

**IPP4 AL-MANAKHER POWER PROJECT**

**REQUEST NUMBER: 2015/02**

**COMPLIANCE REVIEW REPORT – December 2016**

The Project Complaint Mechanism (PCM) is the independent accountability mechanism of the EBRD. PCM provides an opportunity for an independent review of complaints from one or more individual(s) or organisation(s) concerning an EBRD project, which allegedly has caused, or is likely to cause harm. PCM may address Complaints through two functions: Compliance Review, which seeks to determine whether or not the EBRD has complied with its Environmental and Social Policy and/or the project-specific provisions of the Public Information Policy; and Problem-solving, which has the objective of restoring a dialogue between the Complainant and the Client to resolve the issue(s) underlying a Complaint without attributing blame or fault. Affected parties can request one or both of these functions.

For more information about PCM, contact us or visit [www.ebrd.com](http://www.ebrd.com).

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 <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism.html>

### How to submit a complaint to the PCM

Complaints about the environmental and social performance of the EBRD can be submitted by email, telephone or in writing at the above address, or via the online form at:

 <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/submit-a-complaint.html>

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*NOTE: Unless otherwise defined, capitalised terms used in this Compliance Review Report refer to terms as defined in the PCM Rules of Procedure.*

## Acronyms and Abbreviations

CEMS	-	Continuous Emissions Monitoring System
EASEP	-	East Amman Society for Environmental Protection
EBRD	-	European Bank for Reconstruction and Development
EHS	-	Environmental Health and Safety Guidelines (World Bank)
ESIA	-	Environmental and Social Impact Assessment
ESD	-	Environmental and Sustainability Department (EBRD)
ESP PR	-	Environmental and Social Policy Performance Requirement (EBRD)
ESSD	-	Environmental and Social Due Diligence
ESMMP	-	Environmental and Social Management and Mitigation Plan
GAM	-	Greater Amman Municipality
IFC	-	International Finance Corporation
MOE	-	Ministry of Environment
NEPCO	-	National Electric Power Company
NTS	-	Non-Technical Summary
OPIC	-	Overseas Private Investment Corporation
PCM RPs	-	Project Complaint Mechanism Rules of Procedure

This Complaint was registered in accordance with the PCM Rules of Procedure approved by the EBRD Board of Directors in November 2014. For the purpose of this Report, all references to the PCM RPs are to the PCM RPs 2014, unless specified otherwise.

RSS	-	Royal Scientific Society
SEP	-	Stakeholder Engagement Plan

**Note**

This Compliance Review has been undertaken in compliance with Project Complaint Mechanism (PCM) Rules of Procedure (RPs) 35-44, and in accordance with the Terms of Reference set out in the Eligibility Assessment of the Complaint (Request No. 2015/02).

The term “Complainant” is used in this Report to refer, for convenience, to the Representative of the Complainants identified in the Complaint to the PCM.

The photographs in this Report have been taken by the Expert unless otherwise ascribed.

## **Executive summary**

This Compliance Review has been undertaken in compliance with Project Complaint Mechanism (PCM) Rules of Procedure (RPs) 35-44, and in accordance with the Terms of Reference set out in the Eligibility Assessment of the Complaint (Request No. 2015/02).

This Compliance Review Report is based on review of relevant documentation, discussions with EBRD officials, discussions with Complainant(s), meetings with members of the communities surrounding IPP4 (excepting the directly-affected village, Al Manakher, which was not represented in the Complaint), discussions with the Client, meetings with national and local government authorities, and a site visit by the PCM Expert and the PCM Officer.

In accordance with PCM RPs, this Report is expected to determine whether EBRD complied with the ESP in ensuring that the AES Levant (the Client) met its commitments under the PRs..

In preparing the Report, the Expert has tried to understand the issues raised in the Complaint, not simply from the perspective of compliance with the ESP and PRs, which is its formal remit, but given that IPP4 also needs to operate within a local community setting, to what extent it responded to area-wide concerns that may have contributed to the Complaint.

This Report considers that there are not sufficient grounds to conclude that there were adverse impacts beyond the project area of influence – Al Manakher village and its immediate environs – attributable to the operations of IPP4 which may have been overlooked by EBRD in its due diligence obligations set out under the ESP. This Report considers that the Complaint is based largely on information that is not supported by evidence and that there is not substantive causality established for the impacts alleged by the Complainants. The Report considers that EBRD has ensured that the Client followed internationally-accepted practices in testing for environmental parameters associated with a Category A project, and that the Client did not apply discriminatory employment practices, or been subject to political influence in the management of plant operations. There has also been no evidence of alleged health-related impacts of plant operations. The EBRD Management and the Client Responses provide detailed clarifications on the technical aspects of the Complaint and are accessible in the PCM register at <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html> .

This Report considers that EBRD ensured that the Client engaged qualified and competitively-selected individuals to work at the plant, and that licensed contractors were engaged to provide technical support services at the plant. Through EBRD's due diligence and monitoring reports, it has been seen that the Client has demonstrated a high degree of corporate social responsibility in outreach to not only the directly-affected village of Al Manakher, but also the greater area that includes the villages represented by the Complainants.

This Report considers that EBRD, through detailed oversight and continuous comprehensive monitoring, has fulfilled all the commitments set out in the 2008 Environmental and Social Policy, and has ensured that the Client has met the requirements of the ESP Performance Requirements (PRs).

This Report considers that while the Complainants may be justifiably concerned about the general environmental and social conditions in East Amman, those conditions are extraneous to the operations of IPP4. The Report believes there is not sufficient evidence-based documentation

to establish causality between IPP4 operations and alleged environmental impacts on the local community other than those on the directly-affected village of Al Manakher, mitigation of which is covered by the ESMMP.

This Compliance Review Report considers that EBRD, consistent with the ESP, has fulfilled its responsibilities in ensuring that the Client has met its commitments under the PRs, particularly in the testing of environmental parameters and stakeholder engagement with affected communities in the project area of influence, in a timely and appropriate manner.

## I. Eligibility Assessment and Basis for the Compliance Review

1. On 2 August 2015, a Complaint from the East Amman Society for Environmental Protection (EASEP), its Chairman, and all members of EASEP was received by the Project Complaint Mechanism requesting a Review and a Problem-solving Initiative in relation to the IPP4 power plant in Jordan.
2. The IPP4 power plant, located near Al Manakher village, about 14 km east of Amman. The IPP4 project (the Project) involves the operation of a 240 MW peaking power plant to “supply electricity to Jordan’s National Transmission System to help meet temporary demands to maintain the stability of the System.”<sup>1</sup> The power plant comprises 16 reciprocating engines, each with a capacity of 15 MW.<sup>2</sup> The power plant is owned by AES Levant Holdings B.V/Jordan (the Client).
3. The IPP4 power plant was initially structured to meet Jordanian and World Bank / International Finance Corporation (IFC) requirements, rather than EBRD requirements. An ESIA report, which was prepared before EBRD was approached for financing, was disclosed on 6 June 2012 by the Project Company and OPIC.<sup>3</sup> The Bank disclosed the ESIA on 16 August 2012.<sup>4</sup> The ESIA report<sup>5</sup> refers to Jordanian and World Bank/IFC requirements, and not to EBRD requirements, which were considered later within EBRD’s Environmental and Social Due Diligence (ESDD) process.
4. EBRD classified the Project as a Category A Project, and, together with OPIC, retained an Independent Engineer to undertake aspects of the ESDD process.<sup>6</sup> The Independent Engineer’s subsequent report (which was addressed to both EBRD and OPIC) considered both the IPP4 project and an adjacent project, IPP1, in which the EBRD has no financial interest.<sup>7</sup>
5. The ESDD “confirmed that the ... [IPP4] ... Project Company has the institutional capacity to fully implement the Bank’s PRs [Performance Requirements]. However, the ESDD identified a number of gaps in the existing documentation in terms of the Bank’s PRs.”<sup>8</sup> The Project Company prepared additional documents to address these gaps – “including” a non-technical summary (NTS) and a Stakeholder Engagement Plan (SEP). The Environmental and Social Management and Mitigation Plan (ESMMP) was updated with the aim of complying with the 2008 Environmental and Social (ESP) Performance Requirements (PRs).<sup>9</sup> This document fulfilled the functions, in the case of the IPP4 Project, of the Environmental and Social Action Plan requirement referred in the 2008 ESP.<sup>10</sup> It also contained monitoring measures to fulfil the monitoring requirements of the 2008 ESP. The document notes that “[i]t is considered that so long as the plant implements the mitigation and monitoring measures outlined in the EMMP the

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<sup>1</sup> EBRD. *Non-Technical Summary of IPP4 Al Manakher Power Project, Jordan*. August 2012, page 1.

<sup>2</sup> EBRD Management Response, 1 October 2015, Section 1.

<sup>3</sup> *Ibid*, Section 3.6.

<sup>4</sup> *Ibid*.

<sup>5</sup> AES Levant Holding BV Jordan. *IPP4 Al Manakher Power Project, Environmental Statement*. May 2012.

<sup>6</sup> EBRD Management Response, Section 2.

<sup>7</sup> *Ibid*, Section 3.1.

<sup>8</sup> *Ibid*, Section 3.6.

<sup>9</sup> *Ibid*.

<sup>10</sup> EBRD. *Environmental and Social Policy*. May 2008.

*project will comply fully with all relevant Jordanian Standards, Laws and Regulations as well as the applicable requirements of the World Bank/IFC and the EBRD as presented in this EMMP.”<sup>11</sup>*

6. The EBRD Board of Directors approved EBRD financing of the Project on 3 October 2012.<sup>12</sup> Financial close was achieved at the end of January 2013. Construction began later in 2013, and the power plant began commercial operations in July 2014.<sup>13</sup>

7. Initial inquiries by the PCM and subsequent clarifications by EASEP led to submission by EASEP (as the Complainants’ representative) to PCM of a list of 91 individual complainants. They include the Chairman of EASEP as well as 90 others (who together with EASEP are the “Complainants”).<sup>14</sup> The 91 individuals are either residents of, or landowners or farmers in, one or more of seven villages from the area surrounding the IPP4 power plant, and seven out of the eight named in the Complaint (excepting Al Manakher). The Eligibility Assessors understand from their subsequent enquiries that several of the Complainants are also members of EASEP.

8. The Complaint was registered by the PCM Officer on 11 August 2015 pursuant to PCM Rules of Procedure (PCM RPs) 11-13, and was subsequently uploaded to the PCM website, pursuant to PCM RP 20. The Eligibility Assessment (EA) was posted on the PCM website on 8 January 2016. The Eligibility Assessors determined that the Complaint was eligible for a Compliance Review under PCM RPs 24-29, and that it was not eligible for a Problem-solving Initiative.

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<sup>11</sup> AES. *IPP4 Al Manakher Power Project - Environmental and Social Management and Mitigation Plan*. Executive Summary. July 2012.

<sup>12</sup> EBRD Management Response, Section 1.

<sup>13</sup> *Ibid*, Section 3.3.

<sup>14</sup> The term “Complainant” is used in this Report to refer, for convenience, to the Chairman EASEP as representing the Complainants identified in the formal Complaint to PCM.

## II. The Complaint

9. The Complaint alleges violations of social and environmental standards by the Client. Those have been expressed in terms of IFC Performance Standards, which are not applicable to EBRD-financed projects. However, the substance of the Complaint may be understood to relate to the 2008 ESP and its PRs in relation to both EBRD and Client obligations.

10. The full Complaint is accessible in the PCM register at this link <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html> . In summary, the Complaint alleges that:

- Affected communities were not adequately engaged in and/or consulted on the ESIA
- Directly affected communities include “Khashafiat Aldabaibah, Khashafiat, Alshawabkhah, Albaida, Almadounah, Alalia, Alabdalia and Abu Alanda, in addition to Al Manakher”
- Current arrangements for community representation are defective, and not fully independent of the Client and/or local governors
- The Client’s community liaison officers were not drawn from local affected communities
- Grievance mechanisms had not been put in place by the Client and/or are defective and/or not independent, and do not enable Complainants to have recourse to external experts or neutral parties
- The Client does not report to local affected communities on issues relating to consultation and grievances
- The flow of information to, and engagement with, affected communities on environment, social, and health and safety issues, performance, and test results is inadequate and Complainants have not heard of any periodic environmental, social and/or health and safety reports to local communities
- The SEP is inadequate
- The ESMMP is not being properly implemented
- Monitoring and testing in relation to both point source (stack and effluent) and ambient emission values is inadequate in relation to frequency, methods, and parameters tested, and has not involved the community nor provided opportunities for the community to be trained to participate in monitoring activities
- Monitoring and/or verification of monitoring data is not being carried out by independent third parties and/or experts
- Air quality and effluent monitoring and testing are inadequate and no odor monitoring is carried out
- Fuel tests are not based on continuous testing, and test reports and information about who performed the tests have not been disclosed to local communities

- Procedures and commitments in relation to employment and training or contracting of people from affected communities are defective and/or inadequately followed
- Development benefits or opportunities of the project are not available to local affected communities, and the Client does not provide meaningful (“real”) support for community development in affected local communities
- Community members have not been provided with information about IPP4’s emergency preparedness and response system and have not heard about emergency response drills
- Procedures and requirements applicable to Indigenous Peoples have not been followed
- Involuntary resettlement procedures were not followed.

11. In addition, the Complaint alleges specifically that:

- The sulphur content of fuel used at IPP4 exceeds 6%
- Hazardous and contaminated wastes and sludge are being disposed of by IPP4 on nearby agricultural lands or non-hazardous waste landfills, and contaminated oil is being sold to local contractors
- No “legitimate” hazardous waste contractors are used by the Client
- The only ambient air quality monitoring station in Sahab is not in the area affected by IPP4
- No organization in Jordan is accredited to carry out continuous air pollution monitoring of a kind appropriate for the IPP4 plant
- Nearby houses suffer from cracks, and people suffer disturbance and discomfort
- The Client does not permit people from local communities to be employed in its core workforce and requires subcontractors not to employ candidates from local affected communities
- Senior project engineers rule out contractors from local affected communities and the Client fails to announce tenders in public in a transparent way

12. The Complaint also raises a number of questions about other areas of the Client’s environmental and social performance without detailing any alleged shortcomings. These include the following:

- *“Does this mean that if NEPCO delivers fuel which doesn't comply with the required local & /or IFC standards whichever more stringent, that the client will use this fuel regardless of its compliance & the blame will be on NEPCO.”*
- *“Did the client install FGD to reduce the level of SO<sub>2</sub> emissions or did they use HFO or DFO with sulfur content that complies with IFC standards??? Did the client install Fabric Filters/ESPs to reduce level of PM emissions or did they use HFO or DFO with Ash & carbon content that complies with IFC standards???”*

- *“Use of PCB (Polychlorinated biphenyl), Ammonia (NH<sub>3</sub>), Hydrazine (N<sub>2</sub>H<sub>4</sub>) & Adenosine Tri-Phosphate (ATP)... Client's ESIA 4.1.27 states that In addition to the oil storage, storage facilities will also be provided for the small quantities of chemicals (including sodium phosphate, hydrazine, ammonia/urea and others) used in boiler water dosing. All such chemicals will be retained in suitable containment areas.”*
- *“Client's ESIA 6.4.30 states that Transformers are sealed units, with negligible leakages. The transformer oils will not contain polychlorinated biphenyls (PCBs).”*
- *“Is the real height of IPP 4 stacks 70 or 50m???”*
- *“Who is the licensed hazardous waste disposal company that IPP4 use & where are the manifests of disposed hazardous waste including solid and/or sludge and/or contaminated waste water???”*

13. The Complaint also includes a number of references to and/or extracts from IFC Performance Standards and the Project ESIA that are not explicitly linked to specific acts or omissions on the part of the Client or of the Bank. Those include references to the use of stabilization clauses in agreements with host governments and to business and human rights. and a reference to statements made in the ESIA in relation to the objective of socio-economic impact assessment and to cooperation with the Vocational Training Centre in the Amman Governate in respect of training for local people.

### III. Management Response to Complaint

14. A formal detailed written response to the Complaint was provided by EBRD Management on 1 October 2015 pursuant to PCM RP 19 (accessible in the PCM register at this link <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html>).<sup>15</sup>

15. **Community involvement in the ESIA.** The Management Response notes that the SEP identified residents of Al Manakher village as closest to, and potentially directly affected by the Project. A map provided in the Response places six of the remaining seven settlements named in the Complaint as between 3.4km and 10.7km from the power plant site. The Response notes that for purposes of the SEP, residents of those villages are treated as stakeholders who are unlikely to be directly affected by the power plant.

16. The Management Response describes meetings and information disclosure to Al Manakher and other villages prior to the construction of IPP4. Those included a scoping consultation in July 2010 to which all villagers from Al Manakher were invited, but did not attend. This was followed by a public consultation meeting in Al Manakher in August 2011, complemented by house-to-house meetings in the same village. Subsequently, a follow up meeting was held in Al Manakher in May 2012. The other villages named in the Complaint were not directly invited as those were deemed not to have been directly affected by the Project, being at least 3-4km from the plant. However, those communities would have been able to have seen announcements about these consultations in the local press, and would have been welcome to attend.

17. The Management Response points out that the main channel for engagement between the plant and local communities are two committees that had been established through a process led by the villagers of Al Manakher to represent Al Manakher villagers and facilitate communication between the community and the Client: (i) Roboo Al Manakher Committee, and (ii) Al Kherba Committee. Both Committees were formally registered with the Ministry of Social Development.

18. **Grievance mechanism.** The grievance mechanism established by the Client, as set out in the SEP, provides for capturing “the views of the wider community, or if stakeholder prefer, concerns, questions or comments about the plant.” Any grievance, including human rights concerns, may be raised, the Response notes. The Response describes four avenues for people to direct concerns via the grievance mechanism: (i) through the Governor of Sahab; (ii) through Al Manakher’s two village committees; (iii) direct communication with the Client through a box at the main gate of the plant; and (iv) by telephone with “the contact number also published at the main gate and on the web.” The Client has appointed liaison officers (one male, and one female) whose details are contained “in the grievance mechanism” and published on the notice board at the school in Al Manakher. The Response also states that the Client is considering ways to improve communication with Al Manakher and “other nearby villages.”

19. The Client is required to deliver an annual environmental and social report, starting in June 2016, that includes a summary of stakeholder engagement activities and grievances. EBRD

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<sup>15</sup> The arrangement of issues generally follows the summary provided in the Eligibility Assessment.

monitoring of the grievance mechanism has included meetings with the Client; on two occasions there were face-to-face meetings with Al Manakher representatives. (2012 and 2015),

20. The Management Response states that quarterly reports on environmental, social, health and safety issues are provided to the Governor of Sahab. Those reports are available *“to the community on request”* and, since March 2015, have been posted on a dedicated notice board outside Al Manakher School. During the EBRD June 2015 visit *“it was identified”* that those reports should be expanded to include updates on stakeholder engagement and the grievance mechanism. The lenders *“are in discussion with the [Client] regarding methods for improving the way in which environmental and social activities are communicated to the local communities as well as including information about stakeholder engagement activities and grievances.”*

21. ***Monitoring and auditing processes and reporting.*** The Management Response summarizes auditing processes in relation to the Client’s operational, environmental and social performance, including auditors appointed by the Client; a planned comprehensive environmental and social audit planned for 2017; quarterly review of operations by the Lenders’ Independent Engineer (a detailed third party audit carried out by the Lenders’ Engineer during July-August 2015); and inspections carried out by the Ministry of Environment (MOE). The Response states that community observation of technical audits *“is not usually appropriate”* for health and safety reasons, and that for safety reasons *“only licensed contractors are able to be involved in witnesses or participating in testing.”* Site tours for community members have been restricted to non-sensitive parts of the site. According to the Response, monitoring and testing information (including from the Lenders’ Independent Auditor) shows that the Client is operating in accordance with agreed requirements, including in relation to emissions and air quality limits applicable to the plant.<sup>16</sup>

22. In relation to the sulphur content of Heavy Fuel Oil (HFO), the fuel supplier [NEPCO] must certify the sulphur content of deliveries as below 1% by weight. The Client then carries out analysis of samples from fuel storage tanks on a monthly basis through a laboratory in Singapore. This is supplemented with “periodic” sampling and testing of samples from individual tanker deliveries. The Management Response notes that the Client *“is able to refuse delivery of fuel if it does not meet these minimum quality specifications.”* The Response states that samples from May-June 2015 confirmed sulphur content of less than 1%, and that ash content in May-June 2015 was within parameters set in the ESIA. CO<sub>2</sub> emissions are calculated and reported annually based on the type of fuel used and the technology employed.

23. Client testing and monitoring commitments are set out in the Environmental and Social Monitoring and Mitigation Plan (ESMMP). The Management Response states that *“emissions from the plant stack are monitored continuously, [using a Continuous Emissions Monitoring System, or CEMS] as is ambient air quality.”* Stack emissions monitoring equipment is operated by the Client, with automated measurement. Confirmation of adherence to the approved emissions monitoring plan has been provided to the Bank via the Independent Engineer who, at the time of the Response, is undertaking a detailed audit of the procedures and results of the

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<sup>16</sup> The Independent Engineer’s Q1 2016 Report states that, *“AES Levant Jordan has implemented a 3rd party Air Quality Monitoring by installing a mobile air quality monitoring station which will be used to sample air quality from a second location. This second monitoring site will be selected from one of the areas of predicted maximum impact. The mobile monitoring station will be used to collect samples over 24hr duration once a month for the first 6 months of operating on natural Gas (already 5 months have been carried out) to determine the correlation between the permanent site and the area of maximum impact.”* Page 6.

continuous monitoring programme. The Response states that the CEMS measurements demonstrate compliance with the ESIA and ESMMP.

24. Ambient air quality (NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>) is monitored “*continuously at a permanent air monitoring station at the boundary of the plant.*” The results are reviewed by the Independent Engineer and the EBRD environmental specialists on a quarterly basis. Jordanian PM<sub>10</sub> values have been exceeded on three occasions (described as “one-off”) since July 2014, although averages have been within applicable standards.

25. The Response states that a mobile air quality monitoring unit was set up for six months, in accordance with the air quality monitoring plan, at a location where highest pollution concentration had been modelled during ESIA work. The Client’s Q2 operating report to EBRD states that readings from that station are less than those from the existing permanent unit, and within hourly and daily limits required by Jordanian standards.

26. The Management Response states that EBRD is advised by its own independent consultants and internal specialists, and does not rely on the results of air monitoring undertaken by the Jordanian Ministry of Environment. The Response provides information on the automation and calibration of air quality monitoring equipment, and states that arrangements in place for testing the equipment are sufficient to meet the requirements of the ESMMP.

27. **Waste.** In relation to waste issues raised in the Complaint, the Management Response states that the operation of the Client’s waste management procedures has been inspected by its Independent Engineers. EBRD notes that all waste disposals are carried out by licensed contractors, and in accordance with customary practices in waste management, with quantities and contents recorded by the Client. The Response does not indicate that it has information to believe that there have been instances of non-compliance in this respect.

28. **Effluent monitoring.** The Project’s Independent Engineer, at the time of the Management Response, was auditing the Client’s waste disposal activities. The ESIA and ESMMP describe the waste management strategy, which commits the Client to using licensed waste disposal companies. The Response states that the plant is “zero effluent” and all effluent remains on-site and is treated in an evaporation pond, which has been physically inspected by the lenders and their Independent Engineer.

29. **Sludge and contaminated oil.** Ministry of Environment-licensed contractors take sludge oil and used lube oil from the site. The Response notes that the Client maintains a list of those contractors as well as disposal quantities and contracts. The Response states that the Client has confirmed that it is not aware of contaminated materials being spread on agricultural land, and has requested more detailed information from the Complainants if there were specific allegations.

30. **Use of hazardous materials.** The Response responds to the Complaint’s questions about use of hazardous materials at the site. Of those listed in the Complaint, it states that only aqueous ammonia is used.

31. **Noise and cracks.** The Management Response describes a number of noise control and minimization measures implemented in the development phase of IPP4. Noise monitoring is now undertaken by the Client at the plant boundary, where the Response observes that plant noise is within limits set by Jordanian law and the EHS guidelines of the World Bank. An unattended noise monitoring station is also in place at the school. EBRD and its Independent Engineer are, at the

time of the Response's submission, analysing the monitoring programme. Recording equipment is calibrated by the "Owner's Engineer" and calibration certificates provided to both EBRD and the Independent Engineer.

32. Complaints "from villagers" have been received about cracks appearing in houses. *"[The community has a written undertaking from the [Client] that it will contribute to fixing the cracks."* However, the request is pending *"an independent survey of the houses impacted to be carried out by the Ministry of Public Works and Housing."* No work would be carried out by the Client until that survey had been carried out.

33. **Odor monitoring.** The Client *"monitors ... [odor]... operationally"* and documents any significant odour events. The Client reports that it has not received any complaints regarding odor from the community or people working inside the plant.

34. **Employment, training and contractor policies.** The Management Response states that the Client employs two individuals from Al Manakher in permanent full time positions, with employment on an occasional basis for 30-40 unskilled labourers. The Response asserts that *"these opportunities are publicly advertised in print media"* available to Al Manakher and surrounding communities. The Client *"operates a roster to ensure fair allocation of jobs in case supply of labour exceeds demand."* The Response further notes that *"contractors have specifically been told by the [Client] to try to hire local people for jobs"* (the Client's security contractor is specifically mentioned); and that the Client *"uses many people from the Sahab Governate for its workforce."* The IPP4 plant offers two scholarships a year to support members of the local community through university. Two trainees from the Sahab area have received training under a training programme set up by the Client with the Jordan Engineers Association during 2014 and 2015.

35. **Social responsibility.** The Response outlines the Client's social responsibility programme and notes the Client's policy *"of not providing direct financial contributions to local communities."*

36. **Plant emergency and preparedness and response.** IPP4 has an emergency response plan. *"[R]egular drills are carried out with participation by local responders."* The Response states that "the village chief of Al Manakher" was invited to witness the last full scale emergency drill, in February 2015. During the site visit in June 2015, *"it was highlighted [presumably, though this is not explicitly clear, by the Bank] that emergency drills should involve greater participation from the local community, in addition to the village chief."* EBRD has provided recommendations to the Client – including that it consider ways *"of involving more members of Al Manakher village in the drills, taking into account necessary safety and security concerns."*

37. **Indigenous Peoples and Resettlement.** The Management Response asserts that the characteristics of "Indigenous Peoples" for the purposes of relevant provisions of the 2008 Environmental and Social Policy are not met by the inhabitants of villages surrounding the power plant. In relation to resettlement, the Response points out that the development of the power plant did not entail any resettlement as the government was already the owner of the lands on which the plant was located, and those lands were unoccupied and unused. As such, the Response asserts that requirements on "Free, Prior and Informed Consent" are not applicable.<sup>17</sup>

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<sup>17</sup> EBRD. Management Response, Section 4, Box 17.

#### IV. Client Response to Complaint

38. The response of the Client regarding the Complaint (accessible in the PCM register at this link <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html>) is summarized below:

39. ***Community involvement, reporting, and grievance procedures.*** The Client Response outlines scoping sessions and subsequent community consultation during the ESIA and, following financial closure, in accordance with the SEP. At the project planning stage, villages other than Al Manakher were not “directly” invited to public consultation sessions following an initial scoping session “because they are deemed to be remote and not affected by the project.” As described in the SEP, and confirmed in the Client Response, “Residents of Al Manakher are closest community to the project and will potentially be directly affected by the project while Residents of Sahab and other communities in the immediate vicinity of the project are Unlikely to be directly affected.”

40. The Response notes that “... interaction between the local community and AES is an ongoing process, all interactions are under the local governor supervision and advice, and none of the local community is appointed or selected by the government authorities.”

41. The grievance mechanism “allows people to direct concerns through the Governor of Sahab or through the Al Manakher village committee.”<sup>18</sup> A suggestion box/register and contact phone numbers were available at the main gate of the plant “and ... [that information] ... communicated verbally to all villagers through the village committees and during the scoping session.” The Client Response asserts the Client’s belief that recourse to external experts is “not applicable” as “project company has engaged [with] all complain[t]s and answered all the concerns.”

42. Two community committees exist, with representatives selected by Al Manakher villagers. The Client states that no complaint from these two committees was noticed in “frequent communication with individuals from the village and local authorities.” The Response notes that Table 3 of the SEP contains a list of the various stakeholder engagement activities undertaken, and that communication with local communities is additionally “through the local governor.”

43. Health, Safety and Environment reports in Arabic are provided to the Governor of Sahab on a quarterly basis. Since March 2015 those have also been posted on the notice board outside Al Manakher school. The Client Response notes that “for safety reasons, only licensed contractors are able to be involved in witnessing or participating in the testing on the site.”

44. ***Emissions monitoring and testing and waste disposal.*** The Client Response notes that the ESIA and ESMMP describe measures to control emissions. Stack emissions are monitored continuously for SO<sub>2</sub>, NO<sub>x</sub>, CO and PM/TSP using CEMS. CO<sub>2</sub> emissions are calculated and reported annually. The Client Response confirms that the stack height is 70m. The results of monitoring are reviewed by the lenders and their Independent Engineer. Ambient air quality is measured at a permanent on-site ambient air monitoring station that monitors NO<sub>x</sub>, SO<sub>2</sub> and PM<sub>10</sub>. An independent third party carries out annual ambient air testing. The Client Response describes a commitment agreed with lenders at the time of approval of an Ambient Air Monitoring Plan to use a second mobile air quality station at one of the areas of predicted

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<sup>18</sup> Ibid.

“maximum impact” for “the first six months” to determine correction between the permanent site and the area of maximum impact, with the continued requirement for monitoring at a second site assessed based on the performance of the results against a set of pre-agreed criteria. The Client Response states that results of this six-month monitoring at a second location showed that ambient air conditions are better there than at the on-site monitoring station, and meet Jordanian standards. Based on these results, *“second off-site monitoring station will not be installed.”*<sup>19</sup>

45. Fuel oil is tested on a monthly basis by DNV-Dubai and *“all fuel supplied to date [by NEPCO] has been in compliance with relevant requirements”* with Sulphur of less than 1%. Independent verification of data *“is done as needed.”* The Client Response lists the external parties performing external “comprehensive audits and tests.”

46. The Client Response explains that there is no need to install FGD or fabric filters / electrostatic precipitators (ESPs).

47. The Client Responses notes that the plant records disposal quantities and contracts for disposal of sludge oil and used lube oil with contractors approved by MOE. The Client Response states that there has been no disposal on nearby lands. Sewage is removed by Greater Amman Municipality (GAM) trucks. Hazardous waste is stored in a designated hazardous waste storage facility and disposed of through approved contractors who *“have a record that all wastes are disposed properly at designated place...”*

48. ***Use of hazardous substances.*** The Client Response states that *“no PCB or any similar material is used at site.”*

49. ***Noise.*** The Client Response describes noise control and minimization measures implemented in the development phase of IPP4, as well as noise monitoring undertaken by the Client at the plant boundary (with quarterly measurement via an independent third party). Additionally, Parsons Brinckerhoff set up unattended noise monitoring equipment for a two-month period both at Al Manakher school and at the closest house to the IPP4 boundary, some 30m away. Results of noise monitoring (which the Client Response states have all been in compliance with World Bank/IFC and Jordanian limits) are monitored by the lenders and communicated as part of the quarterly reports to villagers, MOE and the Governor of Sahab.

50. ***Odor monitoring.*** The Client Response confirms that odor is not monitored, and that there has not been complaint from the community or from people working inside the plant. Biological oxygen demand (BOD) and chemical oxygen demand (COD) levels in the plant’s evaporation pond are monitored regularly.

51. ***Local employment, training and contracting.*** The Client Response states that one engineer and one technical “from the local area” work at IPP4 full time, with around 40 other “local workers” working at the site on an ad hoc basis. The Response states that *“[f]or non-skilled labour the companies exclusively use local labour.”* Engineering positions are advertised in Jordanian newspapers and the company *“would particularly encourage applications from local communities.”* Contracts are awarded competitively, and the Client states that *“we normally provide priority to Jordanian companies when they have the qualification skills.”*

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<sup>19</sup> From the Independent Engineer’s Q1 2016 Report, it appears that a second station will be installed.

52. ***Social responsibility programme.*** The Client Response states that AES has “a social responsibility programme and has implemented numerous projects like solar heater installation, solar PV module installation, supplying blankets heating devices and gas cylinders to Al Manakher village, supplying furniture, to the mosque scholarships for students, repair and extension in the village school, distributing food boxes and wheel chairs in the holy month of Ramadan and a free medical camp.”

53. ***Plant emergency preparedness and response.*** The Client states that it has appropriate emergency response plans that are regularly tested. Drills “are carried out with participation by local responders.” The village chief of Al Manakher, nearby police station officials and the Governor of Sahab had been invited to witness and understand the risk and response at the most recent full scale emergency drill carried out on 11 February 2015. The Client states that “[i]f there is interest in the response plans, more information will be provided to the community liaison committees to convey to the communities.”

54. ***Indigenous Peoples and resettlement.*** The Client Response notes that no Indigenous Peoples were identified as part of the ESIA and therefore requirements relating to Indigenous Peoples are not applicable. The lands for the project site had been acquired by the Government in 2006 prior to approval of IPP4, and were leased to IPP4 as clear and unoccupied. The Client Response adds that the plant is located on arid land that was not being used by the local community.

## V. Site Visit – Client

55. The PCM Officer and the Compliance Review Expert (the Mission) visited Jordan during 7-12 February 2016 to speak with the Client, Complainants, and other stakeholders. The Expert visited the IPP4 area on two occasions, the first a quick overview of the area around the power plant on 7 February, and the second, a detailed tour of the plant facilities on 10 February.

56. The first visit involved a tour of the areas surrounding the plant (just off the Amman Ring Road-Madounah Road interchange) to understand the setting of the relative locations of the villages mentioned in the complaint. The Expert noted that Al Manakher adjoined the plant, and could obviously be affected by any impacts that might be caused by the operation of the plant. However, it appeared that the villages to the west of the plant (the closest was Al-Khushshafiyah) were too distant to be affected by plant operations, especially if natural gas was being used; the Expert noted that the wind direction was toward the east/southeast. The view to the west showed some cultivated fields and rocky outcrops, with a gentle rise to higher elevations where the villages were located several kilometers away. The eastern side of the plant comprised barren rocky lands.



*Photo 1 Current view to West of IPP4*

57. During the briefing on 10 February, the Client mentioned the following:

- A state-of-the-art continuous emissions monitoring system (CEMS) had been installed and would be operational very shortly, with the Ministry of Environment connected online and able to view data in real time; the system could also retrieve historical data to compare findings
- The plant was ISO 18001 and 14001-certified, with re-certifications having been obtained recently

- The population of Al Manakher had grown threefold over the past 10 years
- Recent corporate social responsibility initiatives<sup>20</sup> had included four scholarships for university education, a medical camp that had been attended by over a thousand people, continuing contributions to the school at Al Manakher (electrical repairs, garden, play area additions, internet, stationery)
- The independent monitoring firm continued to submit quarterly reports to the lenders
- Waste, especially domestic wastes, was an issue for the Greater Amman Municipality, and there was an open landfill at Al Ghabawi, to which Amman solid wastes were transported
- Hazardous waste at the plant was managed professionally, with dedicated storage, monthly inspections by MOE, MOE-licensed disposal firms that transported wastes in specialized vehicles to the special landfill at Swaqa<sup>21</sup>, some 10km away and which was being upgraded to fully meet international standards
- Smoke would be visible when HFO or DFO was used to start up the plant, but that would last only 1-2 minutes
- There were four 10,000m<sup>3</sup> HFO tanks, filled every month, and one 750m<sup>3</sup> LFO tank (used for pilots and engine flushing, with sulfur content <1%, filled every two weeks)
- There were six HFO bays and two LFO bays, filled by insulated tankers from Aqaba
- 25% aqueous ammonia was being used, a more expensive product, but intended to avoid health hazards; it was recognized that minimal leakage might occur during coupling
- Currently, IPP4 runs almost exclusively on natural gas, hence there were no oil tankers traversing village roads<sup>22</sup>
- Power plant had engaged six employees from Al Manakher Village, three permanent, and three contractuels; all positions were publicly advertised, with preference for suitably qualified members of the local community
- All employment was advertised and positions competitively filled with plant operations-relevant competencies; there were no positions that had been filled under political pressure

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<sup>20</sup> The CSR Committee also raised funds that were matched by AES.

<sup>21</sup> MOE is the operator of the Swaqa hazardous waste treatment center, the only licensed center for central storage, treatment, and disposal of hazardous waste in Jordan. GTZ SWEEP-net. *Country Report on Solid Waste Management in Jordan*. 2014.

<sup>22</sup> In July 2014, IPP4 was commissioned to run on diesel and HFO, and in practice ran as baseload and almost exclusively on HFO, which was cheaper than diesel for the combined cycle gas turbines. By June 2015, Aqaba LNG terminal had come online and natural gas displaced liquid fuels on the Jordanian grid. At that stage, NEPCO switched back to dispatching the CCGTs (i.e. IPP1 and IPP2) in preference to IPP4 which reverted to its originally intended role as a peaking power plant, but still running on HFO. In September 2015, IPP4 was successfully commissioned to run on natural gas, and from that time has run almost exclusively on natural gas. EBRD Communication. 21 July 2016. The Independent Engineer's Q1 2016 Report confirms that no HFO was used during that period (page 7).

- There was zero effluent discharge from the plant, with discharges to an evaporation pond (with fish and algae), and some used for greenery irrigation within the plant;<sup>23</sup> stormwater was discharged through pipes to adjoining canals
- The plant had one sludge tank; as furnace oil sludge had heating value, it was treated for later use
- There was very little used oil, perhaps a barrel (200 litres) for the year, which was disposed according to MOE guidelines
- There were acoustic barriers to handle noise, which was ultra-low at IPP4 (background wind noise levels were high in the area); the only perceptible noise was at switching, when a whistle was used to indicate that action
- No hydrazine<sup>24</sup> was being used at the plant; instead, considerably more expensive (5-6 times) diethylhydroxylamine<sup>25</sup> was being used as a low-toxicity alternative
- Land values had increased in the area, especially with the construction of the ring road, with greatly increased economic activities serving growing populations
- The grievance redress mechanism allowed for phone calls, a box at the gate of the plant to receive any complaints; a log was maintained of all complaints
- Most of the inquiries placed in the grievance box were employment-related
- Given the political construct of Al Manakher Village, there were two committees with which the Client communicated in its outreach, feedback and corporate initiative activities

58. The Reports considers that there is not sufficient evidence to establish causality between IPP4 operations and alleged environmental impacts on the local community other than those on the directly-affected village of Al Manakher, mitigation of which is covered by the ESMMP.

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<sup>23</sup> Confirmed in the Independent Engineer's Q1 2016 Report.

<sup>24</sup> Hydrazine is used within both nuclear and conventional electrical power plant steam cycles as an oxygen scavenger to control concentrations of dissolved oxygen in an effort to reduce corrosion. However, as a preferred but more expensive alternative, DEHA exhibits less than 10% of hydrazine toxicity.

<sup>25</sup> "From an oxygen scavenging standpoint, 40% more DEHA is required than hydrazine (N<sub>2</sub>H<sub>4</sub>). The competitive advantages, which DEHA has over hydrazine, result from its volatility and low toxicity ... DEHA exhibits less than 10% of hydrazine toxicity." F. Kazinecz. *Diethylhydroxylamine (DEHA): A Volatile Oxygen Scavenger for Boiler System Treatment*. The Analyst. Winter 2001



*Photo 2 View of Plant - 1*



*Photo 3 Plant Waste Management*



Photo 4 Continuous Emissions Monitoring System



Photo 5 Plant Evaporation Pond



*Photo 6 Garden maintained with recycled wastewater*



*Photo 7 View of Plant – 2*



*Photo 8 HFO Loading Bays - currently unused*

## VI. Meeting with Complainant(s) and Site Visit

### A. The Meetings

59. The Mission met with members of the local community (other than Al Manakher), including several of the Complainants over two days,<sup>26</sup> and subsequently accompanied the Complainant to some areas that were reported to be affected by the Project.<sup>27</sup>

60. The meetings with the Complainant, members of EASEP, community leaders and public officials covered all aspects of the perceived adverse impacts of the Project. The meetings were attended by about 30 persons on the first day, and about 20 persons on the second day, with about four new attendees. Virtually all the attendees were from Kashafya Al Daboubi,<sup>28</sup> which had not been considered under the ESIA as being within the zone of influence of IPP4 and therefore not affected directly by the operations of the plant.<sup>29</sup>

61. The issues raised by individuals during the first day's discussions were:<sup>30</sup>

- Recapitulation of the Complaint by the Complainant, including the following:
  - o The local community should be involved in neutral third party monitoring of the environmental performance of the plant
  - o The community was suffering respiratory diseases caused by emissions from the plant
  - o There had been no initiatives by IPP4 for development support to local communities
  - o IPP4 needed to compensate people for loss of lands, livelihoods and reductions in land prices owing to the siting of the plant
  - o The power plant as polluter should pay for training of locals
  - o IPP4 did not want to recruit from local community, and had only seven employees from the area
- Instead of engaging security guards from the locality, IPP4 had engaged a national security firm
- IPP4 had declined or refused to accept applications from local residents, including those who had diplomas<sup>31</sup>
- If local residents were not qualified, IPP4 should provide 1-2 years training for employment at the plant

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<sup>26</sup> 8-9 February for meetings organized by EASEP.

<sup>27</sup> 11 February site visit with EASEP.

<sup>28</sup> Al Dabaibah in the Complaint.

<sup>29</sup> As mentioned the Complaint, the other villages were Kashafiya, Al Shawabkah, Al Baida, Al Madounah, Alalia, and Abu Alanda. Abu Alanda is a densely populated and highly commercialized area immediately to the east of Amman, within the Greater Amman Municipality, but is too far to be affected directly by IPP4.

<sup>30</sup> The opinions and allegations expressed at the discussions were purely those of the participants at the meeting.

<sup>31</sup> The level of education was not specified.

- Land for the plant had been acquired at low prices, and the services and training opportunities that had been promised had not materialized
- There were bad odors emitted by the plant that could be smelled as far as Kashafiya
- With emissions over the past three years, there were local residents who had developed asthma and cancer
- IPP4 should construct a small hospital to deal with the respiratory diseases caused by plant operations
- There were strong vibrations felt by the communities during early mornings
- Cars in Al Manakher had rusted owing to emissions from the plant
- People were unable to sleep in the open at night after the construction of IPP4 owing to unhealthy emissions
- Water was being polluted by plant operations, and claimed to be carcinogenic
- How were the hazardous wastes being disposed by the plant; local sheep could not eat the grasses adjoining the plant as those contained hazardous waste disposed by the plant without treatment?
- Land prices had dropped, and could no longer be used for agricultural purposes
- There were cracks in homes
- There was congestion on village roads
- What were the rights and obligations of communities under the agreements that the Client had signed with EBRD and the Government?
- Did the Client have in mind any projects for schools, playgrounds?
- There were no advertisements for jobs at IPP4
- The communities had realized that a power plant was being constructed only on completion of the plant
- There were no consultations during the ESIA
- The operations at Lafarge<sup>32</sup> were cited as an example of support for local communities, with local employment, six scholarships

62. During the first sessions, a set of questions was also distributed, summarized as:

- Why was the complaint not eligible for a problem-solving initiative?
- How can an ESIA report be disclosed prior to EBRD financing?

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<sup>32</sup> The location was not specified. Lafarge owns two cement plants in Jordan, one at Fuheis (reportedly, currently non-operational), the other at Rashadiyah.

- As the ESIA was based on IFC standards, and EBRD considered this within its environmental and social due diligence, which did EBRD not accept the complaint according to IFC Performance Standards?
- Why did EBRD classify the project as Category A, whereas the Client and Government classified as Category B?
- What are the SEP, ESMPP and monitoring measures requested of the Client to fulfil the EBRD PRs?
- What was the outcome of EBRD's Monitoring Report and Environmental Audit dated 15 September 2015?
- PCB materials are being used. ESIA 4.1.27 states that "in addition to oil storage, storage facilities will also be provided for the small quantities of chemicals (including sodium phosphate, hydrazine, ammonia/urea and others) used in boiler waster dosing. All such chemicals will be retained in suitable containment areas."
- What were the Client's documents which prove that they dispose hazardous waste according to IFC Performance Standards?
- How did EBRD decide that other villages surrounding IPP4 range from 3.14 to 10.7m?
- Why did EBRD treat residents of other villagers as "stakeholders" not affected by IPP4?
- With whom did EBRD hold meetings in other villages prior to IPP4 construction other than Al Manakher residents?

63. The second day essentially covered the same topics as the first session:

- The Client should appoint local community representatives from villages other than Al Manakher
- The likelihood of cancer had increased with proximity to the NEPCO transmission line from the plant
- Lands adjoining the plant were no longer productive, and company should buy landowners out at the highest prices (wheat productivity had dropped significantly, estimated at a fifth of earlier levels), or compensate for loss of land values
- Five sheep had died as the area around the plant had been poisoned by illegally-dumped plant wastes
- Water with high pH levels were being drained to adjoining lands
- High levels of ammonia within the plant exposed workers to health hazards
- Hazardous wastes were being transported by unauthorized tankers and were sold to companies that recycled the pollutants
- As IPP4 had created environmental refugees, housing should be provided by the company

- There should be independent supervision of plant operations other than a specific group appointed by the Governor of Sahab
- There had been no grievance mechanism available to the communities
- The current representative of the Al Manakher community in IPP4 stakeholder discussions did not represent the affected peoples
- There had been no health and safety reports publicly available to the communities
- The Royal Scientific Society was not a credible organization, neutral independent monitoring required
- It had been reported that airplane pilots claimed haze over IPP4 and Al Manakher owing to emissions from the plant
- The 230m<sup>3</sup> evaporation pond could not handle the pollutants discharged by the plant
- Passers-by the plant have seen hazardous waste
- 30% of key positions at IPP4 should be filled by locals
- There were a significant number of fuel trucks on the road
- East Amman was bearing the brunt of environmental pollution as all environmentally-unfriendly investments were being located in that area; those investments should be located at least 50km away from Amman

64. On the second day, a Member of the Jordanian Parliament joined the meeting, but did not address any specifics of plant operations, noting only that given the poverty and unemployment levels (with 70% of the local population under 30) in East Amman, there was a great need to provide development opportunities to the communities around the plant. Most of the surrounding areas were not arable, hence a strategic plan for encouraging enterprise investment was needed. Noting that he was not opposed to investment in the plant, and that he did not doubt the sincerity of the lender, the MP nonetheless expressed hope that continuing support would be given for community development activities in the area.

## **B. Observations on the Meetings**

65. In the view of the Expert, the meetings provided very useful interaction with the community represented, which was other than Al Manakher, the only village directly affected by plant operations. However, none of the issues raised were supported by sufficient evidence, and the participants did not appear to have recognized that while the plant may have caused certain environmental issues for Al Manakher, it was unlikely that those impacts could have been felt in the community that was represented at the meeting. Most of the participants presented individual problems that were largely employment-related.

66. Some health issues were raised for which it was difficult to understand causality. For example, the allegations of cancer, asthma, and tuberculosis were not borne out by any medical evidence, and skin rashes and water-borne ailments may have had less to do with plant operations than the impact of environmental degradation across East Amman itself; any of those illnesses could have been caused by both unregulated small-scale industries (microenterprises, leather, plastics, repair shops, etc.) and large-scale investments (landfills, abattoirs). Some of the

allegations did not appear to have adequate scientific foundation (e.g., sludge content and disposal).

67. Throughout the discussions, a key issue raised was the lack of employment opportunities offered by IPP4 to the villages around the plant. The focus on employment opportunities that the plant was expected to provide appeared not to recognize the point that a modern power plant relies more on automated equipment, and hence requires less human inputs. Even more to the point is that any employment opportunity at the plant would have to require qualifications relevant to the operations of a sophisticated installation, and which could not be acquired through short training courses, but would require substantive technical knowledge and extensive experience.

68. Amman has grown perceptibly in the past few years owing less to natural increase than high rural-urban migration and the influx of refugees<sup>33</sup> and guest workers, especially with the majority settling in the East Amman area. Unemployment has remained chronically high at 12-15%.<sup>34</sup> Given the economic situation of East Amman compared with the wealthier West Amman, unemployment levels are high, particularly among the youth, which then presents significant challenges in dealing with relative poverty. This was very evident in the comments by the participants on the need for opportunities in both employment and skills-building.<sup>35</sup>

69. While the benefits of local employment are evident in any major energy investment, the plant operation requirements are largely for technical services that must follow mandatory procurement procedures, that is, those must be bid out not only to ensure that mandatory procurement policies are followed, but also that the best-qualified firms are engaged (e.g., sludge and waste disposal). Even the provision of security services must involve the engagement of firms that have demonstrable knowledge of modern security systems, particularly for an installation that is of national importance given that it provides a significant proportion of Jordan's electricity needs.

70. The plant had been constructed on government lands that were handed over to NEPCO. Hence, no lands were acquired that would have required displacement. As to economic displacement, the lands adjoining the plant were poor rocky soils on which grazing would have been an option. That value would not have diminished owing to the location of the plant. As to Al Manakher land prices, there were no landowners from that area present who could have clarified whether prices had dropped. While the trends in land prices were not investigated for this Report,

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<sup>33</sup> See *Rapid Assessment of the Impact of Syrian Refugee Influx on the Environment in Jordan*. UNEP. 2015

<sup>34</sup> As a UN report notes, "The labour market suffers from severe structural unemployment due to a mismatch between a) skills of job seekers, b) demand in the labour market, and c) the perceived better working conditions in government offices ..." UNEP. *Towards a Green Economy for Jordan*. 2011. Page 2. An interesting study that highlights the preference for public sector employment by O. Elabed is *Graduates and Jobs in Jordan: The Gap Between Education and Employment*. Phenix Center for Economics and Informatics Studies. March 2016.

<sup>35</sup> A recent report reads, "Settlement patterns in Amman follow strict socio-economic lines, with wealthy neighbourhoods concentrated in the western areas of the city and poor neighbourhoods in the east. There are marked differences in building structures and infrastructure between east and west Amman ... Residents of west Amman constitute the country's elite, comprising Jordanians, many of Palestinian origin, and rich expatriates ... East Amman hosts low-income and informal settlements and Palestinian refugee camps. It has long been home to middle-class and poor Jordanians, the vast majority of Palestinian origin, as well as acting as a reception area for low-income foreign economic migrants, especially Egyptians and, more recently, for the poorest segments of the Iraqi refugee population ... dwellings in east Amman are permanent structures and enjoy relatively good access to basic services. Nonetheless, these are overcrowded areas, with narrow side alleys, poor infrastructure and dwellings often built with substandard materials." S. Pavanello and S. Haysom. *Sanctuary in the City? Urban displacement and vulnerability in Amman*. Humanitarian Policy Group Working Paper. Overseas Development Institute. March 2012.

given the fast growth of the village and enterprises in the surrounding area, including Sahab, it seems unlikely that there would have been a decrease in property prices.

71. With Al Manakher not being represented at the meetings, there were no stakeholders from the immediate proximity of the plant who could have provided more information on alleged adverse environmental impacts, and whose testimony might have been more substantive and verifiable, and in the context of direct impacts, more relevant. The participants were clearly concerned about the growing environmental pollution problems in East Amman, but ascribing the area's problems of poverty, lack of employment opportunities, health issues (both human and livestock), declining land values and productivity, and general pollution to solely the presence and operations of IPP4 appeared not to be justified by any clear evidence. The sentiments of the participants, who appeared to be all from the same village as the Complainant, were very strong, and certainly reflected frustration with the general economic situation of the area, but it appears that eliciting more substantive response to those concerns could have been better served with representations to relevant authorities and development agencies.

### **C. Site Visit**

72. The Mission was invited to join the Complainant on a visit to see alleged environmental impacts of the plant. The Mission visited Al Manakher Village, an (incomplete) road adjoining the highway immediately to the west of the plant, and then the entire stretch of Al-Jasoor Al-Ashra Street past the power plant up to the Al-Ghabawi landfill (latitude 31° 55' 56" north, longitude 36° 11' 12" east) at the end of the road in the Eastern Desert.

73. At Al Manakher, the Mission was told that there were no emissions visible from the stacks as the power plant was deliberately not operational. As confirmed by plant officials and the Mission itself, the plant was operating on the day of the visit with the Complainant. In any event, it was evident that there would be little in the way of visible emissions as the plant was operating on natural gas at that time. The Mission was also told of cracks at one of the homes that had been caused by operational vibrations during plant operations. While the mission was unable to visit any houses with visible cracks, we have subsequently learned that the Client has agreed to repair any cracks allegedly formed due to vibration through a process that would first see the Government of Jordan (GoJ) investigate and compile a report on which structures need repairing. The GoJ must issue its report first before any repairs can occur. The Mission was also shown the proximity of the school to the plant, which indeed abutted the plant perimeter, overlooking it from a hill at a height of some 50-60 feet.



*Photo 9 Stacks showing no perceptible “emissions” during the Mission visits*



*Photo 10 School wall adjoining the Plant*



*Photo 11 Plant Perimeter Wall - View 1*



*Photo 12 Plant Perimeter Wall - View 2*

74. The Mission was then taken to a section of a road to the west of the plant, across from the major road on the western side of the plant. The road, which ended after only a short distance,

showed a trail of white waste, which the Complainant claimed was sludge that had been dumped by the power plant the night before. However, based on further observation it was evident that the substance was certainly not oil-based sludge but could have been the result of vehicle clean-ups as the amounts on the road were quite extensive. Hence, it was difficult to establish any specific linkages to plant discharges, which in any event were understood to be taken by plant-contracted officially-licensed waste disposal firms in specialized vehicles to official dumpsites.

75. The Mission then accompanied the Complainant to the road adjoining the Al Ghabawi landfill. While not part of the Complaint, nor within the mandate of the Compliance Review, the Mission observed that solid wastes were spread all over the road all the way to the landfill, likely blown off improperly loaded garbage trucks. It was evident that the situation could only be improved with more effective environmental policy application and enforcement. This aspect was emphasized by the Complainant, who considered that East Amman was being commercialized without effective environmental management, and that industrial units needed to be fully compliant with environmental and social requirements to ensure East Amman's sustainability.



*Photo 13 Wastes on road adjoining IPP4*



*Photo 14 Wastes on road adjoining IPP4 - View 2*



*Photo 15 Close-up of alleged illegally-dumped IPP4 Waste*



*Photo 16 Garbage on road to Al Ghabawi - 1*



*Photo 17 Garbage on road to Al Ghabawi - 2*

## **VII. Meeting with Governor of Sahab and Government of Jordan Officials**

76. Meeting with Governor. On 11 February, the Mission met briefly with the Governor of Sahab.<sup>36</sup> The Governor, whose predecessor had had interactions with the Complainant, expressed close interest in the situation of the Complainants. The Mission briefed the Governor about the purpose of the visit, and the activities in which it had been involved during the visit.

77. The Governor welcomed the Project, and expressed appreciation for the community outreach initiatives that the Client had undertaken, and looked forward to continuing community support. He pointed out that the East Amman area was economically underdeveloped, with high levels of unemployment, particularly among the youth. It was important for those youth to become educated and trained in vocational skills that could be used to develop the area. He urged the Client to support activities that would lead to economic opportunities for those youth.

78. In response to the Governor's query, the Mission clarified that it had met only with community members who had attended the EASEP-organized meeting. The Mission mentioned that in its discussions with IPP4 officials, it had been familiarized with plant facilities. It had also accompanied the Complainant in a visit to areas surrounding the plant, as well as going out as far as the landfill and planned abattoir facilities toward the east of the plant.

79. Meeting with Ministry of Environment. The Mission met with officials of the Ministry of Environment (MOE). MOE officials had explained oversight and monitoring activities associated with IPP4. In particular, they had drawn attention to the unique real-time air quality monitoring arrangements that would track emissions at IPP4, noting that that continuous emission monitoring system would be initiated in a few days.<sup>37</sup> The officials also mentioned that air quality testing had been carried out at Al Manakher on several occasions following the commissioning of the plant, and that the only events of exceedances had been recorded was during construction activities. While the Ministry had been willing to respond to any complaints, the officials noted that there had been no formal complaints to the Ministry by the villagers of Al Manakher, which was the community in immediate proximity of IPP4 and considered to be the only village in the plant's area of influence.

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<sup>36</sup> H.E. Dr. Mohammad Al Harahsheh.

<sup>37</sup> The Independent Engineer's Q1 2016 Report confirms that the system is now operational. Page 7.

## VIII. Compliance with EBRD Performance Requirements

80. The Complaint does not refer to EBRD's PRs, but to the IFC's Performance Standards, which are not applicable to EBRD financing requirements. However, as the EA notes, *"IFC Performance Standards are ... not 'Relevant Policies' for the purposes of the PCM RPs. At the same time, IFC Performance Standards are applicable to the Project by virtue of the fact that it is co-financed by OPIC ..."*<sup>38</sup>

81. The ESIA<sup>39</sup> for the Project involved environmental due diligence by Parsons Brinckerhoff in association with the Jordanian Royal Scientific Society (RSS). Parsons Brinckerhoff is one of the leading engineering services firms in the world, acquired in 2015 by WSP, another major engineering firm. WSP Parsons Brinckerhoff has a 130-year history, employs some 34,000 staff in 500 offices across 40 countries. With that global presence, the firm has exceptional technical capabilities in dealing with complex energy and infrastructure projects.

82. AES is a Fortune 200 global power corporation with over 21,000 employees and \$37 billion in assets; it formally adopted a Human Rights Policy in 2016,<sup>40</sup> a Code of Conduct in 2007, an Environmental Policy 2012, and Global Stakeholder Engagement Guidelines. AES is obliged to follow not only EBRD ESP PRs, but also conform to OPIC Environmental and Social Policy Statement 2010. IPP4 is certified by SGS for ISO14001 and OHSAS18001.

83. RSS is a state-owned applied research institution established in 1970, with 27 laboratories, 19 of which are internationally accredited, including by the United Kingdom Accreditation Service (UKAS)<sup>41</sup> to meet its current ISO 17025<sup>42</sup> certification. The institution has a well-known regional presence as a testing laboratory and has worked closely with a number of major development agencies, including USAID, JICA, UNDP, GTZ, and WHO. The Complainant's reference to the need for a *"neutral, credible, specialized and accredited third party (not the Jordanian authorities nor RSS) such as national or international mediation bodies, independent mediators and facilitators and independent accountability mechanisms"* suggests that it is less the technical capabilities of the testing agencies than dissatisfaction on a political plane, especially as the Complaint refers to mediators rather than alternative laboratories or procedures.

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<sup>38</sup> Eligibility Assessment Report. Para. 77, pp. 18-19.

<sup>39</sup> Disclosed by OPIC in May 2012. OPIC Website: *"OPIC staff undertook an environmental and social due diligence site visit from June 26 to 28, 2012. Meetings were held with the Jordanian Ministries of Environment, Health and Water and with residents of the nearby village of Al-Manakher. Public consultation meetings were held in Al-Manakher Village in August of 2010 to identify the concerns of the residents regarding the Project. It was attended by about 75 people, including the Deputy Parliamentarian of the area, and the Chairman of Al-Manakher Village. Additionally, house to house meetings with people of the village were undertaken to explain the Project and its expected impacts and benefits and to independently solicit input from the female members of the community."*

<sup>40</sup> The Policy formalizes the long-term practices followed by the corporation: *"We support our businesses' efforts to create deep, meaningful relationships with the surrounding communities, and to engage with stakeholders in those communities to ensure that they are listening to and considering their views as they conduct their business."* AES Human Rights Policy. 2016.

<sup>41</sup> "UKAS is the sole national accreditation body for the UK, and is recognized by the UK government, to assess against internationally agreed standards, organizations that provide certification, testing, inspection and calibration services." From UKAS website, <https://www.ukas.com>.

<sup>42</sup> ISO/IEC 17025:2005 specifies the general requirements for the competence to carry out tests and/or calibrations, including sampling. It covers testing and calibration performed using standard methods, non-standard methods, and laboratory-developed methods. It is the single most important standard for calibration and testing laboratories around the world. Laboratories that are accredited to this international standard have demonstrated that they are technically competent and able to produce precise and accurate test and/or calibration data. See [www.iso.org/iso/home/standards](http://www.iso.org/iso/home/standards).

84. The involvement of the Government in the Project is in its ownership of the power utility, NEPCO, which purchases the output of the plant, and ownership of the land on which IPP4 is situated. NEPCO also provides fuels and natural gas to the plant for its operations. Other indirect relationships are in licensing various plant-associated services, such as waste removal. As a lender, EBRD's legal relationship is solely to the borrower, AES Levant Holding BV Jordan PSC, a special purpose vehicle incorporated in Jordan for the purpose of building, owning and operating the Project.<sup>43</sup>

85. A fundamental constraint in reviewing the issues surrounding compliance by EBRD to its ESP is the position of the Complainants in lack of belief in the statements and documentation of the Client, the coverage and effectiveness of the Client's outreach activities, the competencies of the national laboratories, and the technical conclusions on environmental parameters, together with mistrust of the Government (primarily the Sahab administration) and its alleged involvement in IPP4 administration. Aside from that clear distrust, subsequent to the Complaint, there was an incident in which the Complainant asserts that he was taken to the police station and was held overnight, an action that he alleges was triggered by having publicly criticized IPP4 for what he claims is its environmental pollution and lack of concern for stakeholders, among which he includes his community in the village of Al Daboubi that, together with other villages (including the peri-urban Abu Alanda) is at some distance from the directly-affected village, Al Manakher.

86. While the Complainant's concern for the environmental problems of East Amman is understandable, his position on IPP4 environmental and social impacts includes largely anecdotal information, expectations of the Client for area community development that is beyond customary corporate social responsibility, and opposition to what he believes is interference and undue influence by the Government in the workings of IPP4. The Complaint singles out the Governor of Sahab for influencing stakeholder consultations, dispute resolution, and appointment of staff at IPP4.

87. The allegations of the Complainants are wide-ranging and reflect strong dissatisfaction with the Client's coverage of perceived project impacts and complete rejection of environmental monitoring results by the Client and RSS. However, their comments must be placed within the context of EBRD's compliance with the 2008 ESP and the fulfilment of obligations by the Client consistent with the ESP PRs.

88. The requirement by EBRD for making the Client responsible for compliance with the ESP reflects the nature of accountability inherent in any investment operation. That the Client has assumed responsibility for having accepted certain commitments implies that it will use its resources to respond with actions and mechanisms to ensure accountability through technical monitoring and supervision, together with outreach to affected communities. The Client must also maintain and strengthen its ability to continuously monitor all environmental parameters, including audits that provide an independent review of the Client's compliance with its commitments. Crucial to monitoring is that it must be carried out by qualified technical specialists who are selected on the basis of their experience and competencies in specialized scientific analyses. Although the ESP does mention the possible involvement of local communities in monitoring activities, highly technical environmental parameters would require substantive knowledge of plant operations.

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<sup>43</sup> From EBRD. *Project Summary Document*. 24 August 2012. The client is ultimately owned 60% by AES Corporation (AES) and 40% by Mitsui and Co. Ltd. AES is a global power company headquartered in the US with operations in 27 countries, and Mitsui is a Japanese public company that is one of the world's largest conglomerates.

89. Good international practice imposes the responsibility of monitoring environmental parameters on a client to establish not only competencies in a particular project, but also set acceptable standards across its organization and other projects that it may undertake, and thereby build – just as with any institution – technical capabilities that have credibility with financiers, regulators, and other institutions that may be monitoring environmental impacts. Credibility, then, requires the selection of qualified and experienced staff by a client, testing at laboratories that have internationally-recognized certification, and conduct of independent audits by firms that have internationally-recognized credentials. Credibility, too, has to be assumed in technical oversight by government agencies, at which the capabilities of government-appointed staff assigned for technical oversight must meet accepted academic and professional standards and competencies. Testing laboratories must meet commonly-accepted international standards to be able to command the levels of credibility expected in an internationally-financed project.

90. Turning to EBRD, the PRs to which the Complaint appears to relate are largely those that have to do with compliance with acceptable environmental standards, stakeholder engagement, grievance mechanisms, and environmental and social monitoring. As the technical issues raised in the Complaint have been responded to on several occasions in considerable detail by both the Client and also by EBRD Management, this Report will not repeat the clarifications sought by the Client or responses to the allegations, but refer the reader to the documents that are accessible in the PCM register at <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html>.

91. Select relevant references in the ESP and conformance by EBRD and the Client to the ESP and PRs are:

- ESP statement:
  - o EBRD expects clients to assess and manage the environmental and social issues associated with their projects to be able to meet the PR (para. 3) [Complied in conduct of ESIA and ESMMP implementation]
  - o EBRD is committed to principles of stakeholder engagement (para. 7) [Complied in preparation of the SEP and outreach to communities]
  - o EBRD expects clients to identify and interact with their stakeholders on an ongoing basis, and engage with potentially affected communities through disclosure of information [environmental and social issues], consultation and informed participation in a manner deemed by the Bank to be commensurate to the impacts associated with the project (para. 7) [Complied as part of due diligence and preparation of SEP, and implementation of ESMMP, with AI Manakher being the directly affected community]
  - o The Client is responsible for ensuring that required due diligence studies, information disclosure and stakeholder engagement are carried out in accordance with PRs 1-10, and submitted to EBRD for review as part of its own appraisal [Complied in preparation of ESIA and associated studies]
  - o EBRD will provide clients guidance on how the project can meet the PRs (para. 14) [Complied in Client-EBRD exchanges and the preparation of mandated documentation, such as the ESIA]

- o PR10 sets out requirements for clients to identify stakeholders potentially affected by their projects, disclose sufficient information about issues and impacts arising from the projects and consult with stakeholders in a meaningful and culturally appropriate manner (para. 25) [EBRD has ensured compliance by Client through stakeholder consultations carried out as part of due diligence]
- o Monitoring is carried out by both the client and EBRD, and the extent of monitoring will be commensurate with the project's issues (para. 34) [Complied with continued close monitoring by both Client and EBRD]
- o EBRD will monitor projects on an ongoing basis, which will include monitoring missions by staff or consultants, and periodic third party monitoring that may involve independent specialists or representatives of the local communities [Complied, and ongoing through EBRD missions and Independent Engineer reports]
- PR1
  - o EBRD requires clients to develop a systematic approach (which includes adoption by clients of ISO 14001), tailored to the nature of their activities or projects, to managing environmental and social risks and opportunities that enable the client to comply with the ESP (para. 2) [Complied; Client has ISO14001 and OHSAS18001 certifications<sup>44</sup>]
  - o The client will consider in an integrated manner the potential environmental and social issues and impacts associated with the proposed project (para. 5) [Complied as part of due diligence]
  - o Environmental and social impacts and issues will be appraised in the context of the project's area of influence, which may include areas and communities potentially impacted by planned and unplanned (but predictable) project development, but which does not include impacts that would occur without the project or independently of the project (para. 6) [Complied, with area of influence established by the ESIA to include only Al Manakher Village and its immediate environs]
  - o Due diligence studies will be prepared by qualified and experienced persons (para. 8) [Complied, with all relevant studies carried out by internationally-recognized firms and certified research laboratories]
  - o The client will ensure that employees with direct responsibility for activities relevant to the project's or the company's social and environmental performance are adequately qualified and trained so that they have the knowledge and skills necessary to perform their work (para. 18) [Complied, with locally, nationally or internationally-recruited technical personnel, competitively-selected and qualified to work with the sophisticated systems and equipment installed at IPP4]
  - o The client will establish and monitor procedures to monitor and measure compliance with environmental and social agreements and EBRD requirements (para. 20) [Complied in implementation of ESMMP and regular reports to EBRD]

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<sup>44</sup> The Independent Engineer's Q1 2016 Report states, "AES Levant Jordan has successfully cleared ISO 14001 & OHSAS 18001 surveillance audit by SGS with zero minor or major findings." Page 4.

- o Monitoring by the client will include feedback from stakeholders, such as community members (para. 20) [Complied in ongoing outreach and communication with residents of Al Manakher Village]
- PR2
  - o The client will ensure that there is no discrimination in employment decisions (paras. 7, 10) [Complied in human resources practices at IPP4 with positions properly advertised and competitively filled on the basis of experience and qualifications]
  - o The client may take initiatives to promote local employment opportunities or select an individual for a position based on the inherent requirements of the job involved, in accordance with national law, that shall not be deemed discriminatory (para. 10) [Complied in offering employment opportunities to qualified individuals through appropriate recruitment procedures, including consideration of local candidates who may qualify]
- PR3<sup>45</sup>
  - o EBRD will agree with the client how relevant requirements of the PR will be addressed and managed as part of its environmental and social management system (para. 4) [Complied in establishment and implementation of the ESMMP at IPP4]
  - o The client will avoid, minimize and control the release of pollutants, generation of hazardous wastes, establish emergency preparedness measures, ensure all effluents and emissions are inventoried and monitored on an ongoing basis (para. 10-16) [Complied in implementation of ESMMP, including proper waste management practices, with disposal by licensed firms, continuous monitoring of emissions, conduct of test emergency procedures, etc.]
- PR4
  - o The client will identify and evaluate the risks and potential impacts to the health and safety of the affected community during the operation of the project (para. 7) [Complied in ongoing monitoring by the Client and authorities of environmental impacts of IPP4]
  - o The client will disclose relevant project-related information to enable the affected communities to understand potential adverse impacts of the project (para. 8) [Complied in outreach and communications with Al Manakher Village]
  - o The client will prevent or minimize the potential for community exposure to hazardous materials that may be released by the project (para. 12) [Complied in implementation of ESMMP]

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<sup>45</sup> This section draws attention to some highlights of the PR. The applicability of EU and World Bank/IFC pollution abatement measures and environmental standards for the parameters identified in the Complaint have been responded to in detail by EBRD, the Client and EBRD Management.

- o The client will avoid or minimize adverse impacts due to project activities on air, soil, water, vegetation and fauna and other natural resources in use by the affected communities (para. 16) [Complied in implementation of ESMMP]
- PR 5 is not applicable in terms of resettlement activities as there was no physical or economic displacement caused by the project; however, the issue of a grievance mechanism is treated in the context of PR10
- PR7 is not applicable to the Project as there are no indigenous populations involved, and hence FPIC is not relevant<sup>46</sup>
- PR10
  - o Stakeholder engagement will be free of manipulation, interference, coercion, and intimidation (para. 6) [Complied, with stakeholder engagement by the Client conducted freely and with no political pressure]
  - o EBRD will assess the level of information disclosure and consultation against the PR (para. 7) [Complied in agreement with stakeholder engagement processes]
  - o The client will identify those individuals who are affected or likely to be affected (directly or indirectly) by the project, including those who may be differentially or disproportionately affected because of their disadvantaged or vulnerable status (paras. 8,9) [Complied, with Al Manakher and its immediate environs being the affected community]
  - o A Stakeholder Engagement Plan should be prepared for the identified stakeholders (para. 11) [Complied, and applied]
  - o The client will disclose risk, impacts and communication processes to affected communities in an accessible and culturally appropriate manner (para. 12) [Complied in stakeholder engagement activities involving Al Manakher Village]
  - o The stakeholder consultation process must be meaningful and inclusive (paras. 15-16) [Complied by Client and EBRD, including gender-sensitive outreach]
  - o Throughout the life of the project, the client will provide ongoing information to identified stakeholders and use appropriate community engagement practices to disclose information and receive feedback on the effectiveness of mitigation measures (para. 21) [EBRD ensuring compliance by Client through ongoing monitoring]
  - o The client will establish a grievance mechanism process or procedure to receive and facilitate resolution of stakeholders' concerns and grievances about the client's environmental and social performance; the process should address concerns promptly and effectively (paras. 24, 25) [Complied with in the establishment of

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<sup>46</sup> Palestinians 3 million (50%), Bedouins of Jordanian origin (est. 33%), Iraqi refugees 450,000-1 million (7.5-17%), Christians 360,000 (6%), Chechens and Circassians 60,000 (1%), Armenians 60,000 (1%), Druze 12,000-14,000 (0.2%), Baha'i 1,000 (.02%), Kurds, Shia Muslims, Assyrians, (no figures available). From Minority Rights Group, International. *World Directory of Minorities and Indigenous Peoples - Jordan*, 2007. Given those figures, it is reasonable to assume that in not being disadvantaged minorities that are citizens of the country, the Complainants are not indigenous in the context customarily understood in international understanding of the term, "indigenous peoples."

channels of communications, access to Client through web, mail, telephone, and regular meetings]

92. The responses to the Complaint by both the Client and EBRD Management provide extensive details on technical parameters. This Report agrees with the responses as those are based on testing according to established scientific practices and consistent with internationally-accepted standards. That the Complainant believes that those tests are not accurate because of a lack of “neutrality” and “independence” when internationally-accepted practices<sup>47</sup> have been applied does not provide grounds enough to suggest that the tests were biased or deliberately changed in any way, or even that those test were not properly carried out according to international and Jordanian standards.<sup>48</sup> There is no factual evidence to suggest that the tests were not properly carried out, especially as both the Client and RSS have established internationally-accepted certifications with regard to testing equipment and procedures.

93. That the Client carried out proper due diligence in accordance with the conditions set out in the PRs is reflected in the ESIA and associated documentation, including the Stakeholder Engagement Plan. The latter is particularly important as it demonstrates both the intent to engage constructively with affected persons and the conduct of a structured process of engagement. The Complainant’s view that information dissemination should include “newspapers, posters, radio, television, information centers and exhibitions or other visual displays, brochures, leaflets, summary documents ...” appears not to be commensurate with the impacts on the well-defined boundaries of the affected village.

94. A principal aspect to keep in mind in addressing the concerns of the Complaint is the determination of the project area of influence, that is, the area that would be directly or indirectly affected by IPP4.<sup>49</sup> Neither the ESIA for IPP4 nor that for IPP1 clearly defines an area of influence for environmental impacts. The latter, which was commissioned in 2009, was built on unused

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<sup>47</sup> For the purposes of this Report, “internationally-accepted practices” refer to practices and procedures commonly adopted across the world in power generation project implementation and monitoring, particularly in using accredited laboratories and certified procedures for testing environmental parameters.

<sup>48</sup> The Complaint points out the need for a “neutral, credible, specialized and accredited third party (not the Jordanian authorities nor RSS) such as national or international mediation bodies, independent mediators and facilitators and independent accountability mechanisms”

<sup>49</sup> PR1 states that, “The area of influence may include ... (i) assets and facilities directly owned and managed by the client that relate to the project activities to be financed (such as production plant, power transmission corridors, pipelines, canals, ports, access roads and construction camps) ... (ii) Supporting/enabling activities, assets and facilities owned or under the control of parties contracted for the operation of the client’s business ... (iii) associated facilities or businesses that are not funded by EBRD as part of the project ... whose viability and existence depend exclusively on the project ... (v) areas and communities potentially impacted by cumulative impacts from further planned development of the project ... (vi) areas and communities potentially affected by impacts from unplanned but predictable development caused by the project that may occur later or at a different location ...” (Para. 6). IFC defines Affected Communities as “local communities directly affected by the project” (IFC PS1, para. 1, with later explanation of the area of influence similar to EBRD’s ESP; PS1, Guidance Note, paras. 6 and 14 state the same, with additional detail on methodology). The World Bank’s OP 4.01 (Annex A, para. 6) defines the area of influence as, “The area likely to be affected by the project, including all its ancillary aspects, such as power transmission corridors, pipelines, canals, tunnels, relocation and access roads, borrow and disposal areas, and construction camps, as well as unplanned developments induced by the project (e.g., spontaneous settlement, logging, or shifting agriculture along access roads). The area of influence may include, for example, (a) the watershed within which the project is located; (b) any affected estuary and coastal zone; (c) off-site areas required for resettlement or compensatory tracts; (d) the airshed (e.g., where airborne pollution such as smoke or dust may enter or leave the area of influence; (e) migratory routes of humans, wildlife, or fish, particularly where they relate to public health, economic activities, or environmental conservation; and (f) areas used for livelihood activities (hunting, fishing, grazing, gathering, agriculture, etc.) or religious or ceremonial purposes of a customary nature.”

land in a largely uninhabited area, with Al Manakher village and a few “scattered houses.”<sup>50</sup> Hence, the emphasis was on the effects of construction and operation on Al Manakher. Given that IPP4 was constructed adjacent to IPP1, with other villages in the area at some distance west from the plant (over 3km), it also followed the logic of focusing on primary impacts that plant construction and operation might have on Al Manakher. The area of influence does not include the densely populated and highly-commercialized peri-urban area of Abu Alanda, which is over 10 km away toward the west.

95. This Report also considered a social area of influence, which would take in a wider geographic space. The socioeconomic analyses and stakeholder mapping that were carried out as part of the ESIA did not cover areas other than Al Manakher as the noise, air, and other impact parameters would only affect that village. There would have been no significant social, economic, political, and environmental changes induced by IPP4 other than in the immediate environs of Al Manakher. On the other hand, the construction of the plant did offer employment opportunities to local communities; during operations, that number was obviously far less, and restricted to individuals with specialized skills.

96. Following the logic of defining the area of influence, the stakeholders must then principally originate from the village directly affected by IPP4 operations – Al Manakher. Which is not to say that representations cannot be made by persons and communities other than residents of Al Manakher. It is just that those representations must relate to impacts that have been demonstrated to affect those communities and could conceivably have been unpredictable outcomes of plant operations. This Report is not convinced that there is justifiable cause for the inclusion of communities other than Al Manakher as those do not appear to be substantially affected by plant operations. Contrariwise, this Report observes that the location of the plant may even have induced some economic development in the immediate area, although the natural outward growth of East Amman obviously influences any such development.

97. As the Management and Client Responses are exhaustive on technical details, and have been summarized earlier in this Report, this section will not repeat those details, but simply observe that all the parameters (air, noise, water, waste discharges, hazardous wastes handling, etc.) have been well within national and internationally-recognized limits, with occasional exceedances having been recorded for noise and emissions only during plant startups and that, too, when the plant was using HFO and DFO.<sup>51</sup> The Client’s Responses are accessible in the PCM register at <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism/pcm-register.html> for reference.

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<sup>50</sup> *Amman East IPP Project. Environmental and Social Impact Assessment: Executive Summary.* AES Oasis Limited and Mitsui & Co. December 2006. Sections 4.2, 5.5. Section 5.7 reads, “The site lies in a sparsely populated area to the east of Amman close to the village of Al Manakher. There is little to no industry in the immediate vicinity of the site with the nearest residential properties located about 1km to the north and south.”

<sup>51</sup> As part of loan processing, a derogation was approved to reflect EU Industrial Emission Directive Emission Value Levels for NOx emissions by new plants constructed from 2012 onward.

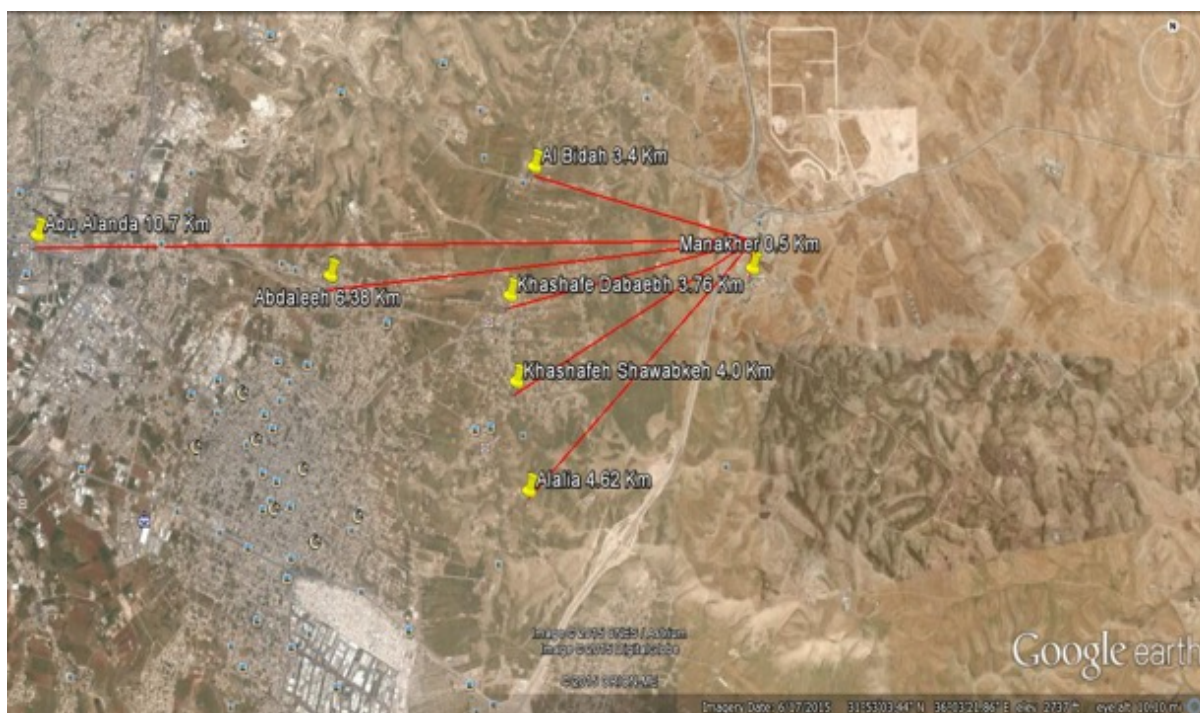


Photo 18 Villages around IPP4 with distances



Photo 19 View of Al Manakher during IPP4 Construction. EBRD Photo.

## IX. Public Consultations and Grievance Mechanism

98. The Client, in accordance with the PR 10 (and substantively with PR5, although that PR is not applicable to the Project), established a grievance mechanism that involved channels of communication with identified IPP4 officials through telephone, web access and a grievance/complaints box situated at the main gate of the plant, and the formation of committees to represent the affected community at Al Manakher Village. The box is checked every few days, and complaints are logged and responded to as soon as possible.



*Photo 20 Complaints Box at IPP4 Main Gate*

99. A major complaint by the Complainant is that IPP4 Management does not respond to inquiries placed by the communities that he represents (aside from Al Manakher, which has not formally requested representation by the Complainant in the Complaint submitted to the PCM). The principal aspect to consider here is the nature of the inquiries, and whether those were relevant to plant operations, environmental and social impacts or other concerns of affected communities?

100. Despite the Complainant's claim of non-responsiveness by the Client, there is substantive evidence to show that the Client did indeed respond to all his inquiries with verbal and written communications, as well as meetings, both at the plant and within the local area, attended by the Complainant. That those meetings did not result in understandings with the Complainant is unfortunate, but does not indicate that the Client has been unresponsive. Indeed, following the Mission by the Expert and PCM officer, a meeting was held between the Complainant (accompanied by several members of his village) at the plant on 28 February 2016. The meeting was reported by the Client to be cordial, with emphasis by the villagers on creating more development opportunities in the area and providing more benefits to that village.



Photo 21 Complaints Box at IPP4 Main Gate - close-up

101. Some aspects to keep in mind in understanding IPP4's role in the community are the following:

- The affected community according to the ESIA is Al Manakher village
- The ESIA was disclosed by the Client on 6 June 2012, reviewed by Jordanian authorities and an independent engineer
- The protestations have come primarily from Kashafiya Daboubi, a village nearly 4km away from the plant and according to environmental parameters, unaffected by plant operations
- Two committees (reflecting the composition of the residents) have been set up at Al Manakher to liaise with the Client on all issues of concern to the villagers regarding the operations of the plant
- The Client reports that it has never filed a complaint with the Government regarding the Complainant's activities, nor have there ever been instances in which the Complainant has been threatened or intimidated by the Client
- The Complainant has not provided substantive proof, written or verbal, of the alleged involvement of the Governor of Sahab influencing recruitment at the plant or the composition of the committees and liaison-representatives to IPP4
- The Complainant appears to have consistently rejected all testing and monitoring results by the Client, claiming that the laboratories and independent audits were not neutral and provided biased outcomes

- Stakeholder meetings were held with the villagers of Al Manakher as part of scoping and public disclosure exercises
- The Client has continued to engage with residents of Al Manakher on issues of concern to them
- The Client has undertaken several corporate social initiatives in Al Manakher, from medical support to continuing support for the mosque and local school in supplies and infrastructure:
  - o Installed solar photo voltaic panels for 110 houses
  - o Installed solar water heaters for 85 households
  - o Expanded Al Manakher School with a new classroom and playground
  - o Provided internet facility and computers for Al Manakher School
  - o Renovated Al Manakher Mosque
- The Client has conducted a medical camp at Al Daboubi village for some 615 community members, and donated 10 wheelchairs
- 95% of IPP4 staff are Jordanian, including the Operations and Maintenance Director, the Environmental Health and Safety Manager, and the Human Resources Manager
- Two engineers employed by the Client are from Al Daboubi village
- Unskilled laborers are sourced locally

## **X. Conclusion**

102. This Compliance Review Report is based on review of relevant documentation, discussions with EBRD officials, discussions with Complainant(s), meetings with members of the communities surrounding the plant (excepting the directly-affected village, Al Manakher, which was not represented in the Complaint), discussions with the Client, meetings with national and local government authorities, and a site visit by the PCM Expert and the PCM Officer.

103. In accordance with PCM Rules of Procedure (RPs) 35-44, and in accordance with the Terms of Reference set out in the Eligibility Assessment, this Report is expected to determine whether EBRD complied with the ESP in ensuring that the Client met its commitments under the PRs.

104. In preparing the Report, the Expert has tried to understand the issues raised in the Complaint, not simply from compliance with the ESP and PRs, which is its formal remit, but given that IPP4 also needs to operate within a local community setting, to what extent it responded to area-wide concerns that may have contributed to the Complaint.

105. Given those parameters, this Report considers there are not sufficient grounds to conclude that the Client created adverse impacts beyond the project area of influence attributable to the operations of IPP4. This Report considers that the Bank ensured that the Client had not applied discriminatory employment practices against local community members, but had followed appropriate procedures in ensuring that technically qualified individuals were competitively selected to work at the plant. The Client also demonstrates a high degree of corporate social responsibility in outreach to not only the directly-affected village of Al Manakher, but also the greater area that includes the villages represented by the Complainants. In the opinion of this Report, it is evident that in keeping with the spirit of the ESP, the Client has demonstrated a continued and substantive willingness to work with the Complainants on issues of relevant concern, and also initiated several development activities that have been welcomed by the communities.

106. The Complainant has been unwilling to accept the reliability of any tests carried out by the Client or national laboratories, although those have been carried out in accordance with internationally-accepted practices and procedures by well-recognized and accredited institutions. The Complainant has also alleged political interference in Client employment practices, which does not appear to be borne out by either the selection process or the current composition of technical staff at the plant.

107. From the perspective of the ESP and its PRs, which is the remit of this Report, the Expert notes that the Client has not been subject to any workplace-related human rights complaints at the IPP4 facility up to and including the period under investigation.

108. In the opinion of the Expert, the unwillingness of the Complainant to accept any test results; unverified instances of alleged health impacts (some of which appear to be causally unlinked, such as tuberculosis); the inability of the communities to participate in testing owing to both lack of technical capabilities and security concerns at the plant; the lack of local community members suitably qualified and experienced to operate sophisticated equipment at the plant; the general growth of the local communities and increased economic opportunities (this has to be balanced against the large unemployed youth population) – all those aspects appear to indicate that the allegations set out in the Complaint are not substantive. As to singling out

government authorities and elected officials, in particular the Governor of Sahab, the allegations are unproven and beyond the scope of this Report.

109. This Report considers that while the Complainants may be justifiably concerned about the general environmental and social conditions in East Amman, those conditions are extraneous to the operations of IPP4, and the Report considers that there is insufficient evidence to establish causality between IPP4 operations and alleged environmental impacts on the local community other than those on the directly-affected village of Al Manakher, mitigation of which is covered by the ESMMP.

110. Overall, this Compliance Review concludes that the EBRD, consistent with the ESP, has fulfilled its responsibilities in meeting those commitments, and ensuring that the Client met its commitments, particularly in the testing of environmental parameters and stakeholder engagement with affected communities in the project area of influence, in a timely and appropriate manner.

## **XI. Management Recommendations**

111. Given that this Compliance Review Report concludes that EBRD has complied with its obligations under the ESP and PRs, there are no substantive Management recommendations to be made.

## References

A.H. Nidal and Z.S. Tarawneh. "Environmental Issues in Jordan: Solutions and Recommendations." *American Journal of Environmental Sciences*. 3 (1): 30-36, 2007.

AES/AES Levant

- *Amman East –PP1 Plant Start Up Noise Survey and Assessment*. October 2013.
- *Amman East IPP Project. Environmental Statement*. November 2006.
- *Amman East Noise Monitoring Plan Data Acquisition Requirements*. July 2013.
- *Construction Period Emergency Response Plan*. January 2013.
- *Construction Period Occupational and Safety Plan*. January 2013.
- *Environmental Statement*. August 2012.
- *Health Safety and Environmental Plan*. January 2013.
- *Human Rights Policy*. 2016.
- *IPP4 Air Quality Monitoring Plan*. April 2013.
- *IPP4 Al Manakher Power Plant: Environmental and Social Management and Mitigation Plan (ESMMP)*. January 2013.
- *IPP4 Al Manakher Power Project Executive Summary*.
- *Noise Mitigation Study for Amman East IPP1 and IPP4 Power Plants*. December 2013.
- *Operating Plan*. 2015.
- *Quarterly Operating Reports*. 2015(Q1-4), 2016 (Q1).
- *Response to PCM Complaint*. 22 September 2015.
- *Stakeholder Engagement Plan*. November 2012.

AES Oasis Limited and Mitsui & Co. *Amman East IPP Project Environmental And Social Impact Assessment Executive Summary*. December 2006.

Boij, J. *Striving for a Cleaner Global Environment. New Guidelines from IFC/WB For Thermal Power Plants*. Wartsila Technical Journal 1 2009.

Communication from Governor of Sahab to Mayor of Greater Amman. *Expansion of Power Generation Power Plant*. Governate of Sahab Directorate. 21 February 2013.

EBRD. *Environmental and Social Policy*. May 2008.

EBRD. *Management Response to PCM Complaint*. 1 October 2015.

Ecoconsult. *Greater Amman Municipality (GAM) Solid Waste Environmental and Social Due-Diligence: Non-Technical Summary*. February 2015.

Elabed, O. *Graduate Jobs in Jordan: The Gap Between Education and Employment*. Phenix Center. March 2016.

Elsagheer, M. *Energy Situation in Jordan*. Ministry of Planning and International Cooperation. July 2013.

GTZ SWEEP-net. *Country Report on Solid Waste Management in Jordan*. 2014.

Henderson, S. *Jordan's Energy Supply Options: The Prospect of Gas Imports from Israel*. German Marshall Fund of the United States. Foreign and Security Policy Paper Series. October 2015.

Higgitt, D.L. *Urbanization and Environmental Degradation in Jordan*. HUMAN SETTLEMENT DEVELOPMENT. Vol. I.

International Council on Large Electrical Systems (Cigré). *Jordan Electricity Sector*. October 2105.

International Finance Corporation (IFC). *Performance Standards on Social and Environmental Sustainability*. April 2006. See also *Guidance Notes*.

International Labour Organisation (ILO)

- *Convention concerning the Application of the Principles of the Right to Organise and to Bargain Collectively*. 1949
- *Convention concerning Discrimination in Respect of Employment and Occupation*. 1958
- *Convention concerning Equal Remuneration for Men and Women Workers for Work of Equal Value*. 1951
- *Convention concerning Forced or Compulsory Labour*. 1930
- *Convention concerning Freedom of Association and Protection of the Right to Organise*. 1948
- *Convention concerning Minimum Age for Admission to Employment*. 1973
- *Convention concerning the Abolition of Forced Labour*. 1957
- *Convention concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labour*. 1999.

Kasinecz, F. Diethylhydroxylamine (DEHA): A Volatile Oxygen Scavenger for Boiler System Treatment. *The Analyst: The Voice of the Water Treatment Industry*. Winter 2001.

Makramreh, Z. and N. Almanasyeha. "Analyzing the State and Pattern of Urban Growth and City Planning in Amman Using Satellite Images and GIS." *European Journal of Social Sciences*. Volume 24. Number 2. September 2011

Minority Rights Group International. *World Directory of Minorities and Indigenous Peoples – Jordan*. 2007.

Morgan, G. *Defining a Project's Area of Influence*. World Bank. April 2013.

Overseas Private Investment Corporation (OPIC). *Amman East IPP4 Project: Lender's Engineer Report – Final*. December 2012.

OPIC. *Environmental and Social Policy Statement*. 2010.

Pavanello, S. and S. Haysom. *Sanctuary in the City? Urban displacement and vulnerability in Amman*. Humanitarian Policy Group Working Paper. Overseas Development Institute (ODI). March 2012.

Phenix Center for Economic and Informatics Studies. *Works of European Bank for Reconstruction and Development (ERBD) in Jordan*. Research Paper. March 2015.

Phenix Center. *Communication to EBRD Head of Office Jordan*. 4 June 2013.

Rahim, N.A. *The Energy Sector in Jordan*. August 2015.

Royal Scientific Society (RSS) Jordan. *RSS presentation at 15th Coordinating Council Meeting. Commission on Science and Technology for Sustainable Development in the South (COMSATS)*. Turkey 2012.

RSS. *Air Quality Test (85/2012)*. Air Studies Division. June 2012.

RSS. *Annual Reports*. Website [www.rss.jo](http://www.rss.jo)

Tarawneh, W. "Urban Sprawl on Agricultural Land (Literature Survey of Causes, Effects, Relationship with Land Use Planning and Environment): A Case Study from Jordan (Shihan Municipality Areas)." *Journal of Environment and Earth Science*. Vol.4. No.20. 2014.

United Kingdom Accreditation Services (UKAS). Website <https://www.ukas.com>

UN Economic Commission for Europe (UN ECE). *Convention on Long-Range Transboundary Air Pollution. Suggested Technical Annex to Gothenburg Protocol*.<sup>52</sup> Forty-Fifth Working Group on Strategies and Review, 31 August 2009 - 4 September 2009.

UN ECE. *Guidance document on control techniques for emissions of sulphur, nitrogen oxides, volatile organic compounds and particulate matter (including PM10, PM2.5 and black carbon) from stationary sources*. January 2015.

UN Environment Programme (UNEP). *Rapid Assessment of the Impact of Syrian Refugee Influx on the Environment in Jordan*. 2015.

UN Human Rights Council. Thirty-second session. *Communications report of Special Procedures. Communications sent, 1 December 2015 to 29 February 2016; Replies received, 1 February to 30 April 2016*.

---

<sup>52</sup> *Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone*. 1999.

UN Sub-Commission on Prevention of Discrimination and Protection of Minorities. *Siracusa Principles on the Limitation and Derogation of Provisions in the International Covenant on Civil and political Rights*. Annex E/CN.4/1984/4 (1984).

UNEP. *Towards a Green Economy in Jordan: A Scoping Study*. August 2011.

US Department of State. *Country Reports on Human Rights Practices for 2013*.

VDMA. *Exhaust Emission Legislation: Diesel and Gas Engines*. 2010.

Wartsila. *Traffic Management Plan for Construction of IPP4 Al-Manakher Power Project*. 23 January 2013.

World Bank. OP 4.01: *Environmental Assessment*.

World Bank. *Grievance Redress Service Annual Report 2015*.

World Bank. *Hashemite Kingdom of Jordan: Country Environmental Analysis*. Report No. 47829-JO. August 18, 2009.