



Horsham
District
Council



Gatwick Airport Northern Runway Project

Examination Ref: TR020005

**Gatwick Airport DCO Air Quality Action Plan Review
(submitted as Appendix 5 of Draft S106 Agreement V1-
March 2024) [REP2-004]**

and

**Gatwick Airport DCO Construction Dust Management
Plan Review**

Deadline 4: 15 May 2024

Crawley Borough Council (GATW-AFP107)
Mid Sussex District Council (20044737)
Reigate and Banstead Borough Council (20044474)
East Sussex County Council (20044514)
Mole Valley District Council (20044578)

Horsham District Council (20044739)
West Sussex County Council (20044715)
Surrey County Council (20044665)
Tandridge District Council (GATW-S57419)
Kent County Council (20044780)



Project name:
Gatwick Airport DCO

From:
David Deakin

Date:
April 2024

Gatwick Airport DCO Air Quality Action Plan Review

A review of the Gatwick Airport Limited (GAL) Northern Runway Project Draft Air Quality Action Plan (AQAP), dated March 2024 has been undertaken.

The AQAP is divided into five main sections followed by a reference section including:

- Introduction
- Air Quality Measures – Construction Phase
- Air Quality Measures – Operational Phase
- Air Quality Monitoring
- External Engagement

This review is structured to consider each of these sections in turn.

Introduction

The introduction sets out that whilst significant air quality effects are not anticipated, for some pollutants health benefits will occur from reductions in concentrations below air quality standards. The introduction provides context of previous air quality mitigation and monitoring.

The introduction then provides sign posting to the different parts of the DCO application which include emissions reduction actions.

Section 1.3 of the Introduction is the 'Purpose of the Document'. Within this GAL set out that they propose, under Section 106 (S106) Agreement, to provide an action plan to the Councils on or before the 30th June, in the fifth year of the commencement of the Project. Updates to the AQAP are then proposed every five years, until the end of monitoring defined within S106 as nine years from the commencement of dual runway operations.

It is unclear how the fifth year after commencement has been selected as the first year of the AQAP. Clarification should be sought on why this year is proposed and to understand what activities will take place before this point and so what the air quality risks may be during these first 5 years.

Similarly, it is unclear why an update cycle of 5 years has been proposed nor how the end date for monitoring and AQAPs has been proposed. A shorter review cycle would have been expected, given air quality is typically reviewed on an annual basis. Clarification should be sought from the applicant on both these two points to understand their reasoning.

There is no detail on what the role of Councils would be in reviewing or approving the AQAP and subsequent updates. Clarification is required on this point.

Paragraph 1.3.2 sets out the contents of the proposed AQAP including: monitoring programmes, updates on mitigation measures, AQAMS within 2km and emissions inventory. A key aspect missing from the list is how GAL will consider if the mitigation measures proposed are resulting in the same air quality outcomes as predicted within the DCO. Clarification is proposed on this point.

Paragraph 1.3.3 also refers to the ongoing S106 commitment to publish annual monitoring reports. Paragraph 1.3.4 confirms that the AQAPs and monitoring reports will be published on the GAL website.

Air Quality Measures – Construction Phase

This section of the AQAP sets out that future AQAPs will not focus on construction phase air quality, with this reported on via mechanisms in the Code of Construction Practice. This is logical for later stage updates to the AQAP, however, particularly for the first AQAP clarification is sought on what the combination of construction and operational activities will be at that stage.

Paragraphs 2.3.1 to 2.3.2 provide an overview of the CoCP and CDMP which have been reviewed separately. Bullet point 3 of paragraph 2.3.2 includes the 'where applicable' text concerning vehicle emission standards that has been previously identified as a clarification point.

Paragraphs 2.3.4 to 2.3.6 refer to the Construction Traffic Management Plan (CTMP) and the Construction Workforce Travel Plan. We have previously set out queries concerning the details of these plans including:

- A full CTMP will be developed and approved by the relevant highways authority, in conjunction with the relevant planning authority. However, information is not set out on how this will be secured within the DCO. Nor is it identified that multiple local authorities may be affected by traffic changes during the works and as such may require wider consultation.
- Section 6.3 of the CTMP describes contingency access that would deviate from primary access arrangements. No indication of how often this may be utilised is provided and there is concern over how much any contingency access could be used.
- Section 6.5 Restrictions and Monitoring of the CTMP identify risks associated with construction traffic utilising routes through the J10 M23 and Hazelwick Air Quality Management Areas. Reference is made to a monitoring system that 'it is envisaged' will be developed in the full CTMP. Further details on the monitoring system are needed to understand how this would protect air quality.
- Section 7 of the CTMP includes Measures to Reduce Impacts. The use of low emission construction plant and fleet is identified in paragraph 7.2.15. This is welcomed as a potential measure. Further discussion on how the use of low emission construction plant and fleet can be further developed and secured within the DCO potentially as an additional construction fleet management deliverable is proposed.
- Paragraph 7.5.2 of the CTMP identifies wheel washing will be provided where necessary. This is considered necessary for all egress points where unmade routes have been tracked through. The concern is how wheel washing will be secured.
- The travel plan refers to a monitoring framework that will be prepared to monitor how well the plan is performing and allow measures to be refined. This is helpful, but further information is needed as the monitoring framework is unclear.

The final paragraph of this Section (2.3.7) concerns the toolkit of measures in the CAP. There is an error in a cross reference in this paragraph.

Air Quality Measures – Operational Phase

This section focuses on five areas of operation:

- surface access;
- aircraft emissions;
- airside vehicles;
- energy and fixed plant; and
- miscellaneous emissions.

Surface Access

The surface access commitments are based on an existing Airport Surface Access Strategy (ASAS) and the Surface Access Commitments (SAC) proposed as part of the DCO. The aircraft and airside emissions appear to link to the CAP toolkit.

Paragraph 3.2.1 describes that the ASAS will operate until 2030. It is unclear if the SAC has taken this point into consideration i.e. are measures in the ASAS covered in the SAC. Clarification is sought on this point.

Paragraph 3.2.4 describes a series of commitments that are listed in full in Table 3.1 'SAC measures'. The paragraph explains that commitments 1 to 4 are 'core commitments', but all the other 'commitments' may not be implemented and that the list has been prepared to allow GAL with flexibility in how they achieve the commitments set out in the four core commitments. It is suggested that clearer terminology is utilised to describe commitments 5 to 14 given that these may or may not be implemented by GAL. Further detail is requested on how and when GAL proposes to identify which of commitments 5 to 14 are required and what level of betterment beyond the ES may be expected from the measures.

It would be useful to add a column to Table 3.1 to confirm which commitments have been assumed in the ES submitted with the DCO.

Aircraft Emissions

A list of measures which could be included to achieve climate objectives, and which could also be used to improve local air quality from aircraft emissions are listed in Table 3.2. As with surface access, it would be useful to have an extra column on Table 3.2 to identify any measures that were assumed as embedded mitigation in the ES. Also, as with the surface access commitments further detail is requested on how and when GAL proposes to identify which of the CAP measures will be required and what the level of improvement may be for air quality.

In relation to SAF (paragraph 3.3.2), it is recommended that a further review is undertaken by GAL on the potential benefits and disbenefits of SAF for local air quality.

Airside Vehicles

The same comments set out above for aircraft emissions apply to the measures set out in Table 3.3 CAP airside vehicle measures.

Energy and Fixed Plant

The same comments set out above for aircraft emissions apply to the measures set out in Table 3.4 CAP energy and fixed plant measures.

Miscellaneous Emissions

The same comments set out above for aircraft emissions apply to the measures set out in Table 3.5 CAP miscellaneous measures.

Additionally, the role of hydrogen should be reviewed to consider how this may affect local air quality.

Air Quality Monitoring

Paragraphs 4.1.1 to 4.1.3 set out the previous air quality monitoring undertaken and the annual reporting of the data.

The following paragraph 4.1.4 describes that additional monitoring will be funded to increase spatial resolution, and that this will be achieved through indicative monitoring (i.e. sensors) and reference equipment. It is noted that the locations of the existing and additional monitoring seem to be focused on aircraft and airside emissions. It is not clear what monitoring will be focused on road traffic to confirm the effectiveness of the SAC. Further discussion is proposed on this point.

Additionally, paragraphs 4.1.2 and 4.1.5 notes that the monitoring and annual reporting will be undertaken for the 'Monitoring Period' defined in the S106. As identified previously, further detail on how this monitoring period has been determined is required.

Paragraphs 4.1.8 to 4.1.10 describe the QA procedures proposed and the proposals to correct the proposed indicative sensors. This correction should initially be carefully reviewed regularly if implemented to confirm the effectiveness of the approach.

Emissions Inventory

It is noted in paragraph 4.2.2 that the frequency of emission inventory updates is aligned with the proposed AQAP updates every 5 years. As described above, this is a long interval and further discussion is proposed on the appropriateness of this duration.

It is also noted that the provision of the inventory is also linked to the 'Monitoring Period' for which further discussion is also proposed on to understand the rationale for this period.

Ultrafine Particulates

Paragraph 4.3.1 notes that there is a lack of long-term studies in relation to ultrafine particulates (UFP). However, a long-term monitoring site is not proposed by GAL, only participation in a UFP project. The inclusion of an UFP monitoring site would enable Gatwick to show leadership in the important emerging area.

Odour Monitoring

One paragraph on odour best practice actions is provided (paragraph 4.4.1). As odour issues associated with aviation fuel is a historical issue for some local residentials, a full odour management and monitoring plan is requested.

External Engagement

The external engagement sets out the engagement proposed by GAL with Councils and other industrial bodies etc, linked to the 'Monitoring Period' (see above). Annual meetings to discuss monitoring reports and action plans along with 'twice-yearly' meetings are referenced. Clarification is sought that the 'twice-yearly' meetings referred to are two additional meetings that can be requested by either party during each year?

It is proposed that a timescale for the AQAP and annual monitoring reports to be submitted ahead of annual meetings is set to allow the Councils to review the documents ahead of any meetings.

Clarification/Request for Further Information List

This section of the technical note lists the clarifications for GAL identified through this review:

- Clarification on the proposal of the fifth year after commencement being selected as the first year of the AQAP is needed, to understand what activities will take place before this point and so what the air quality risks may be during this first five years;
- Clarification as to why an update cycle of five years is proposed for the AQAP and how the end date for monitoring and AQAPs has been proposed;
- Detail on the Council's role in reviewing or approving the AQAP and subsequent updates is requested;
- Clarification how GAL will consider if the mitigation measures proposed are resulting in the same air quality outcomes as predicted within the DCO;
- Clarification on how the combination of construction and operational activities will be considered in the first AQAP;
- Clarification on bullet point 3 of paragraph 2.3.3, which includes 'where applicable' text concerning vehicle emission standards.
- Amendments required in Paragraph 2.3.7 which contains an error in the cross referencing.
- Clarification if the SAC has taken into consideration that the ASAS will operate until 2030, i.e., are measures in the ASAS covered in the SAC;
- Clearer terminology is suggested to describe commitments 5 to 14 of the SAC measures and further detail on how and when GAL proposes to identify which of these commitments are required and what level of betterment beyond the ES may be expected from the measures. This clarification point also applies to aircraft emissions, airside vehicles, energy and fixed plant and miscellaneous emissions.
- Inclusion of an additional column in the following tables to confirm which measures are assumed as embedded mitigation within the ES:
 - Table 3.1 SAC measures;
 - Table 3.2 CAP aviation measures;

- Table 3.3 CAP airside vehicle emissions;
 - Table 3.4 CAP energy and fixed plant measures; and
 - Table 3.5 CAP miscellaneous measures.
- The role of hydrogen should be reviewed to consider how this may affect local air quality;
 - Clarification on what monitoring will be focused on road traffic to confirm the effectiveness of the SAC;
 - Clarification on how the 'Monitoring Period' has been determined;
 - Further discussions are required on the appropriateness of the frequency with which the emissions inventory will be updated;
 - Suggestion on the inclusion of an UFP monitoring site;
 - A full operational odour management and monitoring plan is requested; and
 - Clarification that the 'twice-yearly' meetings referred to in the External Engagement section are two additional meetings that can be requested by either party during each year. Also a timescale for the AQAP and annual monitoring reports to be submitted ahead of annual meetings to allow the Councils to review the documents ahead of any meetings is requested.



Construction Dust Management Plan

Project name:

Gatwick

Review

From:

David Deakin

Date:

May 2024

Gatwick Airport DCO Construction Dust Management Plan Review

A review of the Gatwick Airport Northern Runway Project Draft Construction Dust Management Plan (CDMP) (Dated 25/03/24) has been undertaken.

The CDMP is split into four main sections: an Introduction, Construction Dust Assessment, Construction Dust Management Plan Methodology and Example Outline CDMP, with references and appendices. This review is presented on a section-by-section basis.

Introduction

In Section 1.1, paragraph 1.1.1 it helpfully sets out that the CDMPs 'will be prepared for approval by the relevant planning authority prior to the commencement of works' and that this is set out in the Code of Construction Practice (CoCP). There is also a cross reference to the Draft DCO Requirement 6 which secures the need to prepare CDMPs for approval in paragraph 1.1.3.

A review of Schedule 2, Requirements of the Draft DCO shows that Requirement 6 relates to National highways works. Requirement 7 relates to the Code of construction practice. As reproduced below:

Construction of the authorised development must be carried out substantially in accordance with the code of construction practice unless otherwise agreed with the relevant planning authority.

The CDMP should be updated to cite requirement 7 rather than 6. It is also noted that the requirement is essentially a cross reference to the CoCP and so all details of the monitoring and mitigation need to be set out in the CoCP for these to be secured. Therefore, once the CDMP is submitted to the examination, a review of the CoCP text will be required to confirm that suitable cross references are included in the CoCP.

Paragraphs 1.2.2 and 1.2.3 refer to the Draft CDMP as a technical note, it is proposed these paragraphs are updated to refer to the document as a Draft CDMP. It may also be helpful to refer to this document as an overarching CDMP, or similar, to distinguish it from future CDMPs.

It is welcomed that the Applicant has provided this document for review prior to submission to the Examination.

Table 1 of the CDMP sets out that each work package will be assessed individually to identify dust risks, mitigation and monitoring. Whilst it is understood that the detail of these work packages will develop over time, it is considered that enough information is available at this stage to identify dust risks and suitable mitigation and monitoring. This would provide future contractors with a draft of the monitoring and mitigation anticipated at this stage that can then be refined in

response to any notable changes in detailed design. This would give the local authorities additional reassurance that a consistent approach would be adopted across the site and provide earlier visibility of proposals during the examination.

Table 1 sets out that for high risk sites baseline monitoring would be undertaken for at least 3 months prior to the commencement of works. This is welcomed and confirmation is sought that high risk sites would be identified prior to the implementation of mitigation measures. With the monitoring required at high risk sites to confirm the effectiveness of mitigation measures, it is noted that to enable 3 months of data collection that advanced discussions would be needed with local authorities to first agree the monitoring implemented.

Construction Dust Assessment

Section 2 of the Construction Dust Assessment provides a summary of the assessment undertaken to support the Environmental Statement and also provides a table with links to the different parts of the construction dust assessment.

Construction Dust Management Plan Methodology

In this section of the CDMP, it is set out how the work package CDMPs will be prepared. Paragraph 3.1.1 is consistent with the introduction referring to approval from the planning authority.

It is proposed that reference to appropriately qualified air quality specialists is made in relation to the development of the work package CDMPs as currently it is not specified who will prepare the work package CDMPs. This should be updated to confirm that dust risk assessments will be undertaken by a suitably qualified air quality consultant in line with Institute of Air Quality Management Guidance as reproduced below from page 32:

‘These impacts (referring to dust) are often considered to be relatively unimportant compared to assessments of the operational air quality impacts. However, IAQM considers that it requires a level of experience and skill to produce a fit for purpose assessment, and therefore it should be undertaken by, or under the close supervision of, an experienced practitioner. Those who are making the professional judgment must be able to demonstrate technical competency in the assessment of dust impacts.’

Paragraph 3.1.1 notes that *‘The CDMPs will be subject to approval by the relevant planning authority (or relevant highway authority) prior to the commencement of the relevant works’* and would ask that a copy is also sent to the local authority whose residents are likely to be impacted by the works if this is different to the planning authority.

Paragraph 3.1.3 refers to a large number of work packages and a spreadsheet that will be used by contractors to undertake the assessments and that this will be provided to local authorities prior to works commencing. It is proposed that details of the work packages currently envisaged are provided, along with the spreadsheet proposed, for review. Additionally, as set out above it is proposed that rather than waiting until post examination, an initial assessment of these work packages is undertaken by the applicant now. Alternately, this could be undertaken by AECOM.

Paragraph 3.1.6 sets out that where high risk sites are identified, a real time monitoring plan will be created. It is proposed that due to the scale and duration of activities that it will be appropriate to have this approach for medium risk sites also. This is in line with Institute of Air Quality Management guidance which sets out this as ‘highly recommended’. It is also proposed that depositional techniques (e.g. Frisbee gauges or similar) are also incorporated into monitoring proposals as this is the type of data that can be used to understand dust nuisance risks, whereas real time monitoring would be expected to be focused on human health risks (e.g. ambient particulates).

The dust management plan also needs to make clear that where the need for monitoring has been ruled out, a local authority can ask for monitoring equipment to be installed where:

- more than 1 complaint has been received about dust, or
- where a council officer has visited the site and in their opinion there is a potential dust issue.

This allows for the possibility that adverse unintended consequences to be addressed.

Example Outline CDMP

Section 4 provides an example CDMP. As above, it is proposed that this section is replaced with draft or outline CDMPs for the work packages that are currently envisioned to be required. This will enable the local authorities to understand where the high risk work packages are located within the site. This aligns with the request from Joint Surrey Authorities LIR [REP1-097] (para 11.35) the dust management plan '*needs to include a map showing the forecast areas of high, medium, and low dust impact (without mitigation) and what activity is driving that impact.*' These work package CDMPs can be updated at a later date as required to reflect changes in detailed design etc.

Paragraph 4.2.2 identifies the latest version of the IAQM guidance and allows for the potential for this to be updated.

Paragraph 4.6.1 refers to informing the local authority of elevated dust emissions. Further details are requested on the approach proposed.

Paragraph 4.6.2 identifies that complaints information will be provided to the local authority on request. This should be amended so that this information is automatically provided to the local authority.

Paragraphs 4.6.6 and 4.6.7 outline a CDMP review process at least every three months which is welcome. Further details are requested on how this review will be recorded and shared with the local authorities.

Paragraphs 4.7.1 to 4.7.4 refer to visual inspections for dust soiling. It is proposed that these are supplemented in medium and high risk locations with dust soiling monitoring techniques e.g. dust scan or frisbee gauges.

Paragraph 4.7.2 refers to the provision of inspection of information request, as with complaints, a process of routinely providing information rather than on the request of local authorities is proposed.

Paragraph 4.7.11 refers to a web-based location for data collection. Further discussion is proposed on type of access that can be granted to the local authorities to this data.

Paragraph 4.7.13 missing word 'months' after three.

Paragraph 4.7.14 describes monitoring summary reports which are welcome. Further details of the proposed frequency of reporting are requested. Additional data will also need to be added to the proposed list of contents to cover any depositional or dust soiling data. This report could also be used to collate inspection and dust event forms.

References

Draft DCO <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR020005/TR020005000799-2.3%20Draft%20DCO%20Template%20Verification%20Report.pdf>

IAQM Guidance on the assessment of dust from demolition and construction – January 2024 v.2.2. Institute of Air Quality Management (IAQM); [REDACTED]