To: Mr Kemraj Parsram kparsram@epa.org

Executive Director of the Environmental Protection Agency

Ganges Street, Sophia, Georgetown, Guyana. Email: epa@epaguyana.org

From: Concerned Citizens

Vanda Radzik <u>vandaradzik@yahoo.com</u>; Jocelyn Dow <u>jocelyndowna@gmail.com</u>; Janette Bulkan Karen de Souza <u>karendes@yahoo.com</u>; Danuta Radzik <u>dmradzik@yahoo.com</u>; <u>janette.bulkan@ubc.ca</u>

Subject: Objections & Related Questions re the Environmental Impact Assessment (EIA) and Environmental Impact Statement (EIS) for the proposed Esso Exploration and Production Limited's (EEPGL) Gas to Energy Project

Date: June 18, 2022

Dear Sir,

We hereby state our overall objection to the EIA and EIS on the Gas to Energy project proposed by EEPGL.

We have not had opportunity to compile a complete statement of our concerns, but we would do so for interactions with the EPA and EAB as permitted (implied) by Article 13 of our National Constitution in the exercise of shared governance.

We draw to your attention the incomplete information presented by the protagonists, including the absence of a comprehensive technical and financial feasibility study, as mentioned in the national newspapers today, Saturday 18 June 2022. The scrappy nature of the information offered to support a supposed USD 0.9-1.1 billion pipeline alone, not counting the refineries and generator, suggest that the Government itself is not organised to explain or justify such a massive project. We request, therefore, that the interaction between civil society, ExxonMobil (XOM) associates and agencies of the Government of Guyana should work together to determine if this financially enormous investment is indeed in the best interests of the population of Guyana. And we would be pleased to participate in sessions open freely to Civil Society and to the Press to take these matters forward.

We have specific objections and questions related to a number of items and statements in the said EIA which we raise in our submission below.

1. Lack of genuine consultative process

- Neither the EIA nor EIS has been genuinely consultative according to the principles and best
 practices wherein rigorous scientific, social, economic, environmental and cultural assessments are
 conducted over a series of consultative and participatory sessions. The consultative period and
 process were inadequate and insufficient.
- There was no Matrix of Stakeholder inputs documenting inputs and recommendations maintained on a continuum and made publicly available to stakeholders at follow-up sessions. The "consultations" were merely introductory, one-off sessions with the vast majority of the time allocated to the developer and/or EPA and an insulting, miniscule allowance available for participants.
- Neither the principle nor the process of Free, Prior and Informed Consent (FPIC) was applied nor reported.
- Project Cycle Timelines: A big rush to push through this project
 - o The EIA was published on April 20, 2022 with a 60-day period for objections, queries and comments which ends on June 18, 2022.
 - Yet the EIA sets out the following timeline "...a target date of August 2022 for start of NGL Plant site preparation and will take approximately 3 years. The combined offshore and onshore pipeline system is targeted to be ready to deliver rich gas by end of 2024, and the NGL

Plant is targeted to be operational by mid-2025..." and thence continuing for a planned life cycle of at least 25 years.

The above timeline of some two months only before commencing the project is "eye pass" and indicates the rush without due process: to review the EIA, take into account objections, corrections, answer all queries, hold feedback consultations and then either have a new ESIA produced or publish a final version or withdraw the project altogether. This rushed "target date" exposes the scant regard by EEPGL for due process and credible consultations.

• Five year limit on Environmental Permits:

We assume, nonetheless, that the Environmental Permit, when granted by the EPA, will be up for review every five years in accordance with the Environmental Protection Act and its relevant regulations. We do not however see any mention of this fact in the EIA. It needs to be prominently stated and included in the EIA.

2. Our allegations of insufficient detail in references by ERM to best international or oil field practices, making the ERM assertions not reasonably checkable

The Environmental Resources Management (ERM) firm hired repeatedly by EEPGL has been exposed as **not** being sufficiently independent in its conduct of EIAs. The pattern of single-sourcing this one company has been publicly and repeatedly questioned in terms of its viability and acceptability as independent and autonomous. These questions have not been addressed by EEPGL, ERM or the EPA.

3. Objection to "Negligible to Moderate Impacts":

As per usual, ERM and its associates would have us believe that all impacts are "negligible to moderate" and that we, Guyanese, have nothing to worry about concerning this substantial development the kind of which has never yet been undertaken in our country and with which Guyana has had no experience. All we have is the ERM "magic wand" prediction that only "negligible to moderate impacts on physical resources, negligible to moderate impacts on biological resources, and negligible to moderate impacts on socioeconomic resources—with a number of positive impacts on socioeconomic conditions." This is the identical language used in all of ERM's predictions for all of EEPGL's projects. Presumably, just another "cut and paste" that is repeated ad nauseam in all of these botched EIAs.

- We object to and guery this negligent assessment in the EIA by ERM.
- We indicate in this submission several queries and comments related to this objection.

4. Lack of Gender Analysis, Gender Action Plan and Impact Assessment on Women

The lack of Gender Analysis and impact assessments on Women are glaringly absent in the EIA. The world is in the "Generation Equality" era as designated by the United Nations. The Extractive Industries Transparency Initiative (EITI) of which Guyana is an implementing country now mandates sections on both Gender and the Environment to be included in its annual Reporting according to its 2019 Standard. But the EIA for the Gas to Energy project is gender blind - devoid of any meaningful gender assessment or women-related content. Hence some 51% of the Guyanese population is rendered invisible in it. Any EIA worth its salt must include social impacts and gender impacts writ large. All that this EIA has to say on the matter is in the negative and stresses inequality: "... it is very likely that women will **not** have equal access to Project employment opportunities with Guyanese businesses unless they are directly targeted for recruitment."

- But where are the mitigating guarantees? There is no indication of proposed policies or quotas to guarantee women's employment. There is no inkling of a Gender Action Plan (GAP), which, nowadays, is standard procedure for feasibility studies and EIAs/ESIAs and its absence in this EIA constitutes a very big gap.
- In a very convoluted way, the EIA says that: "... to offset the gender imbalance, EEPGL will develop contract language for pipeline and NGL Plant contractors encouraging recruitment and training of women for various Project-related construction roles, as well as advertising the types of goods and services they will procure locally."
- But there is no specificity, no mandate or declaratory position in this sentence to mitigate gender imbalance just some vague language about "language" to be developed to "encourage". This is just not good enough and leaves women hanging in the imbalance.

5. Where are the safeguards to address the potential exploitation of and harm to women? Where is provision for strong Workers Representation and Protection?

The EIA appears to be devoid of gender sensitive safeguards and measures to cushion the exploitation of women. These questions are asked in the light of the employment experience and consequences of at least one woman employed in the EEPGL's empire of Oil and Gas development in Guyana on one of its floating platforms – the offshore oil rigs. Her job entailed washing the clothes of the oilrig workers that were contaminated by hazardous substances and toxic chemicals. She is now, allegedly, permanently disabled because of ineffective implementation of environmental and human health and safety measures while on the job.

- The EIA for the gas to energy project needs to substantially address and recommend a suite of safeguards informed by adequate workers' representation and stringent protection policies which are also gender sensitive with full compensation provisions.
- We recommend a modern and effective oil & gas workers union for Guyana modeled on the Oilfields Workers' Trade Union (OWTU) which is one of the most powerful trade unions in Trinidad and Tobago.

6. Net Zero Employment for the Guyanese population out of a GYD\$260 billion Gas to Shore project Costs: EEPGL estimates the current project cost at approximately USD\$1.3 billion (GYD\$260 billion). Also projected is a "higher certainty cost estimate" which it says will be calculated after all major contracts are negotiated.

In terms of "positive socioeconomic impacts", the EIA states that the project aims to employ approximately 800 workers during the peak construction stage, 40 full-time workers during the operation phase and about 50 persons during the decommissioning stage. Simple calculations show that this is a very miniscule contribution:

- 800 workers during the peak constriction phase = 0.100% of the Guyanese population (pegged at 793,973 as of Saturday, June 18, 2022, based on the latest United Nations data)
- 40 full time workers during the actual operations of the gas plant = 0.005% of our total population; and
- 50 workers to close down the project for good when it is decommissioned = 0.006% of Guyanese people.
- Altogether resulting in a grand total of zero percentage of employed Guyanese for all phases of this 260 billion Guyana Dollar project! (And we do not even know how many of this Zero percentage may be allocated to expatriate workers).

7. Cost of Living Increase

The EIA language is muddy on the "potential" cost of living increase with ERM attributing this to: "a higher demand for some goods and services, either through direct Project procurement or through Project worker purchases."

- **Question:** What precisely does this mean?
- As it stands, this sounds like ducking the issue with "gobbledy-gook". Some plain English explaining how and why and by how much the cost of living would rise would be helpful and honest.

Women, who mainly manage households and purchase and prepare food for families, will be severely impacted – with poor women, rural and Indigenous women bearing the brunt of this negative impact already being tangibly felt and due to the exponential increase of cost of living from the onslaught of the oil and gas industry. The EIA makes no effort to provide practical mitigation proposals or solutions to this.

8. Our allegations of insufficient relevant data, for example, in relation to fish populations and the livelihoods of fishing families.

Questions:

- Where are the detailed studies in the EIA that show the levels of impacts on the Guyana Fishing Industry in the zone of influence of the gas to energy project?
- Where are the mitigation measures to alleviate the loss of livelihoods of impacted fishers including "artisanal fisherfolk vessels that operate in shallower waters in particular in the nearshore offshore pipeline segments and at the shore landing site".

- ERM is apparently dishonest in claiming that there "may" be such impacts and that these are "negligible" while stating that "fishing activity will be prohibited during the operation stage to prevent damage to the infrastructure".
- The operation stage is pegged at lasting for 25 years and the construction stage for 3 years with a target date set for commencement of construction in the EIA for two some moths from now in August 2022 where large and small scale fishing by Guyanese will be prohibited.
- It is also a fact that right now fishery operations are closed, boats moored and fishermen and their families are bereft of their livelihoods. Added to this dismal situation is the massively destructive seismic booming that has and will continue to drastically affect the fish themselves and we have in one fell swoop the decimation and destruction of a significant portion of the Guyanese fishing industry courtesy of EEPGL with the expected support of the EPA and the Guyana Government.

The Realities and Impacts on the Pockets and in the Pots

- So while the promise of cooking gas from the project is touted the question remains gas to cook what? No readily available fresh local fish to cook, no income for fisherfolk to survive on but an increased cost of living to contend with and admitted as fact in the EIA.
- o Fishermen are asking; are we going eat road and infrastructure?
- o Women are asking what's to be in their market basket? What's to be in their cooking pot?
- Women ask can we eat the gas? Saying how little they can actually buy to cook now and even less in the near future with the promise all this cooking gas going hand in hand with an unbearably high cost of living. (Red Thread has published its first installment of its ongoing "Market Basket" survey in a recent "In The Diaspora" column in Stabroek News).
- Will the gas to energy project, miraculously, make the gas edible and cheap so as to give Guyanese people the required nutrition to convert into human energy for human life? This is the absurd conundrum that emerges from this EIA in terms of human life, well-being and socio-economic "benefits" and with all impacts on marine and human life dismissed as "negligible".

9. Alternatives Not Considered

The EIA claims that EEPGL and the government explored other alternatives for sources of energy, settling on natural gas positing that it is a more reliable source when compared to renewables such as wind, solar and hydro. Twenty prospective sites for the gas to energy pipelines and plant were assessed and desk top and field feasibility surveys carried out. A "no project" option was also considered.

An alternative which was NOT considered, however, was the comparative advantage of utilizing the massive budget of USD\$1.3 billion (GYD\$260 billion) repoted as being dedicated to the project.

- The alternative of investing this dollar amount into a country-wide installation of renewable energy sources was not carefully enough considered. *Especially since not all Guyanese will, for instance, benefit from the gas to shore development.*
- Alternatively, equipping each household in Guyana urban, peri-urban, rural and hinterland with alternative energy sources such as solar and wind would, in fact, provide lifetime sustainable and reliable source of electricity that each household could own.
- Additionally, providing duty free and other financial incentives to the business sector to invest in "green" energy hardware and services might be attractive. (We have the example of Demerara Bank that converted its corporate head quarters entirely to solar power.)
- Most countries of the world, developed and developing are switching to these alternatives and oil and
 gas/fossil fuels are on the way out universally. The UK, Canada and the USA have all set targets to
 completely phase out fossil fuels during the very period that we, in Guyana, are being pushed into
 greater consumption of these bad and outdated options.

Natural gas is a much 'dirtier' energy source than we thought (Stanford University research)

• Natural gas is mainly methane—a strong greenhouse gas: It has been proven scientifically, and beyond the shadow of a doubt, that natural gas is not clean energy – that it is a highly destructive contributor to environmental and human hazards, climate change and global warming.

Some alternative questions that the EIA should have considered:

• Why is natural gas bad for climate change?

- Natural gas emits methane into the air, a greenhouse gas that's 86 times as potent as carbon dioxide (CO2) over a 20-year period.
- o Natural gas stoves also emit carbon monoxide and formaldehyde. And there are other methane emissions to consider.

• Are stoves that use gas the best alternative?

No, they are not. Researchers say that more than three quarters of methane emissions occurred while the stoves were turned off, suggesting that gas fittings and connections and in-home gas lines are responsible for most emissions.

• The climate and health impacts of natural gas stoves are a known problem.

o In the USA, New York is considering a ban on natural gas connections in new buildings and <u>dozens</u> of local governments have taken similar action.

• Quotes from the recent Stanford University Study:

- o "One of the big take-homes from the study is that using gas stoves simultaneously harms the environment and our health through the gases they emit," says lead author Eric Lebel, who conducted the research as a graduate student in Stanford's School of Earth, Energy and Environmental Sciences (Stanford Earth).
- "We found that the methane emissions from stoves, for instance, increase the carbon impact by 39% compared to when just CO2 emissions are considered," he says. "And that's only leakage at the appliance-level, it doesn't incorporate leaks from the rest of the supply and distribution chain, all of which can leak additional methane gas as the gas is produced and distributed, etc."

ERM should have researched these factors and at least provided viable alternatives and options for all Guyanese people to benefit - other than that of a gas pipeline and gas plant to only benefit some Guyanese – and to have provided independent up to date research and alternatives.

Alternative Costings for Supply of Renewable Energy for Every Household in Guyana

- O The number of dwellings in Guyana was reported as 221,741 in the 2012 census, up by 16,624 dwelling units reported in the 2002 census. If we add an additional 25,000 households/dwellings to the 2012 figure and use this estimated, projected figure of 246,741 households let's see what might be benefits to each household/dwelling if the same budget for the gas to energy project was applied to this alternative:
- o If a minimum of one million Guyana dollars were allocated to the provision of a renewable energy source per every household in Guyana (projected at 246,741 households in 2022) this would cost a total of GYD 246,741M. The budget for the gas to shore project of GYD\$260 billion would adequately cover this amount with a savings of thirteen billion two hundred fifty-nine million Guyana dollars. This amount could be set aside as a contingency to increase the cost or cover related costs of installation etc. and/or applied as incentives for the business sector to itself invest in hardware, services and installation of renewable energy for their own businesses.

10. Environmental Impacts

A range of potential impacts on the physical, biological (marine, freshwater, and terrestrial) and socioeconomic environment were referred to in the EIA

• The EIA said that while the project, with both onshore and offshore components, will have a range of potential impacts on the physical, biological (marine, freshwater, and terrestrial) and socioeconomic environment, it will also generate benefits for Guyanese through increased employment and increased energy reliability.

- The EIA concluded that during both the construction and operation stage there will be sound and vibration impacts and persons will be subjected to higher than normal noise levels. Additionally, the air quality is expected to be impacted due to dust and other emissions from all three phases of the project.
- The EIA states that 6.62 hectares of benthic habitat will be lost.

The EIA informed that approximately 6.62 hectares of benthic habitat will be lost as the offshore pipeline is being laid. However, the impact of this is rated from "negligible to moderate" by ERM

We object to and query this assessment.

Benthic habitats relate to/occur at the bottom of a body of water and/or relate to/occur in the depths of the ocean are of critical importance – especially in the Guyana context since they may have three-dimensional structures that serve as shelter and provide storm protection by buffering wave action along coastlines. Benthic habitats can play an important role in maintaining water quality.

- We refer to a report by an independent organisation, *Frontiers in Environmental Science* published in 2016 which highlighted the detrimental environmental effects, routine oil and gas activities can have during exploration, production and decommissioning.
- The study titled, 'Environmental Impacts of the Deep-Water Oil and Gas Industry: A Review to Guide Management Strategies' was done in collaboration with 21 universities in the United States of America (USA), Canada, South Africa, Portugal and others.
- The document explained, "During the exploration phase, impacts can result from indirect (sound and traffic) and direct physical (anchor chains, drill cuttings, and drilling fluids) disturbance. Additional direct physical impacts occur in the production phase as pipelines are laid and the volume of discharged produced water increases. Lastly, decommissioning can result in a series of direct impacts on the sea floor and can re-introduce contaminants to the environment."

(We also note that the Yellowtail EIA concocted by the self-same ERM mentions bethnic impacts as "negligible to moderate" unsurprisingly).

Question: Has the cumulative impacts of current oil & gas developments and operations on bethnic impacts been taken into consideration in this EIA produced by ERM?

(Or in the Yellowtail EIA also produced by ERM? Or in any of the other secret, internal assessments carried out by the EPA and oil & gas developers?)

Cumulative Effects

- On October 8, 2021, the Chronicle reported Exxon and the Govt. of Guyana announcing that Guyana is poised to produce over 10 billion oil-equivalent barrels of oil. This is projected over the next decade at least and maybe longer. ExxonMobil further announced in March 2022 that it will be producing 1.2 million barrels per day of oil and gas in Guyana.
- There is also the potentially dangerous gas to shore pipeline and gas plant to take into consideration;
- And the series of shore-based "storage and calibration" facilities for hazardous substances including radioactive sources directly related to the oil & gas industry which are springing up all over East Bank Demerara in residential areas and in West Demerara with all EIAs being waived by the EPA!
- The cumulative and combined impacts on the environment and humans from these all need to be taken into account to avoid piecemeal and otherwise false pictures presented to Guyanese.
- These cumulative impacts of this industry should never honestly or professionally be skated over and minimized as "negligible to moderate".
- Guyanese who promote the industry, Guyanese who oppose it and Guyanese in the middle, or who are unsure, all need to see and understand the big, overall picture with all impacts and consequences the good, bad and ugly the combined short-term and the combined long-term all honestly, professionally and publicly made available to us all on a continuum.

11. Our allegations of non-compliance with legal requirements in relation to the EIA of the Gas-to-Energy project.

In a series of Letters addressed to and couriered to the CEO of ExxonMobil and Engine No 1 Board Members and copied to the Head of ExxonMobil in Guyana comprising several of the issues cited below was signed by Elizabeth Deane Hughes and endorsed, to date, by over 70 Guyanese. The signatories below of this submission to the EPA contributed to and endorsed the said series of Letters to ExxonMobil.

A number of these issues and concerns are itemized below for the further attention of the EPA contributed to and endorsed said series of Letters.

Generally:

- No parent company insurance
- Permits do not align with International best practice
- ExxonMobil refuses to sign, put names of directors, address as per the regulations of the Guyana under its Environmental Protection Act Section 11 and its Regulations Section 17
- EEPGL's proposal for a pipeline development in the nascent gas sector and the EIA produced by ERM is fraught with environmental irregularities, lack of genuine social engagement and lacks documented issues related to affected citizens and communities;
- Non-compliance with legal requirements e.g. under the Environmental Protection Act, The Freedom of Information Act.

Specifically concerning the Gas to Energy project

- No consultation of primary stakeholders who live along the proposed pipeline route
- No name of developer, ExxonMobil on the submitted documents, nor that of board of directors
- No proof of ownership of land where proposed pipeline will be laid
- No evidence of feasibility study as per 1794/2017 Petroleum Agreement
- No professional Gender Analysis or Gender-related impact assessment or impacts on women specifically assessed
- No evidence of compliance with Free, Prior and Informed Consent (FPIC) from any Indigenous Community
- No Gas Leak Pipeline Management Plan or System in submitted EIA/EIS
- No response to questions being asked.

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We further join with Guyanese experts and others: scientists, geologists, lawyers, housewives, fisherfolk, oceanographers, sociologists, researchers, economists, insurance experts, academics, gender experts, women's rights advocates, farmers, youth leaders, indigenous leaders, sociologists, anthropologists, conservationists, climatologists, geographers, journalists, renewable energy experts and rights defenders who have all raised their individual and collective voices on these and similar concerns.

Respectfully submitted

June 18, 2022

Signed:

Vanda Radzik Karen de Souza

Danuta Radzik vandaradzik@yahoo.com karendes@yahoo.com dmradzik@yahoo.com **Janette Bulkan** ianette.bulkan@ubc.ca **Jocelyn Dow**

jocelyndowna@gmail.com