



**This form will report compliance with your permit as determined by an Environment Agency officer**

|  |  |               |              |            |          |                 |
|--|--|---------------|--------------|------------|----------|-----------------|
| Site                                   | Equinix Powergate  |               | Permit Ref   | TP3500PB   |          |                 |
| Operator/ Permit holder                | Equinix (UK) Limited   |               |              |            |          |                 |
| Date                                   | 04/11/2020   |               | Time in      | 13:00      | Out      | 14:45           |
| What parts of the permit were assessed | Permit Introduction meeting and Remote Inspection/Regulation |               |              |            |          |                 |
| Assessment                             | Remote Site Inspection                                       | EPR Activity: | Installation | X          | Waste Op | Water Discharge |
| Recipient's name/position              | Simon Reed   |               |              |            |          |                 |
| Officer's name                         | Howard Tee   |               | Date issued  | 17/11/2020 |          |                 |

**Section 1 - Compliance Assessment Summary**

This is based on the requirements of the permit under the Environmental Permitting Regulations (EPR). A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our [Compliance Classification Scheme](#) (CCS). CCS scores can be consolidated or suspended, where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your [local office](#).

| Permit Conditions and Compliance Summary             |  |    | Condition(s) breached |
|--|--|----|-----------------------|
| a) Permitted activities                              | 1. Specified by permit                               | N  |                       |
| b) Infrastructure                                    | 1. Engineering for prevention & control of pollution | N  |                       |
|  | 2. Closure & decommissioning                         | N  |                       |
|  | 3. Site drainage engineering (clean & foul)          | N  |                       |
|  | 4. Containment of stored materials                   | N  |                       |
|  | 5. Plant and equipment                               | C3 | 2.1.1                 |
| c) General management                                | 1. Staff competency/ training                        | N  |                       |
|  | 2. Management system & operating procedures          | C4 | 1.1.1                 |
|  | 3. Materials acceptance                              | N  |                       |
|  | 4. Storage handling, labelling, segregation          | N  |                       |
| d) Incident management                               | 1. Site security                                     | N  |                       |
|  | 2. Accident, emergency & incident planning           | N  |                       |
| e) Emissions   | 1. Air   | N  |                       |
|  | 2. Land & Groundwater                                | N  |                       |
|  | 3. Surface water                                     | N  |                       |
|  | 4. Sewer   | N  |                       |
|  | 5. Waste   | N  |                       |
| f) Amenity   | 1. Odour   | A  |                       |
|  | 2. Noise   | A  |                       |
|  | 3. Dust/fibres/particulates & litter                 | N  |                       |
|  | 4. Pests, birds & scavengers                         | N  |                       |
|  | 5. Deposits on road                                  | N  |                       |
| g) Monitoring and records, maintenance and reporting | 1. Monitoring of emissions & environment             | N  |                       |
|  | 2. Records of activity, site diary, journal & events | N  |                       |
|  | 3. Maintenance records                               | N  |                       |
|  | 4. Reporting & notification                          | A  |                       |
| h) Resource efficiency                               | 1. Efficient use of raw materials                    | N  |                       |
|  | 2. Energy  | N  |                       |

**KEY:** C1, C2, C3, C4 = CCS breach category ( \* suspended scores are marked with an asterisk),  
A = Assessed (no evidence of non-compliance), N = Not assessed, NA = Not Applicable, O = Ongoing non-compliance – not scored  
MSA, MSB, TCM = Management System condition A, Management System Condition B and Technically Competent Manager condition which are environmental permit conditions from Part 3 of schedule9 EPR (see notes in Section 5/6).

|                                    |   |   |     |
|------------------------------------|---|---|-----|
| <b>Number of breaches recorded</b> | 2 | <b>Total compliance score</b><br>(see section 5 for scoring scheme) | 4.1 |
|------------------------------------|---|---|-----|

If the Total No Breaches is greater than zero, then please see Section 3 for details of our proposed enforcement response

## Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- the part(s) of the permit that were assessed (e.g. maintenance, training, combustion plant, etc)
- where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- any non-compliances identified
- any non-compliances with directly applicable legislation
- details of any multiple non-compliances
- information on the compliance score accrued inc. details of suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all actions requested
- any examples of good practice.
- a reference to photos taken

This report should be clear, comprehensive, unambiguous and normally completed within 14 days of an assessment.

This was a remote inspection and liaison meeting conducted on a risk basis for the data centre. The Site had recently received the new permit and this was an opportunity to discuss the conditions and approach to regulation.

The operator provided a short presentation including some site photos (from 2018)

We had a general update on impacts of covid. Engineering were working back to working in independent shifts; access to site was limited to critical activities. No increased public complaints in lockdown period

The site confirmed ISO14001, 50001 & 45001. The permit conditions are the same as the one for the Slough so we didn't go through again but the key areas were discussed:

- Notifications - key is to use the incident hotline soonest but email to me is ok if your not sure.
- Reporting (annual report, test hours and fuel use);
- Odour should include engine fumes etc.
- Noise would be engine testing (*not mentioned at the time but there could be confusion if other Data centre plant like chillers caused noise complaints as such was not technically included in the installation permit - best let us know either way of non-standby plant issues*)

Key is to review the permit and match up to existing procedures and fill in any blanks - key is notifications as part of the internal escalation process.

Equinix were able to summarise their requirement of generator test hours - basically less than hour/month/generator. (fortnightly 5mins start-up; 3-monthly 1 hour 'pull-plug' for individual power/halls; annually each generator 1 hour on load banks)

There had not been changes to fuel deliveries in 2020; indeed it was confirmed generator testing was now stopped until Dec20 now. Control of spills etc is a key component of the permit

### GW and Soil condition 3.1.2

The operator confirmed the nature of the site being hard standing or building across the installation - risks were, and would continue to be, very low. This is a standard template condition. It is for the operator to provide the 5-yearly assessment showing that nothing has changed to site (and hence the Site Condition Report SCR). I can suggest that in the annual report a line confirming no changes/spills/status quo etc should meet this requirement i.e. A whole new lengthy report and review not really necessary if nothing has changed.

### Improvement Conditions:

The deadlines are all 18months (except IC5 at 24 months)- I think we can be flexible in modifying/delaying if needed.

IC1-3 are really a set which can be reported in one go if needed looking at 1) abatement options 2) fitting vertical stacks 3) replacing engines to better emission standard.

IC4 is about ambient air monitoring. The site was going to put forward proposals but would be based around AQMesh system (like at Slough). Consideration of accuracy and utility paramount but is certainly possible

IC5 follow on from IC4 and probably brings together IC1-3 too as a CBA on plant changes to reduce short term Nox. This can consider the overall few hours of operation during testing but focus on any hotspots (i.e. Limiting to individual specific plant).

IC6 is about reducing AQ impacts by focusing on plant test regime etc. This might be difficult given the already low

hours. I would normally see IC6 as an ongoing activity perhaps reported annually. I do think the test regime with input from IC4 might reschedule to minimise impacts

IC7 is the AQMP for outages but could be used to assess prolonged maintenance test runs. I discussed my view it should be concise since it is very unlikely to be needed, avoid having to keep lots of receptor details up to date etc. Resident groups or known local complaints/issues at most. Important to notify EA and LA for known prolonged outages. It's mainly about knowing there could be an AQ issue and having some route to check things.

Notification:

The operator advised the EA that due to accelerated data hall fit out they have discovered that the site had installed 7 more engines on the PG2 site that are not included on the current permit. There are now 29 generators.

I think this takes the site from 131.15MWth to about 172MW.

I have given this some thought and feel the best way forward is to treat this occurrence for what it is being a permit breach under management condition 1.1.1 (C4 non-compliance on C1) for not identifying that the addition of such units had an impact on the permit and a breach of conducting an activity beyond that allowed by condition 2.1.1. {noting that the unpermitted standby plant is operating within the permitted green boundary under 2.2.1} (C3 non-compliance under B4 as I feel such a large increase will add to the required testing regime and needs to be assessed but because this is a low-operational hours standby plant so AQ is unlikely to be significant - but an assessment is clearly needed)

**This enables an Enforcement Action to be document and move things forward:**

- 1) The operator is required to make a permit variation to add the new plant. I think this can be submitted by Jan 2021. It may take time to determine with our NPS dept so I think the variation should be finalised by May 2021 at the latest.
- 2) Provide an updated management plan and undertaking, detailing that the new plant will be operated fully consistent with the currently permitted plant (i.e. fuel containment, test regime minimised, notify of incidents and outages until it is otherwise permitted)
- 3) As part of the variation application an assessment of AQ modelling and impacts is needed by the action deadline. If the AQ assessment and risk screening prior to submission shows that the extra plant is unacceptable (and hence a variation application is unlikely to be successful) then the plant should not be operated.

*It is helpful that the operator confirmed that engine testing had now largely stopped for 2020 so I assume these unpermitted engines might not be operate similarly much until the action deadline anyway.*

Without prejudice to permit application determination and accepting 2) it is assumed that if pollution or issues arise with this unpermitted plant from now then the EA can seek to enforce that the plant is not operated until properly permitted.

Subsequent to receiving the draft the operator confirms (email 11/11/20)

- The new plant are operated consistently with the EP, adopting the same testing regime and environmental management measures.
- The seven new generators will be taken into account as part of the work that Equinix is undertaking to support the maintenance conditions and Improvement Conditions.
- No testing is planned now until 2021 due to the national lockdown/Equinix's annual planned moratorium.
- grid failure event, and even in this case it is unlikely that all generators would be at full power).
- The air quality assessment that was submitted as part of the EP application for the 22 generators calculated the probability of the NO2 1-hour air quality standard being exceeded due to the tests coinciding with poor dispersion conditions. This concluded a probability of  $2.3 \times 10^{-35}$  %. This is far below the 1% threshold of significance defined by the Environment Agency. It is not expected that the additional generators would result in an exceedance of this threshold, although updated modelling and assessment work is required to establish this which will be undertaken as part of the EP variation application.

- The new generators are located within the current EP (green) boundary, they are located on PG2 which is the least sensitive part of the site/further from the closest sensitive receptors.
- There have been no reported complaints from members of the public and the new generators were installed in May to November 2019.
- Equinix has advised us that it has revised “process and procedures internally to ensure that we now get advance and earlier notification of additional combustion plant being considered in any of our facilities as part of the lessons learned from this event”.

ERM is currently preparing an application for variation to the EP on behalf of Equinix. The variation application will be submitted before the EA deadline of 30/1/21. It will include air quality assessment considering the 7 generators and the in-combination impact with the already installed 22 generators.

If the deadline for submission is missed the enforcement position will be re-evaluated and probably elevate beyond 'advice and guidance' to the next level.

### Section 3- Enforcement Response

Only one of the boxes below should be ticked

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence\* and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

*\*Non-compliance with MSA, MSB & TCM do not constitute an offence but can result in the service of a compliance, suspension and/or revocation notice.*

|  |   |
|--|---|
| Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed. | X |
| In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.                 |   |
| We will now consider what enforcement action is appropriate and notify you, referencing this form.   |   |

### Section 4- Action(s)

Where non-compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.

| Criteria Ref.       | CCS Category | Action Required / Advised   | Due Date |
|---------------------|--------------|---|----------|
| See Section 1 above |              |   |          |
| B5                  | C3           | Permit variation to add the new plant can be submitted by Jan 2021  | 30/1/21  |
| C2                  | C4           | Update management plan and undertaking, detailing that the new plant will be operated fully consistent with the currently permitted plant. Submit an assessment of AQ modelling and impacts as part of the permit variation | 30/1/21  |

## Section 5 - Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- advise on corrective actions verbally or in writing
- require you to take specific actions in writing
- issue a notice
- require you to review your procedures or management system
- change some of the conditions of your permit
- decide to undertake a full review of your permit

Any breach of a permit condition is an offence\* and we may take legal action against you.

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and or suspension or revocation of the permit.
- A civil sanction Enforcement Undertaking (EU) offer may also be available to you as an alternative enforcement response for this/these offence(s).

### See our Enforcement and Civil Sanctions guidance for further information

*\*A breach of permit condition MSA, MSB & TCM is not an offence but may result in the service of a notice requiring compliance and/or suspension or revocation of the permit.*

This report does not relieve the site operator of the responsibility to

- ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- ensure you comply with other legislative provisions which may apply.

### Non-compliance scores and categories

| CCS category | Description   | Score |
|--------------|---|-------|
| C1           | A non-compliance which could have a <b>major</b> environmental effect       | 60    |
| C2           | A non-compliance which could have a <b>significant</b> environmental effect | 31    |
| C3           | A non-compliance which could have a <b>minor</b> environmental effect       | 4     |
| C4           | A non-compliance which has <b>no</b> potential environmental effect         | 0.1   |

**Operational Risk Appraisal (Opra)** - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

### MSA, MSB & TCM are conditions inserted into certain permits by Schedule 9 Part 3 EPR

**MSA** requires operators to manage and operate in accordance with a written management system that identifies and minimises risks of pollution.

**MSB** requires that the management system must be reviewed, kept up-to-date and a written record kept of this.

**TCM** requires the submission of technical competence information.

## Section 6 – General Information

### Data protection notice

The information on this form will be processed by the Environment Agency to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). The Environment Agency may also use and/or disclose it in connection with:

- offering/providing you with its literature/services relating to environmental matters
- consulting with the public, public bodies and other organisations (e.g. Health and Safety Executive, local authorities) on environmental issues
- carrying out statistical analysis, research and development on environmental issues
- providing public register information to enquirers
- investigating possible breaches of environmental law and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

The Environment Agency may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

### Disclosure of information

The Environment Agency will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within 28 days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

### Customer charter

#### What can I do if I disagree with this compliance assessment report?

You must notify your local officer within 28 days of receipt if, you wish to challenge any part of this compliance assessment report. If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with the officer's line managers. If you wish to raise your dispute further through our official [complaints](#) and Commendations procedure, phone our general enquiry number 03708 506 506 (Mon to Fri 08.00–18.00) and ask for the [customer contact](#) team or send an email to [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk). If you are still dissatisfied, you can make a complaint to the Ombudsman. For advice on how to complain to the [Parliamentary and Health Service Ombudsman](#), phone their helpline on 0345 015 4033.