

Climate change aspects within EIA proceedings

Spain: Oil refinery in Extremadura

Case Study

Justice and Environment 2012

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SPAIN

Art. 3 (b) and Annex No. IV. of the Directive of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (EIA Directive - 2011/92/EU) laid down that environmental impact assessments shall identify, describe and assess in an appropriate manner direct and indirect effects on climate, and shall include a description of the aspects of the environment likely to be significantly affected by the proposed project, in particular – and inter alia - climatic factors, and the inter-relationship between all the factors mentioned therein. Climate relevant impact of a plan should be assessed but in practice it is very limited and formal without deeper evaluation.

1. Title of the case

Project on the construction of an oil refinery in Extremadura, in the municipality of *Los Santos Maimona* (Badajoz) and its associated infrastructures (Sevilla and Huelva). This case-study focuses on the construction of the oil refinery which is the project having impacts on climate factors.

2. Description of the project

The project subject to the IPPC legislation consisted on the building and entry into operation of an oil refinery in Los Santos de Maimona together with all the facilities and necessary infrastructures to provide the raw materials to the refinery and to distribute the end-products of the refinery.

The project conceived in 2005 has as main aim to cover the main part of the national demand of oil refined products (mainly diesel and kerosene)

2.1. Features of the project, location, likely environmental impacts etc.

The project was comprised of the following components:

1.1. *Refinery and associated infrastructure in Extremadura*. The project proposed to build a refinery in an approximate surface of 200 hectares with a capacity to process 5.750.000 tns/year of oil and other raw materials and to produce 5.411.000 tns/year of products. This component is comprised of three areas:

- Processing area: divided into seven processing blocks:

Block 0: Ancillary Services. Energy generation (electricity and steam), water pre-treatment, refrigeration system, nitrogen and air.

Block 1: Oil atmospheric distillation, desalination, vacuum distillation and gasses concentration

Block 2: Retarded pet coke processing and coke storage

Block 3: Hydrogen production

Block 4: Hydrocracking and hydrotreatment of medium distillate products.

Block 5: Hydrotreatment of naphtha and of liquated oil gasses

Block 6: Regeneration of amine and sulphur production

- Storage area

The main environmental impacts of the refinery are air and noise pollution and water pollution in addition to the generation of hazardous waste.

1.2. Oil pipe for supply oil and polipipe for exportation. The main characteristics of these infrastructures projected in parallel are:

The function of the oil pipe is the transportation of oil from the storage terminal in Palos de la Frontera (Huelva) to the Balboa Refinery in Santos de Maimona (Badajoz).

The function of the polipipe is to transport oils and naphtha from Balboa Refinery (BR) to the storage terminal.

The environmental impacts of the pipes are on protected areas of Natura 2000 and associated fauna and flora and water pollution.

1.3. Port facilities in Huelva province. The associated port facilities to BR are:

- Discharge and oil reception system comprised of the float, the oil pipe (underwater and land tracks), connection collector- Pipe Line End Manifold (PLEM) –and the pumping station Booster
- Storage Park
- Infrastructures for oil exportation: boarding dock and connection polipipe between the dock and the storage park

The land facilities would be placed in the Huelva Port specifically in the sector of the Exterior Port in the municipality of *Palos de la Frontera*.

The environmental impacts of the port facilities are on protected areas of Natura 2000 and associated fauna and flora, noise pollution, water pollution through discharges and impacts on the marine environment.

2.2. Does the project have likely harmful impacts on the environment, especially on climate?

The refinery would have a series of harmful impacts on the environment, specifically:

- Air pollution. The project foresaw the construction of 10 smokestacks where emissions of SO₂, NO_x, CO, PM₁₀, H₂S y NMCOVs (non methanics VOCs)
- GHGs emissions. The environmental impact study submitted by the developer reported the following GHG emissions:
 - o CO₂: 1.556.187,95 ts/y.
 - o Methane (CH₄): 19,15 ts/y.
 - o Nitrous oxide (N₂O): 21,52 ts/y.

These emissions amounts 1.562.998,35 tons CO₂ equivalent. The study foresees 3.812 tons/day CO₂ emissions approximately¹.

¹ <http://www.grupoag.es/refineriabalboa/medioambiente/pdf/emisiones.pdf>, p.83

In spite of this, the EI Study states that the project will not contribute to increase global climate change². In addition, it affirms that the possible consequences on climate derived from the GEIs emissions associated to the refinery have a global character and for this reason its geographical location is irrelevant.

- Impact on air quality in the neighbourhood area
- Water pollution. The project foresees the discharge of waste water with pollutants such as oils, phenols, sulphurs, ammonia, metals, variable values of COD and suspended solids after treatment in the river Guadajira a tributary of the Guadiana River which is a RBD shared with Portugal.

3. Applicable national regulation

3.1. Which are the main national provisions transposing the EIA Directive?

At the State level the main act transposing the EIA Directive is Royal Legislative Decree 1/2008, of 11 January, approving the consolidated text of the Law on the Environmental Impact Assessment of Projects³ (RLD).

3.2. Does the national regulation on EIA demand taking climate change aspects into consideration in the procedure?

Article 1 of the RDL establishes the object of the EIA procedure. Its 3rd paragraph provides that the EIA shall identify, describe and assess the direct and indirect effects of a project on a series of factors which includes the climate.

In addition, Article 7 of the RDL requires projects subject to an EIA to include an Environmental Impact Study which must contain a series of data including an assessment of the foreseen direct and indirect effects of the project in a series of elements which includes climatic factors.

² Ibid, p. 80.

³ Real Decreto Legislativo 1/2008, de 11 de enero, por el que se aprueba el texto refundido de la Ley de Evaluación de Impacto de proyectos.

4. Description of the impact assessment procedure

4.1. Type of procedure, competent authorities, claimants and other participants involved

The analyzed project is one of the projects listed in paragraph 3.a of Annex 1 of the mentioned RLD. Therefore, this project is compulsory subject to an EIA.

There are two kinds of competent authorities in EIA in Spain. The so-called substantive competent body, which is that body of the public administration at the State, autonomic or local level holding the competence to approve or when appropriate to control the activity through the responsible statement or communication of the projects subject to EIA⁴. The environmental body, which is the body of the State or autonomic public administration competent to assess the environmental impact of projects.

The substantive competent body for the Balboa refinery is DG for Energy and Mining Policy from the Ministry of Industry, Energy and Tourism. The environmental body is DG for Environmental Quality and Assessment and Nature Protection from the Ministry of Agriculture, Food and the Environment. Therefore, the competent bodies lie on the State Administration.

The developer of the project is Refineria Balboa S.A (RB).

The EIA procedure at the State level comprises three stages:

- Phase 1.- Scoping. It is comprised of the submission by the developer of the application which must enclose the initial project document before the substantive body and of the scoping itself to determine the extension of the EI Study after consulting interested public administrations and persons (preliminary consultation).
- Phase 2.- This phase it is comprised of the preparation of the EI Study by the developer, public information and consultation to interested parties procedures to be carried out by the substantive body.
- Phase 3.- Environmental Impact Statement issued by the environmental body.

⁴ After the transposition into Spanish Law of the Services Directive not all projects are subject to authorization but there are projects subject to a responsible statement or communication.

The procedure started on 7 June 2005 when RB filed the application. The preliminary consultation started on 21 April 2006 whereby 148 interested parties were consulted. Of these 8 were State ministerial departments and autonomous bodies, 11 Autonomous Communities departments, 3 provincial bodies, 3 National research institutions, a national park biological monitoring point, 2 academic institutions, 3 agriculture associations, 100 municipalities, 7 environmental NGOs and a citizen's grassroots group. Nevertheless, only 43 of them sent their comments to the environmental body, of those 3 responses were sent by environmental NGOs and by the citizen's grassroots group. In addition, other associations sent their comments and 5.908 persons also sent comments.

During the public information procedure many institutions and persons sent allegations on the project as well as public administrations (municipalities, autonomous communities and state), political parties, private companies, professional and business associations, citizen's grassroots groups, environmental NGOs and individuals.

During the consultation procedure 32 reports were received from 8 municipalities, 7 state public departments, 4 autonomous communities public departments, 5 environmental NGOs 3 citizen's grassroots groups and the remaining from agriculture groups.

In addition, the Portuguese authorities also participated through the transboundary EIA procedure. Portugal emphasised on the environmental impacts on the Guadiana shared river basin district.

4.2. Does the project have likely harmful impacts on climate?

The project will increase CO₂ emissions in Spain. (See point No. 2.2.)

4.3. Did the assessment meaningfully evaluate the likely impacts of the project on climate?

The assessment mentions the climate conditions of the area where the refinery would be located indicating that it is a mild climate of Mediterranean type. This climate could be considered a transitional climate because it has continental features (extreme conditions) and the Atlantic influence of the winds coming from Portugal. Precipitations are modest distributed during the whole year excluding the period of summer drought (May-September). It also provides brief information on the winds.

The assessment carried out by the environmental body hardly evaluates the impacts of the project on climate. However, the EI Statement when it summarizes the elements taken into consideration to reach a final decision mentions that the project is contrary to the energy efficiency goals of the EU which comprises the need to improve the use of the available energy resources, to reduce the energy dependence and the consequent reduction of CO2 emissions.

- 4.4. Had the claimant or other participants stressed the priority of preventing climate change? If yes, had been these arguments taken into account?

The allegations submitted by *Ecologistas en Acción* affirmed that the refinery was against the internationally agreed commitments by the Spanish government. Those commitments as stated by *Ecologistas en Acción* urgently obliges to limit CO2 emissions which generate climate change, limitation which must take place in industry and transport, two sectors where the projected refinery impacts directly and negatively⁵.

Climate change reason was not stressed as a priority by any of the participants. Nevertheless, as mentioned before it was briefly mentioned among the elements which were taken into consideration when the decision was taken.

5. Outcome of the proceedings / content of the final decision

The main elements of the final decision provide that some components of the project are contrary to environmental protection policy and some potential impacts have not been sufficiently analyzed. In addition, in spite of some of the measures proposed to correct a series of impacts remains which represent a relevant effect on the environment.

DG on Environmental Quality and Assessment and Nature proposed a negative EI Statement to carry out the project for the construction of the refinery and its associated infrastructures due to some considerations. Among them are the irreversible transformation of the agro-nature territory, the landscape impact due to air pollution and odours and the lack of compliance with EU energy efficiency objectives. Thus, the Secretary of State for the Environment in light of the proposal of that DG, formulated a negative EI Statement of the project.

⁵ www.ecologistasenaccion.org/article11766.html

6. Obstacles/Challenges generated in this case

The EIA procedure took 80 months. The social and economic implications of the refinery generated a very divergent response from society. Thus, the Administration had to review hundred of allegations. It also created political tensions in the Extremadura Autonomous Community.

After the publication in the Spanish Official Journal of the EI Statement, the civil society platform Refinery Yes and the government of Extremadura have submitted allegations to the Spanish President against that EI Statement.

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