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Title: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE E23H CENTRIFUGE PLANT

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Abstract:
No new wastes or effluents are produced by E23H that are not produced elsewhere in E23. The addition of E23H will increase the amounts of wastes already produced (due to the relative sizes of E23 A,B,C, D, E and E23G, this increase is approximately 22%).
The environmental impact of the E23H centrifuge plant has been assessed using the methodology given in the company procedure, CP-ENV-02 – Assessment of Significant Environmental Aspects. The Assessment is prepared to satisfy the requirements of The Town and Country Planning (Environmental Impact Assessment) Regulations 1999. It is concluded that the only new environmental effects are the visual and noise impact of the building and these are not considered significant.
The building of E23H will increase the enrichment capacity at Capenhurst. The use of the latest Urenco centrifuge technology will increase the overall efficiency of the site and result in less noise and lower emissions per unit of separative work, which is a positive environmental impact.

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1 INTRODUCTION

The production of an Environmental Impact Assessment is required by the UCL Environmental Management System (Reference 1). This specifies the Company Procedures, Safety Instructions and other control procedures which must be observed for compliance with the UCL Environmental Management System, which is currently ISO 14001 certified. These company procedures and Safety Instructions relate to all UCL activities and ensure compliance with current environmental legislation.

The Assessment is prepared to satisfy the requirements of The Town and Country Planning (Environmental Impact Assessment) Regulations 1999.

The E23H project is a continuation of the E23 project to increase the enrichment capacity on the UCL site. It will involve the construction of an extension to the current E23D, E & G buildings and the installation of enrichment process equipment.

A Preliminary Safety Report, PSR, is currently being produced for the E23H phase of the project. A PSR and a Pre-Commencement Safety Report, PCSR, have been produced for the previous phase of the E23 project (References 2 and 3), E23E, which also involved the construction of a building and installation of process equipment. The E23H building will be, as far as possible, the same as the E23G building, except with a larger footprint. Reference 3 included safety assessments where a requirement was identified during the Hazard and Operability, (HAZOP) studies. It was concluded that the risk to operators and the public was 'As Low As Reasonably Practicable', ALARP. Reference 3 also provided details of the types of effluents, residues and wastes produced during the normal operations of the facility.

The content of this Environmental Impact Assessment is consistent with the guidelines given in the UPD Design Instruction, DI/005, (Reference 4). Assessment of the environmental effects from the construction and operation of the E23H centrifuge plant is presented below using the methodology of CP-ENV-02 (Reference 5).

The project to construct and equip the E23E centrifuge plant is identified in Reference 3 to be a Category 'A' project using the categorisation procedures of SI(U)-NSL-6 (Reference 9). The same categorisation will be applicable to the E23H plant.

2 SYSTEM DESCRIPTION

The purpose of the E23H centrifuge plant is to provide URENCO (Capenhurst) Limited with further capacity for UF_6 separative work due to customer demand. Enrichment facilities already exist within the original E23. The E23D , E23E & E23G Buildings are extensions to the E23 Building and were constructed adjacent to it. The E23H Building will further extend the E23 complex and house the E23H Centrifuge Plant.

The un-enriched UF_6 is delivered to site in standard Type 48 international transit cylinders. These cylinders are placed in feed stations and are joined to a common manifold. Heat is applied in the form of hot air to sublime the UF_6. E23H is designed to operate entirely at sub-atmospheric pressures thereby reducing the likelihood of external releases of UF_6 from any system breach, e.g. pipework. E23H maintains low pressures by operating with feed material in the solid phase.

Individual centrifuges are not able to produce the desired product enrichment in a single step. Therefore, they are grouped together in series and in parallel to form cascades. A typical cascade will comprise over a thousand centrifuges.

UF_6 is drawn through the cascades and once sufficient separation has taken place, the product and tails material are de-sublimed at low temperature product and tails take-off stations.

A vent system is provided to remove hazardous contaminants from the small quantities of light gas that arise from background in-leakage, routine venting of UF_6 cylinders and purging of UF_6 lines.

The design of E23H draws on the experience of many years of successful operation of centrifuge enrichment plants at Urenco, whilst including, where applicable, improvements in technology to increase both the safety and efficiency of operation. Many of the potential hazards of previous plants have been designed out and where this has not been possible protection or mitigation has been used against recognised and understood hazards.

Under normal operating conditions the E23H plant will produce small amounts of radiological liquid effluents and negligible quantities of radiological aerial effluents. Filters and chemical traps are used to ensure that the level of these effluents remains negligible even under fault conditions. These filters and traps, once spent, form the bulk of the solid radioactive wastes produced by the plant. The uranic material in the chemical traps will be recovered.

The E23D , E23E & E23G plants meet all the applicable current safety and environmental standards by some margin (Reference 3) and as the E23H plant is essentially a copy of in terms of process design, it should also meet the same standards.

3 CHOICE OF LOCATION

A new building is required for the E23H plant. It will physically join onto the existing E23G building and will utilise the UF_6 loading bay, blending facilities and other limited services from the main E23 building. The location is not a green field area nor is it close to any sites of special scientific interest.

At present the land to be built on is covered by tarmac anD temporary car parking areas. The construction of the E23H building could be considered an aesthetic improvement to the area.

The extension will be visible from three sides. The site plan, Appendix 3, shows the building's location. The visual impact of the E23H extension can be assessed from each elevation.

West Elevation
The west elevation of the extension will not be visible as it is part of the E23G building.

East Elevation
From the East perspective the E23H building will replace the view of the current building. The extension will be of a similar design to the existing building.

North Elevation
This elevation will be visible from the site perimeter. There is at present shrubs and a contractors compound. As the extension will be of a similar design to the existing E23 buildings, the additional visual impact will be minimised.

South Elevation
The south elevation will not be visible from the site boundary.

The environmental significance of the visual impact of the building was evaluated using company procedure, CP-ENV-02 (Reference 5). The evaluation is detailed in Appendix 1. The score is below the limit set for the effect to be regarded as significant.

4 CHOICE OF PROCESS AND WASTE ROUTE

4.1 Choice of Process

The E23H centrifuge plant will be similar to the existing E23 plant. Unlike E23A and other older centrifuge facilities, it is designed to operate entirely at sub-atmospheric pressures thereby reducing the risk of external release of UF_6 from a breach. E23B,C, D , E and G maintain low pressures by only warming feed material slightly so that it remains in the solid phase. The UF_6 vapour is drawn off without the need for liquefaction. This design removes the need for secondary containment feed autoclaves.

Once the separation process has been completed, low temperature product and tails take-off stations are used. These operate at significantly lower temperatures than previous designs, thereby reducing the operating pressures and removing the need for high pressure pumps. Within the feed purification and product vent systems, cold traps and chemical traps are used to minimise any carry-over of UF_6 or HF into the Gaseous Effluent Vent System, GEVS. The cold traps recycle any trapped UF_6 back in to the production streams, again with UF_6 in the solid phase, thereby maintaining the sub-atmospheric pressures.

4.2 Choice of Waste Route

The E23 plants have been designed to, as far as reasonably practicable, minimise the amount of waste produced during normal operation. The handling and disposal of the waste produced is performed according to the relevant company instructions relating to the Urenco (Capenhurst) Limited Environmental Management System which ensure, as a minimum requirement, compliance with current environmental legislation.

Details of the residues, wastes and effluents produced by E23E are given in Reference 3 and these will be repeated in E23H. All wastes and effluents have an identified disposal route and disposal will be performed according to the relevant company instructions.

Residues, including chemical traps, produced by the operation of E23H will be sent to BNFL Springfields for the recovery of uranic material. This ensures that uranic material can be recycled and reduces the amount of waste produced.

Solid contaminated waste, which cannot be decontaminated, will be sent to BNFL Capenhurst for disposal via the UCL Inter-Site Transfer Authorisation. Non-contaminated solid waste is either incinerated, if it is combustible, or it is disposed of off-site using a suitable method of disposal. The E23E PCSR (Reference 3) identified small amounts for both aqueous and non-aqueous radiological liquid effluent. The aqueous effluent arises from the GEVS, floor washings and Take-off Station condensate and the non-aqueous waste comprises primarily waste lubrication oils and solvents. The processing and disposal of these effluents is managed in accordance with Safety Instruction, SI(U)-ENV-4 (Reference 10) while the Fomblin oil used for used in pumps which are exposed to UF_6 will be recovered in the Site Pump Maintenance Workshop and is not discarded.

All radiological gaseous effluent exits E23 via the same route, the Gaseous Effluent Ventilation Systems. E23D, E23E ,E23G and E23H all have dedicated GEVS. Instrumentation will be provided to allow accurate measurement of the amount of HF (HF is formed from the reaction of UF_6 with moist air) being discharged. This allows the amount of HF discharged during normal operations each quarter to be reported to the Environment

agency. The level for 2002 was approximately 900 grams per quarter for the existing E23 plant (Reference 11) and while this is above the design intent it is not a significant environmental impact. Anomalies in the operation of the GEVS have been investigated and now the feed purification and contingency dump traps are being changed more frequently. These modifications have reduced HF emissions from the E23 stack. In addition, instrumentation is provided to monitor the concentration of HF being discharged. The uranic discharge is also measures and reported. For 2002 the total amount was 3kBq which constitutes less than 2% of the Plant Specific Limit

Non-radiological gaseous effluent, such as nitrogen, is not a pollutant and is released to atmosphere. Combustion products from the back up diesel generators, which are non-radiological, will not be significant as, although they are tested routinely, they are only operated for short periods.

No wastes or effluents are produced by E23H that are not produced by the rest of E23. There are established routes for the handling of wastes produced by E23. The addition of E23H means that more of the same waste is produced by a factor of 22% (E23H will provide a further 500TSw against the existing E23 capability of 2300TSw.

5 ENVIRONMENTAL IMPACT OF NORMAL OPERATIONS

5.1 Methodology

CP-ENV-02, Reference 5, details the methodology for assessing the significance of environmental aspects. After identifying any environmental effects and risks associated with the project the Production Department Environmental Aspects Register, EAR, was consulted. Any effects / risks that do not appear in the register (e.g. the visual impact of the building) have their significance assessed in accordance with the company procedure. A score of 9 or above is deemed to be significant.

5.2 Environmental Effects

Sections C1 and C2 of the E23E PCSR (Reference 3) provide detailed descriptions of the types and amounts of the various effluents and wastes produced by the normal operation of E23E. The values for E23H will be the same. This reference includes radiological wastes, non-radiological wastes, radiological liquid and gaseous effluent, non-radiological liquid and gaseous effluent.

Radiological wastes are substances contaminated with traces of process material, the recovery of which is not currently considered to be technically or economically feasible. These are discussed in section C1.4. The E23 plants will also generate non-radiological wastes such as air filters, paper, scrap metal, etc..

Section C1.4 also discusses non-radioactive liquid effluents which are collected and disposed of externally to the E23 plant. Along with non-radiological wastes and gaseous effluents, their handling is carried out in accordance with the provision of Safety Instruction, SI(U)-ADMIN-5 (Reference 7).

No wastes are produced by E23H which are not currently produced by the existing E23 plants. The addition of E23H will increase the quantities of existing waste streams by approximately 22%. From the experience gained through the operation of the early phases of E23 (A,B,C and D) and the older plants at Capenhurst, it can be confidently expected that any discharge of effluents or disposal of wastes can be achieved within the existing UCL authorisations. In addition, there would not be a requirement for licence under either the Integrated Pollution Control Authorisation or Local Authority Air Pollution Control. A new consent will be required for the new cooling towers in E23H.

5.2.1 Impact on Public

The E23E PCSR (Reference 3) provides details of the quantities and types of effluents and wastes produced during the normal operation of E23E and these can also be assumed for E23H. These items have little impact on the Site Discharge Authorisation Limits. The public should not be affected in any way by the E23H process effluents and wastes, under normal circumstances.

Additional traffic will enter the Capenhurst site, since the E23H plant will increase the enrichment production capacity. This increase is not expected to exceed one extra lorry per day. Since the Capenhurst site is located close to a motorway junction, this slight increase is not likely to be noticeable to the public.

The major source of noise from the E23 facility is likely to come from the cooling towers. The design of the cooling towers ensures that they are inaudible at night 100 metres away from the facility. Due to the positioning of the cooling towers within the E23H building, this distance is not beyond the site fence. In addition, the nearest dwelling is a farm in excess of

280m from the relevant area of the E23 facility. This farm and other farms further from the E23 facility are encircled by outbuildings which would help shield the dwellings from any carried noise. During the day or night, therefore, the E23 facility should not produce noticeable levels of noise pollution. The noise impact score of the assessment carried out in accordance with CP-ENV-02, see Appendix 1, indicates that this is not a significant effect.

The extension to the E23 building will be partially visible from outside the site boundary. However, as the area is sparsely populated, the visual impact score indicated that this is not a significant environmental impact, see Appendix 1.

5.2.2 Impact on Plants and Animals

As a result of routine operations in E23H trace quantities of uranic material, toxic gases and direct radiation will be emitted. In practice, however, the emissions will be so low as to be almost undetectable. Negligible effects on plants and animals may be confidently expected.

5.2.3 Impact on Water Quality

During routine operation of E23H there are no discharges of liquids which are not covered under local consents (see References 7 and 10). Local ground water, streams or rivers will therefore be unaffected by the operation of E23G.

5.2.4 Impact on Air Quality

Aerial emissions from E23E are given in Reference 3. E23H can be expected to give similar low emissions due to its dedicated GEVS. No impact on air quality, local to or distant from E23H will occur.

5.2.5 Impact on Soil Quality

Due to low liquid and gaseous emissions from E23H, the soil quality should be unaffected by them. All solid wastes will have disposal routes identified for them. No effect by E23H on soil quality is therefore expected.

5.2.6 Impact on Climate

Although the enrichment process used in E23H is relatively energy efficient, it will use large quantities of electrical power (several MW). Much of this power will ultimately be discharged to atmosphere as heat, via cooling system towers and building ventilation systems. The quantity of heat generated would still be orders of magnitude less than a small power station. Climatic effects locally resulting from the operation of E23H are therefore considered to be negligible.

5.2.7 Interactions or Combinations of the Above

The impact of the above ecosystems is shown to be negligible. Even in combination, no noticeable effects are expected. For example, a local wild animal eating local vegetation, grown with local soil, air and water, whilst breathing local air and drinking local water, will in no way be affected by E23H's operation.

5.2.8 Effect on Local Building, etc.

The aerial releases of corrosive substances or diesel exhaust fumes will be in such small quantities as to present no effect to local architecture.

5.3 Overall Environmental Effect

From section 5.2 above, it can be seen that the environmental effect of the normal operation of E23H is deemed to be significant. This is due to the generation of radiological waste and effluent which is subject to legislation and regulatory control, and as such is significant to Urenco (Capenhurst) Limited. In addition, electricity used by E23H can also be considered to be a significant environmental effect (see Appendix 1).

The UCL Environmental Management Policy (Reference 6), includes a commitment to 'the continuous improvement of environmental performance with a view to reducing the environmental impacts through the economically viable application of the best available technology'. In order to quantify the improvements in the identified environmental aspects such as radiological and chemical discharges, electricity, CO_2 and raw water, environmental performance measures are issued quarterly. None of these aspects are new.

In addition, The Production Department Environmental Aspects Register, EAR, (Reference 12) lists a number of other significant environmental effects identified during the operation of each of the enrichment plants on the UCL site. The only significant aspects identified for E23 were; the release of oil during abnormal operation of the chillers, the spillage of liquid chemicals and oils during abnormal conditions and the discharge or gaseous fluorine and uranics due to the abnormal operation of the GEVS system. These aspects have all been addressed in the EAR.

The addition of a new building can be considered a visual environmental aspect but has been deemed insignificant using the scoring methodology previously mentioned. Apart from this the only other new significant environmental aspect was the noise generated by E23H and this was also not deemed to be significant. There are no other new significant environmental aspects associated with the introduction of E23H, although it does add to the existing significant environmental effects. However, it should be noted that given the amounts of wastes and effluents produced and electricity used, the environmental impact will be small.

6 ENVIRONMENTAL IMPACT DUE TO ACCIDENT CONDITIONS

6.1 Methodology

The environmental effects of accident conditions are assessed by a risk assessment ranking system as required by CP-ENV-02 (Reference 5) . The frequency and severity of the environmental accident will be ranked and the risk calculated by multiplying the two ratings. A score of 9 or more represents a significant environmental effect.

6.2 Identified Accident Conditions

A number of accident conditions are assessed in Reference 3 for E23E and they are valid for the analysis of E23H. These are considered to be the worst cases. They can be divided into two distinct groups: high consequence, low frequency events (cylinder rupture, earthquake, aircraft impact); and lower consequence, higher frequency events (UF_6 escape). The effect on the public resulting from many of these hazards have been analysed in the E23E PCSR (Reference 3) and shown to be acceptable and as low as reasonably practicable (ALARP).

Considering firstly the high consequence, low frequency events, a seismic event would have large consequences on E23H as it is not a seismic resistant building. However, a seismic event would have widespread environmental effects regardless of the effect on E23 A,B,C,D, E ,G and G. This and other accidents, such as; cylinder rupture and aircraft impact, would all score 1 on the frequency rating. Therefore, even if they were considered a major hazard on the severity rating (i.e. 5) they would still be below the value of 9 which indicates a significant environmental impact, see Appendix 2.

The second group to consider is the one involving lower consequence, higher frequency events. The main accident of this type is a UF_6 release and would most likely occur from a breach of a cylinder flexible connection. This fault is adequately protected against, by isolating the breach. However, if the breach were not isolated, this event could result in a maximum UF_6 leakage rate of 4.3kg per hour. The dose uptake to a member of the public was estimated, assuming no decontamination factor for the building, to be 11μSv. The resulting HF concentration 100m away from the release was estimated to be less than 1ppm (Reference 3, page 63). Neither of these would have an effect on the public and can be ranked as 2 on the severity rating for consequence. Therefore, when calculating the risk associated with a release of this kind, even if a frequency rating of 3 was used, the maximum value would be 6. As this is below 9, it means that the accident not represent a significant environmental impact, see Appendix 2.

6.2.1 Impact on the Public

Given the estimated concentration of HF and radiation dose caused by a significant release of UF_6 within E23H, it is unlikely that persons outside E23H would notice any detrimental effects. Furthermore, it is unlikely that a member of the public would be standing within 100m of the UF_6 handling area of E23H, the only source of a significant release, as it is within the site boundary. Beyond the site fence is a substation and fields and human occupancy of these areas is very low. Further analysis of public consequences is not considered necessary.

6.2.2 Impact on Plants and Animals

The effect of a small UF_6 release on members of the public has been dismissed above. It is likely that small wild animals may be affected by conditions which have no effect on humans. It is assumed that the effects of any uranic compounds are insignificant compared to the

effects of HF. Reference 8 states that rabbits (common about the plant) can survive 41 hours at a concentration of 30ppm. The levels of HF expected of < 1ppm may cause some discomfort, but does not approach dangerous levels. Insects, fish and plant life would experience lower consequences due to HF release because of the differences in breathing methods.

6.2.3 Impact on Water Quality

A release of UF_6 would increase the acidity of the local water system, but any increase resulting from this volume of release would be negligible.

6.2.4 Impact on Air Quality

The air quality would not be effected other than in the ways discussed above.

6.2.5 Impact on Soil Quality

A release of UF_6 would increase the acidity of the local soil, but any increase resulting from the volume of release would be negligible. Any resulting Uranium contamination would be lower than background levels.

6.2.6 Impact on Climate

A release of UF_6 would increase the acidity of any rain water, but any increase resulting from the volume of release would be negligible.

6.2.7 Interactions or Combinations of the Above

No significant combinations are identified.

6.2.8 Effect on Local Buildings, etc..

Local buildings may be affected by the increase in acidity of any rainfall. The increase in acidity is expected to be very slight and short-lived, therefore the effect may be discounted.

7 ENVIRONMENTAL IMPACT DUE TO CONSTRUCTION

The building of E23H will cause an increase in traffic to the site both in personnel and delivery of new items to the plant. The length of time of this extra traffic will be considerable, approximately one year for the construction of the building and then around a further year for the installation of the internal pipework. The extra traffic will usually only occur during daylight hours and mainly outside of weekends. Local residents should not be significantly affected by this traffic. In addition contractors are instructed not to approach the site through Capenhurst village.

The initial phase of the construction will be the erection of the building itself. Noise levels could be considerable, but the contractors who build the plant will work to the various SI's and NSLA's set by Urenco, plus the ISO9000 and ISO14000 management systems, setting working standards to limit the noise, pollution and disruption. The visual impact of the site will be significant for a time, but as construction workers are already on site, working on E23E and other site projects, the additional impact will not be excessive.

An existing 600 Diameter sewer runs across the site. The existing surface water network will be modelled to ensure any solution does not impact any adjoining land with surface water run off.

The later phase will be the installation work inside the new building. Noise levels outside should be reduced by the fabric of the building. In most cases, large items of plant will be fabricated elsewhere and be brought to the site for installation as a complete unit or in large sections. This will significantly reduce the amount of work being carried out on site and keep disruption to a minimum.

The construction of the E23H Centrifuge Plant will not, therefore, cause significant environmental disruption.

8 CONCLUSIONS

No new wastes or effluents are produced by E23H which are not already produced elsewhere in E23. the addition of E23H means slightly more of the same wastes are produced (due to the relative sizes of E23 A, B, C, D , E and E23G this increase is approximately 22%).

The environmental impact of the E23H Centrifuge Plant has been assessed using the methodology given in the company procedure – CP-ENV-02, Assessment of Significant Environmental Aspects. Using this methodology, it is concluded that the only new environmental effects are the visual impact and noise impact of the building and these are not considered significant environmental aspects.

The building of E23H will increase the enrichment capacity at Urenco (Capenhurst) Limited and as the design uses the latest and most efficient centrifuge technology the overall efficiency of the site will be increased. The new technology, which produces less noise and lower emissions, can be viewed as a positive environmental impact.

REFERENCES

1. SI(U)-ENV-01 – Compliance with the requirements of the UCL Environmental Management System
2. UMSC/02/P34 – Preliminary Safety Report for the E23E Centrifuge Plant
3. UMSC/03/P27 – Pre-Commencement Safety Report for the E23E Centrifuge Plant
4. UPD Design Instruction, DI/005 – Checklist for Environmental Impact Assessment Sections in Safety Cases
5. CP-ENV-02 – Assessment of Significant Environmental Aspects, Issue 3
6. UCL Environmental Manual, Issue 1
7. SI(U)-ADMIN-5 – Arrangements for the Storage, Control and Disposal of Non-Radioactive Waste
8. Documentation for the Immediately Dangerous of Life and Health Consequences (IDLHS) for HF
9. SI(U)-NSL-6 – Procedural Arrangements for the Control of Work on a Plant having Safety or Environmental Implications
10. SI(U)-ENV-04 – Arrangements for the Production, Storage, Transfer and Disposal of Radioactive Waste
11. UMSC/03/P3 – Review of Modifications and Operating Experience on the E23 Plant
12. Production Department Environmental Aspects Register, version 1.03

APPENDIX 1

Normal Operating Conditions

a. Use of Electricity

Aspect Characteristic Index: 4-5
4 – high source of emissions or use of resources
5 – major source of emissions or use of resources

Environmental Consequence: 3 Moderate Consequence
3 – known effect on the environment
moderate contribution to a known environmental problem

maximum environmental aspect rating would be 15
This is a significant environmental impact

b. Visual Impact

Aspect Characteristic Index: 1
1 – Minimal source of emissions or use of resources

Environmental Consequence: 2-3 Limited - Moderate Consequence
2 – Unlikely to give rise to an on or offsite nuisance
3 – Could under certain circumstances give rise to an on or off site nuisance

∴ maximum environmental aspect rating would be 3

c. Noise Impact

Aspect Characteristic Index: 1-2
1 – Minimal source of emissions or use of resources
2 – Limited source of emissions or use of resources

Environmental Consequence: 2-3 Limited – Moderate Consequence
2 – Unlikely to give rise to an on or offsite nuisance
3 – Could under certain circumstances give rise to an on or off site nuisance

∴ maximum environmental aspect rating would be 6

Both b and c are rated are below 9, the level which has been deemed significant.

APPENDIX 2

Abnormal / Emergency Conditions

High Consequence / Low Frequency Events

i.e. seismic events, aircraft impact, cylinder rupture

Occurrence Index: 1
1 – Very Unlikely

Environmental Consequence: 5 Major Consequence
Highly noticeable effect upon the environment
Large scale incident with media reporting
Causing a widespread nuisance on and off site
Consistently exceeds statutory guidance or consent levels

∴ maximum environmental aspect rating would be 5

Low Consequence / High Frequency Events

e.g. breach of a cylinder flexible connection which is not isolated

Occurrence Index: 3
3 – Likely

Environmental Consequence: 2 Limited Consequence
Limited effect upon the environment
Minor incident contained within the area
Unlikely to give rise to an on or off site nuisance
Very rarely exceeds statutory guidance or consent levels

∴ maximum environmental aspect rating would be 6

Both these effects are below 9, the level which has been deemed significant.

APPENDIX 3

Site Plan for E23H Plant.

N