

Habitats Assessment

Introduction

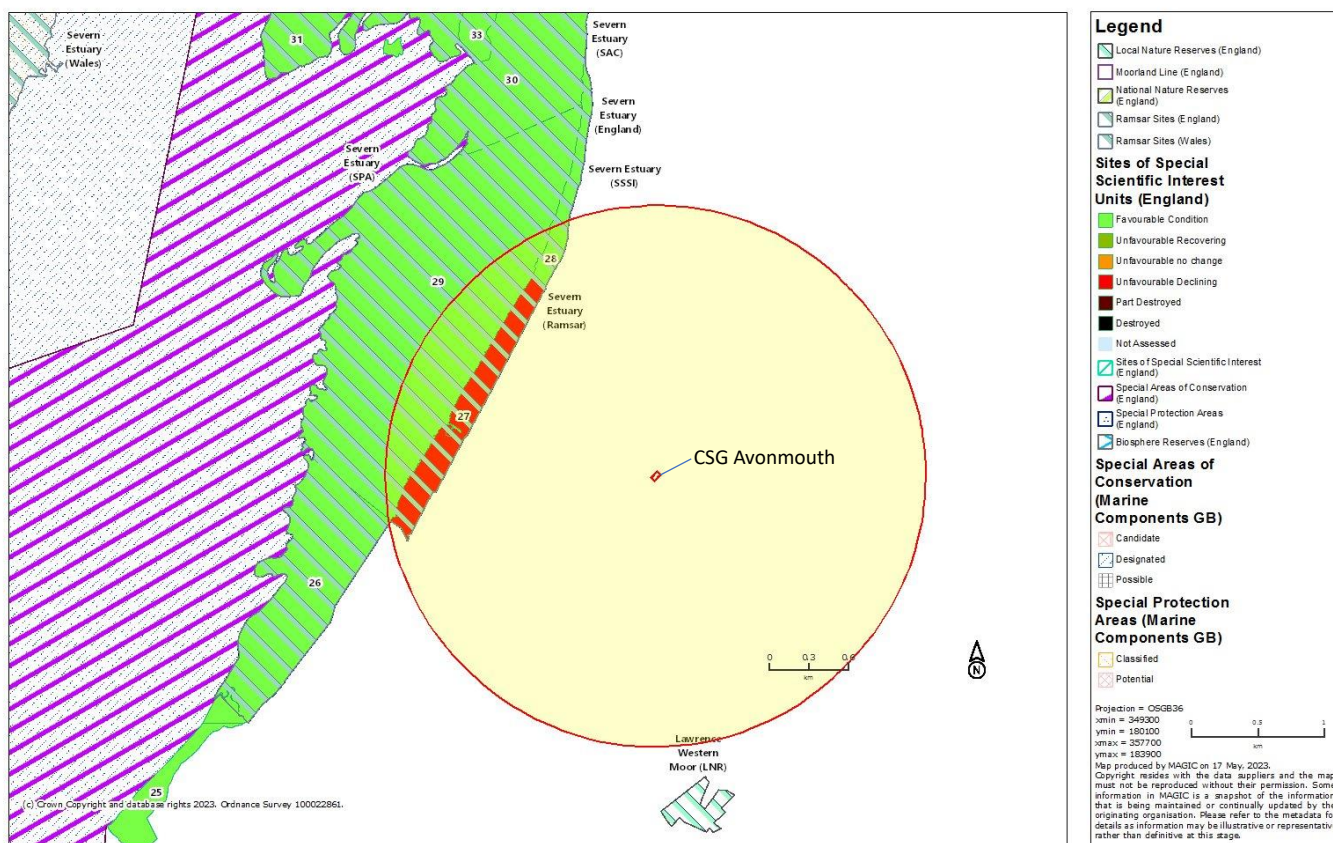
This assessment is submitted as part of the bespoke permit application EPR/FP3823PB/A001 for Cleansing Service Group Ltd. The application is for a treatment plant to remove of oil and solid contamination from water. Whilst this is a new treatment plant and a new permit, it is built to replace a similar facility in Easton, Bristol that will operate until this is functional. An H1 Assessment of Air and Water Emissions and an Ecological report of the site have been used to assess the impact upon designated sites within the relevant screening distance.

Designated Sites

The Severn Estuary is approximately 1.3 km NW of the installation



CSG Avonmouth. Designated Sites within 2km



The Severn Estuary is protected by a range of nature conservation designations to reflect the importance of its habitats and species. The Severn Estuary is a designated Ramsar site, covering 16,942 ha of wetland. The site’s qualifying interest features overlap with those of the Severn Estuary SPA and SAC which are themselves protected by SSSI designations. The site is of particular importance for hosting internationally important populations of several species of waterbirds as well as its fish species migrating between the sea and rivers via the Estuary.

Site Code: UK9015022

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;

- The extent and distribution of the habitats of the qualifying features
- The structure and function of the habitats of the qualifying features
- The supporting processes on which the habitats of the qualifying features rely
- The population of each of the qualifying features, and,
- The distribution of the qualifying features within the site.

Qualifying Features: *Cygnus columbianus bewickii*; Bewick's swan (Non-breeding)

Tadorna tadorna; Common shelduck (Non-breeding)

Anas strepera; Gadwall (Non-breeding)

Calidris alpina alpina; Dunlin (Non-breeding)

Tringa totanus; Common redshank (Non-breeding)

Anser albifrons albifrons; Greater white-fronted goose (Non-breeding)

Waterbird assemblage

European Site Conservation Objectives for Severn Estuary/Môr Hafren Special Area of Conservation

Site code: UK0013030

Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;

- The extent and distribution of qualifying natural habitats and habitats of qualifying species
- The structure and function (including typical species) of qualifying natural habitats
- The structure and function of the habitats of qualifying species
- The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely
- The populations of qualifying species, and,
- The distribution of qualifying species within the site.

Qualifying Features: Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks

Estuaries

Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats

Reefs

Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*); Atlantic salt meadows

Petromyzon marinus; Sea lamprey

Lampetra fluviatilis; River lamprey

Alosa fallax; Twaite shad

Screening of potential impacts

Air

All liquid wastes received for processing at the installation are off-loaded from road tankers to bulk tanks. For each delivery of waste there is a displacement of air from the receiving tanks, for each transfer between tanks or discharge to a road tanker there is also a displacement of air.

Oily wastes are low in VOC's, however, the transfer of these wastes into and out of tanks will result in some air emissions. We have calculated the total emissions for the installation for displacement of air and used the H1 tool to assess the installations emissions as though it were a point source.

The screening assessment, based on the H1 methodology, indicates that all air emissions are predicted to result in process contributions (PCs) that are screened as insignificant against Environmental Assessment Levels (EALs). The installation is 1.3km from the nearest designated site, impact from emissions to air can therefore be screened out as insignificant.

Water

The site is totally contained with no direct emissions to surface water from the installation. All rainwater is contained and treated as though it is contaminated by running it through the treatment facility. The only emission to water is via the Sewage Treatment Works (STW) at Avonmouth that will receive the treated effluent under consent.

The impact of the installation discharge to water, following treatment at the STW, has been assessed, using H1, in accordance with the EA H1 Guidance.

According to the methodology outlined in H1, it is possible to screen out insignificant emissions and those emissions where further assessment is not required, based on the appropriate Environmental Assessment Level (EAL) for each pollutant. Screening of the emissions is achieved using simplified sewage treatment reduction factors, contained within H1, which represent the effects of the treatment process on the pollutants. In line with H1 methodology, the assessment takes no account of dilution provided within the sewerage system.

The screening assessment has been undertaken, based on low dilution in the receiving waters and assuming attenuation/treatment as per sewage treatment reduction values. All emissions to the Severn Estuary via the STW were screened as insignificant.

It is considered that emissions from the installation are unlikely to result in significant impacts to the receiving waters, the impact can therefore be screened as insignificant.

In addition to the above, this site is to replace an existing site that is currently discharging under consent to the same STW. The consented levels for this replacement site will be tighter than those of the existing resulting in a net reduction in emissions to the Severn Estuary.

Ecology

CSG commissioned an Ecological Report of the land prior to the Installation being built. The Ecological Appraisal undertaken at the Site, dated July 2021 was prepared by Nash Ecology.

The appraisal identified that the Severn Estuary (Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar Site) lies 1.3km northwest of the Site. The Appraisal found: "Given the highly localised nature of the development coupled with its intended purpose there are no impact pathways between the Site and the Severn Estuary SAC or Ramsar. The Site does not contain winter grazing habitat and thus is unlikely to be used by birds during the winter. Therefore, the proposed development is unlikely to affect the SPA."

Conclusion

It can therefore be concluded that there is no likely impact on the Severn Estuary and its designations from this installation.