
- number and likelihood of people affected (fatalities and injuries)
  - nature of harm
- 8.21 For example, a gas holder site such as Bethnal Green could be regarded as providing a significant regional benefit in terms of providing a fuel supply to a large community, and hence a planning authority might consider that a moderate level of societal risk associated with the installation was acceptable (provided it could be demonstrated to be As Low As Reasonably Practicable – ALARP), whilst for a smaller industrial activity with no significant socioeconomic benefits, a planning authority might consider the same level of societal risk to be unacceptable (even if it was also ALARP).

8.22 Similarly, where a development is proposed near an existing major hazard site, it is also the responsibility of the planning authority to make such judgements, taking account of the factors noted above. If there was such a pressing need for residential development in the area, and no other land was available, then the local planning authority may be more inclined to grant planning permission than in an area where such a pressing need was absent.

8.23 It is therefore concluded that:

1. The individual risk, at around 12cpm, is not intolerable, but is above the level at which HSE would advise against for this type of development.
2. The current societal risk associated with the gas holder site is not exceptionally high for a Top Tier COMAH site.
3. The addition of the extra population will increase societal risk by around 32%.
4. Whilst it is possible that a case could be made for accepting this additional risk, HSE is likely to be concerned at the potential for cumulative societal risk effects if adjacent properties were to be developed in a similar way.

### **Potential for further mitigation**

8.24 There are features of the development which have the potential to be amended or controlled and in certain circumstances these could be beneficial to future occupants. These measures do not however materially impact on the overall risk assessment.

#### Use of roof terraces

8.25 While there would be no mitigation possible against a major incident (such as a fireball) in practice, however, one of the key risk reduction factors is expected to be control of ignition sources close to the gas holder. The terraces at two levels (1st floor and 4th floor) should therefore be considered in relation to controlling ignition sources. Ideally, both should be removed or made inaccessible for normal use. It is recommended that the lower terrace, which is within 18m of the gas holders, is removed. If it is not possible to remove the upper level terrace, then ignition source restrictions should be applied, since there is the potential for a greater travel distance of a flammable cloud at this higher level. This could take the form of appropriate signage advising against smoking and the use of barbeques when the adjacent gas holders are in use (ie during the winter months). In view of both the greater distance from the gas holders, and the intervening presence of the building, no similar restrictions need to be applied to any terraces at the front of the building.

#### Design of boundary wall

8.26 The rear boundary wall will be 5.2m high, and will have no openings. This would ensure that any low level gas releases would be deflected upwards by the presence of this wall as well as by its buoyancy. Moreover, this would be true of all wind conditions, including those higher wind speeds which would otherwise deflect the cloud towards the ground.

#### Minimising potential for gas ingress

8.27 The risk is reduced if any gas released is unable to encounter an ignition source. This can be achieved by minimising the openings facing and within 18m of the gas holders, and ensuring that any which are within 18m are protected, as noted above, by the boundary wall.

#### Installation of shatter-proof glass

8.28 One of the contributors to the risk is explosion. Since much of the injury potential is from flying glass, the effects of explosion can be reduced by ensuring that the glass in any windows facing the gas holders is shatterproof. This can be achieved either through use of

specialist glass from a supplier such as Romag, or by application of window film such as Llumiar to the internal face of the glazing.

#### Provision of adequate means of evacuation

- 8.29 In the event of a fire on one of the gas holders, the thermal radiation at the rear of the building is likely to be sufficiently intense that evacuation would be impeded. The building design should therefore ensure that all occupants, including those using the terraces, can be evacuated safely to the front of the building.

#### Applicability of the desirable design features

- 8.30 The following were recommended by Atkins with comments by officers on their applicability to the development.

**Ensure impermeability of rear wall up to 5m height:** The approved plans show the wall as impermeable. The developer has indicated a willingness to agree to enter into a planning obligation to secure this in perpetuity.

**Minimise window openings facing gas holders within 18 metres of the holder or where not protected by the rear wall:** There are no windows that breach this criteria. The only risk would be the insertion of windows into the rear wall, which would be prevented by the aforementioned planning obligation.

**Specify heat/blast resistant or shatterproof glass for windows facing gas holders:** The developer has indicated a willingness to agree to this, subject to the Council covering the additional costs. It would be secured by a planning obligation.

**Prevent the use of the lower level rear-facing roof terraces:** The developer has indicated a willingness to agree to this and it would be secured by a planning obligation.

**Display signage restricting the use of ignition sources on the upper level rear-facing roof terraces when gas holders are in use:** The developer has indicated a willingness to agree to this and it would be secured by a planning obligation.

**Ensure adequate provision is made for evacuation to the front of the building in the event of minor fires:** The approved plans provide for this with the interior layout.

#### **Development Plan Considerations**

- 8.31 A wide range of policies will impact on the development, and the Council's assessment of the two applications at this site (PA/05/00421 & PA/06/01393) demonstrates that in land use planning terms a mixed commercial and residential development is acceptable at this location. For the purposes of the considerations in this report the need for the development has to be examined in order to balance it against the increase in risk that it represents.
- 8.32 The area is one that is in need of regeneration. It is characteristic of many locations within Tower Hamlets where the former industrial base has declined and the area is now characterised by vacant and sometimes derelict buildings. The need to regenerate such areas generally and the large potential that exists in east London specifically is strongly recognised in national, regional and local planning policies. The site is within the wider Thames Gateway area where a large part of the significant growth that London is experiencing is planned to be accommodated.
- 8.33 Over and above the specific strategic policies that apply to the wider area, there is a national shortage of housing that government is giving the highest priority to addressing. Developing brownfield sites at high densities, particularly where they are near good transport links such as here, is strongly encouraged.

- 8.34 Although government is prioritising the provision of housing, it also recognises that the industrial base has declined and it can be difficult to bring forward new commercial floorspace that is needed to meet demand. Mixed use schemes, where the provision of commercial floorspace can be subsidised by more profitable uses (such as residential), are seen as necessary and desirable.
- 8.35 The site therefore can be seen as playing a small but important role in delivering a wider range of regeneration policy objectives that are important at a local, regional and national level.
- 8.36 Set against these considerations are policies DEV53 & 54 in the UDP that seek to ensure that the risks associated with hazardous installations are properly taken into account as required by Article 12 of the Seveso II Directive.

### **Conclusions**

- 8.37 Consideration of risk is a balance like any other consideration. In this case the benefits that the development brings in providing much needed housing and employment floorspace to an inner city area in need of regeneration have to be weighed against the risks represented by the development's proximity to a gas holder site.
- 8.38 When individual risk is considered, the development could be seen as being one where there is an increase that results in that risk moving from one that is broadly acceptable, but not to one which is intolerable. A range of measures that could be beneficial for future occupiers have been identified, agreed in principle and will be secured. The societal risk is not currently high and this development increases it by 32%. At these levels HSE is likely to be concerned at the potential for cumulative societal risk effects if adjacent properties were to be developed in a similar way. This risk is very low given the special circumstances of this case and the principle that planning applications are assessed on their individual merits.
- 8.39 It is therefore concluded that on balance the implementation of PA/05/00421 would not create an unacceptable level of danger when considered against the gains that the development represents in terms of much needed housing and modern commercial floorspace. Accordingly the serving of an Order would not be justified in the specific circumstances of this case. However, the mitigation benefits identified in this report at paragraph 8.30 are desirable and should be secured.
- 8.40 All other relevant policies and considerations have been taken into account in arriving at these conclusions.