

GENERAL COMMENTS ON THE EIA/EMP FOR PLATREEF (FLATREEF) MINE OPERATED BY IVANPLATS (IVANHOE)

1. In comparing the final EIA/EMP to the draft version in the light of the Centre for Applied Legal Studies (CALs)'s previous comments, it appears that only one of our concerns (the proportion of jobs to go to local communities) has been addressed in the new version of the document.¹ The substance and wording of the final document appears to be almost entirely unchanged from the draft version. Assuming this is correct this would mean that few of the comments submitted on a range of impacts including on livelihoods, infrastructure, aquatic systems, biodiversity and heritage have had an impact on the final draft.
2. While one would expect that the consultants would not agree with many of the comments received, a systematic failure to address any comments is indicative of a lack of engagement with criticisms of the EIA. The impression created is that the participation process is conceived as a procedural formality rather than a respectful and rigorous engagement between the mine and stakeholders with the aim of ensuring the document before the decision-maker clearly and accurately reflects the likely impact of the project on the human right to 'an environment not harmful to health or well-being' and contains workable measures for minimising these impacts. Given the far-reaching implications of the project, which could radically and irreversibly alter the lives of affected communities, anything less is not consistent with human dignity of stakeholders.
3. This impression is further bolstered by the migration of misprints and grammatical errors from the draft to the final version of the report. While most of these errors are minor, there are a number of errors that inhibit comprehension. A number of sentences are ungrammatical and do not make sense. For example in the discussion of the land ownership baseline, it is stated that 'The implication of this is that any land binding agreement between the project proponent and the affected communities traditional land custodian regarding land use, would have to be concluded in accordance with the provisions of IPILRA might be disputed.' There are instances where the information contained in the tables of impacts does not match the headings – for

¹ The Social and Labour Plan did address a handful of other concerns as well.

² K Crenshaw 'Mapping the Margins: Intersectionality, Identity and Violence against Women of Color' (1991) 43 (6) *Stanford Law Review* 1241, 1245-1246.

example the table headed 'Increased Spread in Communicable Diseases and Social Pathologies' in fact contains information about the empowerment of HDSAs. An apparent contradiction was also noted: In the 2nd paragraph on page 119 it is stated that 'Most members of the communities also have a good attitude towards people with HIV whilst a handful has discriminatory attitudes towards HIV positive people.' In the 5th paragraph, however it is stated that "there are high levels of stigma in the communities with associated discrimination as, although individuals were willing to purchase food from someone who they knew was HIV positive, more than half of the respondents would keep their HIV positive family member's status a secret.' This gives rise to the apprehension that the level of attention to detail falls short of what is required for such a significant document.

4. Further, the document does not adopt a sufficiently intersectional approach. Coined by Kimberle Crenshaw, an intersectional approach entails an awareness of the ways in which different systems of subordination and disadvantage, including race, gender and class, are not to be viewed discretely but as, instead, interacting to produce distinct subject positions.² For example, an unemployed black women residing in a rural area will have a distinct experience from a white, middle class woman living in the suburbs despite both being in a subordinate position as women in a patriarchal society. Intersectionality can also be taken further to encompass the interaction between people and their social and physical environment. Indeed the nature of one's physical environment has an enormous bearing on one's living conditions which further has an impact on health and on overcoming or entrenching patterns of social disadvantage. The advantage of intersectional analysis is that it sheds light on unnoticed causes of disadvantage and suffering. Too often environmental and socio-economic problems that are interrelated are viewed in isolation with the result that the significance of some mining related impacts are not fully addressed.
5. For example, there are important links between the nature of housing for workers, the differential gendered impact of mining and the social problems of increased sexual exploitation of women and the spread of HIV/AIDS. First the quality of housing offered by the mine and/or local government will influence whether male economic migrants will travel with their family/long term partners which in turn will influence the likelihood of having sex with multiple partners and sex workers leading to increasing transmission of HIV/AIDS and other STIs. At the same time, if the tendency of mining economies to marginalise women is not addressed, more women will turn to sex work, where they will enjoy no protection and will become vulnerable to HIV/AIDS. If these connections were expressly acknowledged, the housing situation and the participation of women in the economy would need to be accorded greater weight.

² K Crenshaw 'Mapping the Margins: Intersectionality, Identity and Violence against Women of Color' (1991) 43 (6) *Stanford Law Review* 1241, 1245-1246.

**COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACTS ASSESSMENT REPORT AND ENVIRONMENTAL MANAGEMENT PLAN FOR THE PROPOSED
PLATREEF UNDERGROUND MINE FOCUSING ON ISSUES RELEVANT TO THE SOCIAL AND LABOUR PLAN**

<u>Page</u>	<u>Para</u>	<u>Sentence</u>	<u>Concern</u>	<u>Have the Concerns been Addressed</u>
iv	8	“Local town facilities and infrastructure exist to handle an influx of personnel”	The scale of the influx has not been quantified which means the impact on local infrastructure cannot be estimated. Preparation for the influx is therefore insufficient.	Not addressed.
vii	1	“The construction and operation of the mining infrastructure will lead to the potential loss of general biodiversity within the Project Area, thus decreasing the biodiversity value of the areas affected.”	The significant loss to biodiversity will undoubtedly have an impact on the availability of naturally occurring edible plant species and animals that the land presently supports. This could have an impact on community members who rely on birds, fish and other fauna in the area for their subsistence.	Not addressed.

vii	4	“Increased runoff due to large concrete terraces and roads and poor quality runoff from mining activities could impact the surface water quality.”	Of the socio-economic rights contained in the South African Constitution, few are as fundamental as the right to food and nutrition. Along with air and water, food is an absolute necessity for survival. Influencing the water quality in the area could not only impact negatively on the ability of the community to source clean drinking water but the migration of polluted water could also affect adjacent agricultural holdings, negatively impacting on domestic livestock and the productivity of cultivated lands.	Not addressed.
viii	all	“..summary of the potential social impacts identified and anticipated for the proposed Project.”	a) “Movement patterns” must be clarified. b) “Local resources” must be clarified. c) No mention of the increase in crime rate. d) No mention of pressure on transportation networks.	Not addressed.
6	3	“The Project area currently consists of formal and informal housing, as well as subsistence farming and grazing. Thus, undeveloped land will be altered for mining infrastructure construction and operation.”	What criteria and standards are used to determine whether land is underdeveloped? Farming and grazing land should not be designated as underdeveloped if it serves the vital purpose of providing arable land for subsistence farming activities and domesticated livestock with grazing areas. Such land may thus serve as a vital source of food security for the community.	Not addressed.
16	6	The target minerals are: Platinum Group Metals (PGM’s) Platinum (Pt), Palladium (Pd), Rhodium (Rh), Iridium (Ir), Ruthenium (Ru), and Osmium (Os) All Other Associated Metals and Minerals, including but not limited to:	The fact that Platreef is targeting such a wide range of minerals makes it challenging to predict the impacts as the mining of different minerals produces differing social impacts.	Not addressed.

		Gold (Au), Silver (Ag), Nickel (Ni), Copper (Cu), Cobalt (Co) and Chrome (Cr).		
19	6	<p>“According to the Social and Labour Plan for Platreef, the expected workforce for the mine when fully operational will be approximately just over 2000 people (permanent and contractors).</p> <p>During the construction phase the mine will employ 72 permanent people.”</p>	No indication is given as to the percentage of the workforce that will come from the local population. The nature of the jobs, their grades of jobs and the skill levels required are not indicated (contained in SIA study but not in EIA)	This is addressed in the final EIA/EMP at 92: “it is expected that between 40% and 50% of the workforce (1000-1200) will be recruited from local labour sending areas. The local labour sending area is limited to communities within a radius of 50km of the mine entrance’
19	7	<p>“The proposed Project will contribute to the local economy through both direct and indirect employment opportunities and will result in a substantial injection of cash into the local economy of the Mogalakwena local municipal area.”</p>	A clear description of these direct and indirect opportunities must be articulated. It must be shown which business will receive these opportunities and how they go about accessing them. In addition the direct and indirect job losses as a result of impact on other sectors (including agriculture) must be set out. It is vital that the report anticipates the net effect on employment.	Not addressed
19	8	<p>“In general, the socio-economic conditions in the area will be uplifted through better infrastructure, LED Projects, B-BBEE ownership and Projects and other company Corporate Social Responsibility (CSR) initiatives such as Enterprise Development (ED).”</p>	Which specific types of infrastructure will be focused on? Clear projects must be presented with appropriate timelines attached to manage expectation, encourage accountability and assist with implementation.	The social and labour plan contains little specificity on the focus, targets and timeframes for improvements to infrastructure and who is responsible for what.
23	1/2	<p>“Although capacity and infrastructure for power supply as it currently exists would not support mine</p>	The EIA admits that the current power requirements cannot be supported by the grid as the Medupi power plant is yet to be completed. It states that a temporary	Not addressed.

		development.... agreements with Eskom were made to provide a temporary supply of a 5 MVA overhead power lines to support the power requirements during any future construction activities for the proposed Project.”	power supply will be provided, but does not explain where this power would come from. It does not address whether this would place further strain on an already stretched grid which could negatively impact on the power needs of other users, including community households.	
23	3	“Geo Tail was appointed by Platreef to carry out the necessary activities and tasks, in accordance with the specified requirements and scope of work, to present a scoping study for the new Tailings Storage Facility (TSF) required for the Platreef Project in Limpopo, South Africa.”	More information is required regarding the building of the TSF as the social impacts of the structure will depend on its size, type and location. Such facilities can have severe impacts on the environment including the destruction of grazing land and water resources which would in turn have adverse and severe impacts on the quality of life of directly affected communities.	Not addressed.
33	8	“Both planned cells at the landfill site are to be constructed conjointly.”	Explain the effects of these landfill sites on the directly affected communities.	Not addressed.
38	4	“The sewage treatment requirements on site will vary during the initial construction phase and the operational phase.”	Will any additional strain be placed on existing municipal sewage systems? Especially during the initial construction phases? If so this could lead to affected communities being impacted due to the strain on ageing infrastructure.	Not addressed.
48	7	“When considering the allocation of land for development and in deciding applications for planning permission affecting agricultural land, the agricultural implications must be considered together with the environmental, cultural and socio-economic aspects.”	The land use alternatives must be framed within a context of the importance of agricultural entitlements from a rural perspective. Agriculture becomes paramount from a rural perspective and must be weighted accordingly.	Not addressed.

49	4	“Furthermore, an investigation into alternative source for bulk water supply to the Phase 2B scheme proposed by the JWF has been undertaken.”	More information required to decide whether or not communities will be negatively affected by the bulk water appropriation by the mine.	Not addressed.
53	2	“Beneficial to communities, demand is high. Low costs as it is assumed waste will be made available to local communities or labourers (minimal to no transport costs).”	Much of the community depends on firewood for cooking and generating warmth. They gather firewood from the trees on their land. There were expressions of concern about whether there would be firewood to gather in the new location. There was a concern that the loss of this firewood would render them more dependent on electricity which was costly. Although this is a viable plan it would not be a permanent solution and consequently in analysing the social impacts loss of firewood will need to be factored in and weighted accordingly.	Not addressed.
57	8	“...selected as possible sites for the on-site general waste landfill..”	Any on-site landfill will most likely not receive social acceptance as it would cause additional irritation to affected community members.	Not addressed.
62	1	“Although economically viable, the continuation of agriculture may not provide the level of medium term economic growth to the area that mining would offer, such as increased employment of residents in the area, greater economic input into the area, allowing better development of the towns and surrounding areas, and greater socio-economic stability in the area”	These statements do not take into account the value which communities place on being subsistence farming. The community voices are clear in that they want to maintain their agricultural practices. The desires of the people are being overridden by the interests of the mining company.	Not addressed.

62	1	“After mine closure and rehabilitation of mined areas, the land capability may return to a state which would allow the continuance of agricultural practices.”	Rehabilitated mining land will never return to the quality that it possessed before mining took place. This is because of the distinct possibility of AMD many years after the fact as well as the alteration of the groundwater table.	Not addressed.
62	4	“The mine will also promote sustainable local economic development, to give communities the skills required to remain economically viable and successful after mine closure.”	No supporting evidence for this statement. Any assessment of the long term positive impacts have no basis in the absence of concrete implementable plans to transfer skills and promote local economic development.	Local economic development is addressed in the SLP as is required but some of the projects, including support of entrepreneurial initiatives to be identified by the community remain undefined in their nature, targets and timeframes. There is therefore still insufficient evidence to support this statement.
82	3	“Burrows and holes of small mammals, which can possibly belong to mice, rats and/or suricates, were found during the field survey.”	No mention of the importance to the people as a food source	Not addressed.
83	4	“During the field survey 49 species were observed. The species identified were listed in the flora and fauna impact assessment report.”	No mention of the importance to the people as a food source	Not addressed.
84	6	“Ethnobotany is a branch of botany that places focus on the use of plants for medicines and other practical purposes. The use of native plants for	This is a welcome addition as the plants in the areas have a significant role to play in the spirituality of the members of the communities in the area. Medicinal plants are important to many people and have been used	

		ethno-botanical uses can be detrimental to populations that are overexploited.”	traditionally for centuries to cure many ailments.	
87	1	“The Rooisloot, Ngwaditse and Dithokeng rivers are ephemeral systems and were predominantly dry during the field survey periods. Water was noted in the lower reaches of the Rooisloot and Ngwaditse rivers and it was concluded that this is largely attributed to household effluent. No water was noted in the upper catchment areas of these systems, supporting this conclusion. “	The water resources that were tested seem to be insufficient and of a poor quality. Any additional strain on the water resource by the mine could cause irreversible damage.	Not addressed.
88	7	“The elevated levels of conductivity may be attributed to the associated urban pressures these rivers find themselves under, namely the discharge of chemicals and untreated effluent would increase the levels of conductivity and could negatively affect aquatic biota.”	Adding pressure to the existing water resources in the area would have a negative effect on the way in which residents enjoy access to the resource.	Not addressed.
90	7	“Many species of the fish are believed to be present within the refuge areas in the local impoundments. Due to the reliance of local communities on the fish as a protein source it is important to maintain these aquatic systems.”	What would the effect of the mines presence in the area be, in specific relation to the use of the fish as a source of protein by the residents?	Not addressed.
97	2	“These wetlands would thus provide a service through limited flood	These wetlands perform a significant function which if disturbed and or destroyed could have significant knock-	Not addressed.

		attenuation by the spreading out and the slowing down of floodwater in the wetland, thereby reducing the severity of floods downstream and by trapping and the retention in the wetland itself of sediment carried by runoff waters.”	on effects to downstream users. Many downstream users depend on the quality of water to sustain their livelihoods. This is important to note when considering the local land-uses and surrounding activities impacting on the water quality of the system. Additionally, removing or damaging these wetlands would have a negative effect on downstream retention capability, increasing the likelihood of flooding. This requires further investigation as this could lead to serious consequences to downstream residents.	
99	2	“The floodplain is adjacent to the Waterberg Wilderness Reserve which indicates the importance of this system to provide both tourism and recreational activities such as fishing and birding.”	The influence of these wetlands on daily life should not be underestimated and the weight carried by this importance should be raised to a crucial level.	Not addressed.
99	4	“These services pertain largely to water supply and food resources. The water of the floodplain is used for drinking, cooking, cleaning and watering of plantations. In addition to this, the system is also fished by locals for food.”	The evidence is overwhelming in support of the importance of these floodplains and the role they have in the resident’s daily life. More studies and definitive conclusions required.	Not addressed.
100	3	“In literature, particulate matter (specifically PM _{2.5} and PM ₁₀) represents danger to the receiving population as it can penetrate into indoor environment increasing the exposure period to such pollutants.”	The quality of the air would be significantly affected which would in turn affect the quality of life experienced by directly affected communities. The health risks pose a very serious question which go unanswered in this document.	Not addressed.
109	3	“In autumn, all the sites (seven in	The project area would be located in an area extremely	Not addressed.

		total) exceeded the residential and industrial limit values of 600 mg/m ₂ /day and 1 200 mg/m ₂ /day – with the highest value reaching 2 760 mg/m ₂ /day (site – Ga-Madiba).”	susceptible to high dust levels. The area already exceeds the national standard for dust deposition rates. Additional clearing of vegetation and soil discard will leave adjacent communities heavily affected by dust, substantially impacting the quality of life on the area.	
117	4	“The blasting propagation was calculated separately because it will occur intermittently compared to the other construction activities.”	Blasting, although occurring intermittently, will impact surrounding communities greatly and should not be underestimated. The influence on residents’ daily lives is not being afforded the appropriate weight. The effect of blasting on the houses of neighbouring areas has also not being taken into account as it is generally accepted that the reverberations do cause damage to property, in particular cracks in walls and pipes.	Not addressed.
120	3	“The average rainfall in the area is medium to high (650 mm per annum) and in combination with good soil, results in high arable agricultural potential.”	This comment is evidence that the project area comprises of rich arable land which must be protected and conserved as subsistence farming is the cornerstone of many residents’ fresh fruit and vegetable intake.	Not addressed.
121	2	“Plan 17 (Appendix A) contains the soil data for the alternative plant infrastructure site.”	The document contains many alternative permutations regarding positioning and types of infrastructure. As no final decisions have been made, the social impact of these infrastructure developments cannot be commented on. This is also apparent with the proposed TSF sites which could have significant impact on the residents of the adjacent communities, dependant on their location.	Not addressed.
122	3	“The site is dominated by the Ae land type indicating that arable agriculture is potentially possible but used presently for sustainable agriculture, specifically mixed arable and grazing	The planned project area restricts grazing by local cattle owners; to offset this impact the mine must provide alternative grazing land where convenient for local cattle owners.	Not addressed.

		(cattle) but dominated by grazing.”		
124	4	“The flow data could also indicate extensive upstream use of water resulting in the frequent periods of low flow.”	The flow data suggests that the resource is being utilised extensively. Thus adding the additional impact of a new mine nearby would significantly affect the already limited flow, thereby impacting other downstream users. All cumulative impacts must be investigated.	Not addressed.
139	4	“At the farms Macalacaskop 243KR, Turfspruit 241KR and Rietfontein 2KS water is being abstracted from groundwater sources to supply the various rural communities.”	Rural communities rely heavily on the use of borehole water. The effects on the availability and quality of borehole water to rural communities are not discussed.	Not addressed.
154	2	“Although no signs of settlements were identified within the TSF location option 3 area, community members from Machikiri have strong cultural, historical and spiritual ties to the area due to their on-going rain rituals that are performed on the mountain to the east of the Project area and the collection of medicinal plants.”	In accordance with their religious beliefs, community members have a very strong spiritual connection to grave sites and sacred areas. Due to the long history of the various tribes in the area, there is a profound connection to the land to which a great spiritual significance is attached. The weight attributed to this significance has been underestimated in the EIA.	Not addressed.
154	4	“Burials identified within Project areas are mostly recent and are still connected to those residing in nearby villages. They are part of the living heritage of the communities and are significant as shown by the comments made during public meetings. Community members still visit their ancestors as shown by various burial	Appropriate weight must be afforded to these sites when balancing the importance of the sites and possibility of destroying / relocating for mining purposes.	Not addressed.

		grounds showing signs of on-going maintenance.”		
156	3	“Land uses within the site-specific area include residential, agricultural and grazing uses, while land that coincides with the Project footprint is mostly used for agricultural and grazing purposes.”	Impacts on agriculture and grazing will need to be offset. Extensive consultation with farmers will need to be undertaken to achieve a mutually agreeable solution.	Not addressed in the EIA/EMP. The SLP local economic development projects include the setting up of a commercial farm for the community. However, the projected numbers of long-term employees on this on the farm (40) falls short of the numbers of people who have lost access to grazing land (SLP, 87).
158	3	“The headmen attributed the increase in population to natural population growth and to a lesser extent to influx resulting from employment opportunities associated with mining.”	No scientific study supports this and therefore these findings are inconclusive. The increase in population will increase dramatically when the mine commences operation. This will have serious and lasting impacts. No study into these effects has been commissioned.	Not addressed.
160	2	“Racial segregation is to a certain degree replaced by socio-economic segregation. This situation creates a need to speed up integrated human settlement in order to proactively address resultant social ills (such as crime, and skewed unsustainable development)”	The impacts of the mine being constructed will be felt directly by the poor rural communities outside Mokopane, meanwhile, the affluent minority remains protected. The mine will therefore exacerbate the economic divide by infringing the rights of the poor. Measures to address this divide must be proposed.	Not addressed.
161	3	“The largest proportion of the population in each study area was	These occupation types are usually associated with a relatively basic skill set. In depth study must be done into	Not addressed.

		engaged in elementary occupations, followed by those who are engaged in the craft related trades, and shop and market sales workers. “	the suitability of the job pool in the area.	
163	1	“It is important to note that the statistics provided below do not necessarily agree with those provided above for the district, municipal and site-specific populations, as these reflect a biased sample of mostly unemployed persons who were able to participate in the survey.”	The survey does not reflect a true cross-section of the population and therefore cannot be an accurate account of the unemployed persons in the area. Furthermore, the EIA acknowledges the deficiency in the Digby Wells Survey, which begs the question as to why it was included in the document.	The ‘workforce characteristics’ findings are still based upon this flawed study.
163	3	“Approximately 5% of all respondents indicated that they enrolled in a mining related training course such as welding, and operating mining equipment and heavy vehicles.”	No indication is given as to the plans to increase these numbers to involve the youth in the mining industry. Youth unemployment is a major issue and must be addressed in all employment related documents.	
164	5	“A total of 225 respondents have been involved in mining related occupations.”	2000 positions will be made available by the mine and only 225 respondents have been involved in mining related occupations before. No plans to skill the unskilled unemployed residents’ in the area is provided.	Not addressed in the EIA/EMP. The SLP does contain a training programme in order to equip community members with mining skills. This may also not, however, be sufficient to bridge the gap between the existing skills set and the target of employing 40-50% (1000-1200) of employees from areas within a radius of 50km around the mine in the

				EIA/EMP.
164	6	“The majority of respondents indicated that they were or have previously been employed in non-natural resource sectors.”	Plans must be made to involve those previously employed in non-mining sectors. These plans must have implementable processes to achieve this goal.	See above.
165	2	“A total of 537 respondents registered their businesses on the database. Unlike the residency of those registered on the skills database, the results derived from the business survey, showed that a larger number of businesses are located near the Project area.”	Local business must be supported and included in the construction and operational phases. The plans for this upliftment of local business are not present and therefore unclear. A thorough investigation must be undertaken into the types of business and how they fit in to the mining operation.	Not addressed in the EIA/EMP. The social and labour plan does seek to address this issue through providing for ‘business hubs’ where local businesses will be provided with capacity training and information about the tendering process.
166	3	“These are people who are caught in a poverty trap, unable to benefit in the growth in the first economy, and limited in their ability to access opportunities provided by development assistance initiatives.”	No plan to improve the unskilled poverty stricken majority is presented. The importance of mining to local economic development within intensive mining areas must be recognised and appropriate plans must be formulated.	Not addressed in the EIA/EMP. The SLP contains adult basic education and skills training initiatives but the enrolment targets only cover a limited proportion of the community who need them (450 for the ABET programme, 27 learnership and 390 for non-core technical skills training).
167	4	“Although mining offers a vast contribution to socio-economic development to the site-specific area, it also poses constraints to urban	These contributions and constraints are not addressed. There is no identification of the different contributions and constraints nor is there a quantification of the scale of their impacts.	Not addressed.

		development and growth.”		
168	4	“Tourism contributes considerably to the South Africa’s economy; the World Travel and Tourism Council estimates that the South African Travel and Tourism sector accounted for 7.1% of South Africa’s GDP in 2002 (R72.5 billion) employing 1.5 million people (Urban-Econ, 2006).”	The effect on the conservation and tourism industry must be quantified, in particular the possible job losses. The statistics used are outdated and more accurate data should be sourced as this percentage has probably increased.	Not addressed.
169	2	“Maintaining a prosperous and healthy agricultural community is therefore still important for the district economy.”	How does the province and the mine plan on assisting this prosperity? In the absence of a plan to provide viable alternative land and support to small scale farmers mining will pose a significant threat to this activity.	Not addressed in the EIA/EMP. The SLP does provide for facilitating a commercial farm for the community but is not sufficient in scale and labour intensity to absorb all of those who have lost farming land. Negotiations must be undertaken with all affected parties.
169	4	“According to the Mogalakwena IDP (2012/2013) agriculture is important to rural villages throughout the municipal area.”	Plans to promote agriculture must be implemented, especially focussing on the younger generation.	Not addressed.
170	2	“With regards to the site-specific study area, the dominant land capability is arable supplemented by grazing. The agricultural potential is high due to the combination of average to medium regional rainfall and deep soil	Re-enforcing the agricultural imperative.	Not addressed.

		present.”		
171	2	“The community also reiterated their expectations regarding employment and procurement opportunities that will result from the proposed Project.”	What were the community expectations and how do they relate to plans for the area by Platreef and in the local Integrated Development Plan?	Not addressed.
172	2	“The largest gender discrepancy exists in the Waterberg region, with 57% of women having no income compared to the 41% of males who have no income. The chart shows two kinds of inequality, there is gender inequality and financial inequality.”	The mine must be careful not to re-enforce gender stereotypes. A gendered approach must therefore be reflected in employment plans.	Not addressed.
173	3	“The IDP notes that women, especially women living in rural areas, are the most affected by lack of job opportunities and other social issues such as access to education, role in society and economic opportunities.”	Special attention must be afforded to women when developing implementation plans. The barriers to taking advantage of projected economic opportunities must be clearly identified. Targets for employment of women contained in SIA study but not EIA.	Not addressed in EIA/EMP. In the SLP there are a set of measures for advancing women but no specific targets finalised in relation to women as opposed to HDSAs in general (see SLP comments). Final targets must be set.
175	3	“With regards to cooking and heating there seems to be a greater reliance on alternative energy sources, especially wood. It is reasonable to argue that wood is sourced from areas surrounding rural communities.”	The availability of firewood would be drastically decreased due to the project area being a prime source of firewood. The knock-on effects would be that residents would inevitably have to pay more for electricity which would further stretch already stressed household budgets.	Not addressed.
177	1	“With regards to water quality, the municipality achieved a relatively low	No indication what the effect of the mine will be on the municipality’s ability to provide safe drinking water to	Not addressed.

		blue drop grading (78%); a municipality's blue drop status refers to the safety of water, which is made available for human consumption."	communities in and around the project area. In other words, will the mine be a positive or negative influence and if so to what extent.	
177	1	"It is concerning that only 13% of households within the site-specific area have no access to piped water; these households rely on municipal water tankers or water sourced from boreholes."	No indication as to the effect of the proposed mine on the boreholes in the area. It's evident that these are important water resources for local communities and the impact should not be underestimated.	Not addressed.
177	3	"The Mogalakwena IDP (2012/2013) notes that the water supply infrastructure has deteriorated as a result of ageing and corrosive effects. As a result water supply infrastructure is prone to bursts and leaks, resulting in water losses."	The poor state of the water infrastructure in the area raises concerns about the resistance of the system when additional strain is placed on it by the mine and the influx of migrant labour. The shortage of water services would have a significant social impact on the rural communities in and around Mokopane.	Not addressed.
178	2	"The availability of sanitation facilities not only improves the dignity of people, but also promotes health. Areas without proper sanitation systems can give rise to water borne diseases like cholera, diarrhoea, and typhoid."	The impact of sanitation services is not discussed thoroughly. The immense social consequences of not providing appropriately for this need could result in significant health issues when the already aged sanitation facilities are put under pressure by the influx of new residents.	Not addressed.
179	4	"The Mogalakwena IDP (2012/2013) state that land fill sites are operating at full capacity and are unable to cope with refuse produced by additional population."	The impact of refuse removal services is not discussed thoroughly. The immense social consequences of not providing appropriately for this need could result in significant health issues. The landfill is already oversubscribed and additional pressure could not be absorbed.	Not addressed.
180	1	"The co-ordination of health facilities is planned at a district level and	The impact of health services is not discussed thoroughly. This must be dealt with thoroughly in the social and	Not addressed in the EMP. The SLP does not contain

		therefore not directly the responsibility of Mogalakwena LM.”	labour plan.	any clear projections of where the impact would be felt and the magnitude of this impact on the various aspects of the stresses on the system. One of the SLP local economic development projects (the construction of community centres) is intended to improve the capacity of the public health system as these centres would house healthcare facilities (in addition to other public facilities). What services they would provide and where they would be located is not, however, finalised and is subject to future engagements with the Department of Health and other relevant government departments (see SLP comments).
180	3	“In 2007 there were 285 schools within the Mogalakwena Municipal area; including 167 primary, 104 secondary, and 13 combined schools.”	The influence and impacts of the education facilities in the area must be quantified. Additional courses and institutions must be developed in order to cater for the skills need at the mine. No plans have been presented as yet. This must be dealt with in the SLP.	Not addressed in the EMP. There are no projections of the probable extent of the increased enrolment in local schools due to the population increase associated with mining.

				<p>We are not, therefore, in a position to establish whether the infrastructure and capacitation measures (for 8 existing schools) contained in the SLP will make a meaningful contribution in addressing this challenge. While the EMP does state that Platreef will liaise with the municipality in advance to ensure that community needs are met and the population growth and the pressures on local services are taken into account, the indications are that no detailed impact assessment and planning by the mine and government has taken place yet. This research and joint planning is necessary to ensure that together the IDP and the SLP are capable of ensuring that access to education and other basic services does not deteriorate as a result of the mine which would mean a regression in the community's right to</p>
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				education that is already – as evidenced by the low levels of education - not being adequately advanced.
181	2	“Both the District and Local Municipality are experiencing increased pressure to launch housing developments to alleviate housing backlogs in these areas. The district municipality attributed the housing shortage, in part, to the increase in mining Projects.”	The housing shortage has been directly attributed to the increase in mining projects. Plans must be formulated to address this shortage. No plan by Platreef has been provided and it must be dealt with in detail in the social and labour plan.	Not addressed. The social and labour plan does not contain a clear housing strategy for either the contract workers employed during the construction phase or the workers to be directly employed when the mine comes into operation.
182	3	“Informal settlements have been established throughout the Mogalakwena LM, , the growth of these areas can partly be attributed to a.) people moving from rural to urban areas in search of economic opportunities and b.) a lack of affordable housing.”	The rural sprawl of informal settlements will be accelerated as the mine serves as a catalyst when the influx of migrant labour occurs. No plans to provide affordable housing have yet been provided to I&AP’s for comment. This will hopefully be dealt with in detail in the SLP.	Not addressed. See above.
183	2	“Crime in general was identified by the headmen as a problem within their villages and crime prevention and safety were noted by most communities in the Project area as a priority.”	With the influx of migrant labour there will be a drastic increase in the crime rate. This is evidenced by what has happened in many other mining communities. This can be exacerbated by differences in ethnicity, culture and language. Where there is competition for scarce resources these differences can produced a distrustful social climate. No plans to mitigate this occurrence have been presented to date.	Not addressed in the final EIA. The SLP does provide for the construction of four community centres that, based upon the needs of the community cited from the IDP, would be expected

				to house police stations as well as clinics (SLP, 98). However any further details are subject to Platreef liaising with the Department of Safety and Security. More details are required.
184	2	“There is concern about the rapid degrading of many roads due to the increase of economic activities throughout the District (increase in heavy vehicles with mining materials), the situation is exacerbated by a lack of maintenance and rehabilitation.”	No concrete implementable plan has been provided to alleviate this pressure and rapid degradation of the transport network. This degradation could cause social issues such as serve inconvenience for commuters travelling to work and schoolchildren to school. The improvement of road quality in the Project area is therefore necessary and will be an important aspect of any development Project requirements	Not addressed. Neither does the SLP contain clear measures to contribute towards addressing the transport situation. Detailed planning is required between all prospective mining companies, communities, Mogalakwena Municipality and the Department of Transport to ensure that EMPs, SLPS, IDPs and other relevant plans respond adequately to the demands placed by planned mining projects on the area.
185	2	“Currently the Mogalakwena LM’s capacity to develop and maintain infrastructure and deliver household services seems to be outpaced by population growth and the resultant increase in demand of services.”	Service delivery challenges will worsen as the population in the area swells. No plans have been made to combat this issue and residents would suffer enormously and dissatisfaction would grow rapidly as service delivery obligation continues to go unfulfilled.	Not addressed. See above.
187	4	“In recent public meetings discontent against mining houses were again	There is a general sense of mistrust in the area aimed at the platinum operations. More active and open	Not addressed. MIACC had to resort to a PAIA

		reiterated. During these meetings it became apparent that people perceive mines in the area to be untrustworthy, disrespectful, unfair and sowing division among community members and traditional leadership.”	consultations need to be facilitated whereby answers and certainty can be brought to the Platreef operations	application to obtain the draft SLP.
187	4	“Furthermore it became clear that massive employment expectations exist throughout local communities; if these expectations are not dealt with it might result in even more civil unrest.”	Accurate detailed expected employment figures must be provided to all I&AP’s.	Not addressed.
187	5	“In future community engagement should focus on the concerns of the majority of the people in the affected communities, and not only the traditional leadership of the area.”	A report containing the agreements made with traditional leadership must be released to ensure transparency in negotiations.	Not addressed.
187	5	“Mining houses should go through the proper channels to get the consent of the entire community, not just the traditional leadership.”	There is a sense that traditional leadership is not acting in the best interests of the community and the actual community is not invited to the decision-making table.	Concerns still remain
187	5	“Stakeholders recommended that corrupt practices should be avoided, especially when canvassing support from the community for mining activities, otherwise mining houses will encounter continued community resistance.”	No remedies are proposed to rectify these perceptions.	Not addressed in EIA/EMP. The social and labour plan does state that Platreef is working to prevent corruption in the context of community leadership structures (see CALS comments on SLP). However it is still uncertain

				what remedies Platreef has developed to prevent corrupt practices by its own management.
188	4	“A whopping 416 out of the 613 questionnaires received reported TB to being one of the most common illnesses in their communities.”	The rate of TB could increase with the influx of new residents. This is addressed at 8.5.2 (‘Health Impact Descriptions’). However the community based organisations (CBOs) and NGOs with whom the mine is to liaise on TB programmes are not identified.	Not addressed.
190	1	“Concerns were raised about the availability of water in the Project area to support the mine and related operations, as well as the needs for agriculture and domestic use.”	Impact of local water availability must be undertaken. Area is already water stressed and the mine must be mindful of the knock-on effects.	Not addressed.
190	3	“All five key health personnel interviewed listed HIV/AIDS as one of the top five most common illnesses that they treat...However only four Healthcare facilities stock Antiretroviral drugs (ARVs).”	Influx of migrant workers will cause an increase in HIV infection rates. Measures will need to be put in place to ensure a concomitant increase in access to treatment.	Not addressed.
191	5	“Should the mine lead to the emergence of more prostitution in the area there would be negative social and health connotations. There was also a concern raised that an influx of single male migrants from outside the area would place a burden on scarce resources and also cause an increase in the incidence of HIV and STI.	This is a major issue and the appropriate weight must be afforded to the prevention of such practices.	Still not addressed. It is vital that the causes of sex work – gender disparities that limit the ability of women to benefit from mining-derived economic opportunities and inadequate housing to accommodate the families

		Disadvantaged young girls and child-headed households would be extremely vulnerable to single men with disposal income.”		of migrant workers – be thoroughly addressed by the mine and government through clearly defined initiatives.
192	2	“Therefore food security is an important consideration in understanding potential health impact of development Projects. This EHA is affected by influx of people resulting in increased demand for food. Food shortage is a serious problem in the area.”	This is a major issue and the appropriate weight must be afforded to preparing for such an impact. Food shortage is one of the main health needs in the area. Malnutrition is linked to poverty and food security issues. Poor feeding practices related to poor education and illiteracy. Appropriate studies into preventing food shortages must be undertaken.	Not addressed.
194	2	“While the infrastructure was reported as sound it was mentioned at the KII and also the household surveys that the major challenge for health service delivery in the area was the deteriorating state of health service delivery at the hospital and clinic levels.”	This would worsen with the swelling of population numbers. New facilities must be built in order to accommodate such a trend. The training of staff must be a priority.	Not addressed in EIA/EMP. While addressed in the SLP the proposals lack detail (see SLP comments).
198	2	“Change in the Project Surface area due to Site Clearing.”	Mitigation measures do not assist the farmers who previously grazed cattle and cultivated land. Measures must be put in place to do so.	Not addressed.
200	2	“The TSF will remain beyond the closure phase of the proposed Platreef Project and will, therefore, have a permanent impact on the topography.”	This permanent structure would mean that land could never be utilised again. This permanent and irreversible impact on the residents on the area. There must be plans put in place for the future removal of the TSF planned to avoid this.	Not addressed.
201	4	“Spreading of Soil, Re-vegetation and	What is the timeline for this rehabilitation and at what	Not addressed.

		Profiling/Contouring.”	stage can farming commence on these areas?	
202	2	“Particular attention must be paid to the management of the activities that affect the topography so as to prevent the occurrence of soil erosion.”	What activities? Grazing and farming must be allowed to occur as it did before the construction of the development.	Not addressed.
204	2	“Post-Mitigation of the construction of surface infrastructure influencing the visual environment is categorised as medium to low.”	Incorrect. The visual impact will be significant. Mitigation measures will not be sufficient due to the close proximity of the infrastructure to neighbouring communities.	Not addressed.
205	1	“Post-Mitigation of the drilling, blasting and development of infrastructure and shafts for mining influencing the visual aspects of the project area is categorised as medium to low.”	Incorrect. The visual impact will be significant. Mitigation measures will not be sufficient due to the close proximity of the infrastructure to neighbouring communities. The mitigation required is not sufficient and strictly enforceable.	Not addressed.
205	3	“Post-Mitigation of adding material to the waste rock dumps, stock piles and TSF influencing the visual aspects of the project area is categorised as medium to low.”	Incorrect. The visual impact will be significant. Mitigation measures will not be sufficient due to the close proximity of the infrastructure to neighbouring communities. The mitigation required is not sufficient and strictly enforceable.	Not addressed.
209	2	‘Post-mitigation of loss of secondary grassland and agricultural fields is seen as low.’	Incorrect. These grasslands are crucial and form a distinct part of the grazing and agricultural areas used by farmers. Although partially degraded the value must not be underestimated as some areas have agricultural potential due to soil make up and rainfall reception. No alternative land is provided as a mitigation measure.	Not addressed.
210	2	“Post-mitigation of loss of general biodiversity is categorised as medium to low.”	Close proximity mining to very sensitive areas will cause an impact. The significance rating of medium-low is incorrect. The community depend on the health of these	Not addressed.

			significant areas to maintain a balanced ecosystem which they rely on greatly. The ecosystem is in an already vulnerable state and requires protection. Community members also depend heavily on the health of the biodiversity to support life and birds and fish in the areas for sustenance.	
211	1	"Post-mitigation of loss of floral SSC is categorised as medium to low."	Many of the plants that grow in the project area are utilised broadly by the community as medicine. This issue has not been factored in and therefore the significance should be rated as higher.	Not addressed.
211	1	"Post-mitigation of loss of faunal SSC is categorised as medium to low."	Community members depend on the faunal elements in the area for sustenance and therefore the significance should be rated as higher.	Not addressed.
212	2	"The post mitigation rating of the influx of alien invasive species is categorised as medium to low."	Aliens could become prevalent due to the clearing of all previous vegetation. These aliens could spread to nearby farms crops and cause damage to subsistence farming in the area. The significance should therefore be rated as higher.	Not addressed.
217	2	"The post mitigation rating of the introduction of dissolved elements and sedimentation is categorised as medium to low."	Sedimentation is a great risk to downstream users, especially rural communities that rely on the flow and quality of water to sustain the daily life. The significance rating must be raised to a higher level due to the importance of protecting the water resource.	Not addressed.
219	1	"The post mitigation rating of the reduction water quantity is categorised as medium to low."	The reduction of water quality could have significant impact on communities surrounding the mine and should not be underestimated.	Not addressed.
220	5	"The post mitigation rating of the	Increased runoff due to vegetation and veld removal	Not addressed.

		erosion due to clearance of site is categorised as medium to low.”	therefore decreasing infiltration into soil which may impact on downstream communities. This issue a very serious and the significance rating should be raised to a more appropriate level.	
223	2	“The post mitigation rating of the Spillages Occurring during the Temporary Storage of Hazardous Materials is categorised as low.”	The project area is located in a portion of South Africa that can receive a high amount of rain a in a short amount of time. Due to the proximity of the storage facilities to adjacent communities this does become a real threat to health and wellbeing. This rating should be raised.	Not addressed.
225	1	“Soil Compaction and Topsoil loss due to Erosion.”	Soil compaction and topsoil loss leading to reduced agricultural potential which will directly affect local farmers. Other mitigation measures must be considered.	Not addressed.
228	3	“Fugitive dust (containing TSP (total suspended particulate, will give rise to nuisance impacts as fallout dust), as well as PM10 and PM2.5 (dust with a size less than 10 microns, and dust with a size less than 2.5 microns giving rise to health impacts).”	The dust impacts on the adjacent communities will be continuous throughout the mines construction and operation. Because of the proximity of the mine to the surrounding communities these affects will be greater than medium to low and a more realistic significance rating must be provided.	Not addressed.
232	2	“Noise Generated due to Site clearing, Construction of Surface Infrastructure and Sinking of Vertical/Decline and Ventilation Shafts.”	During all phases there will significant noise and thereby nuisance caused by the activities taking place in and around the project area these will be felt acutely by the directly affected communities due to the close proximity of the mine and the affected communities.	Not addressed.
233	4	“The value of heritage resources located within the proposed Platreef Project will be determined based on criteria contained in Section 3(3) of the NHRA. These criteria have been summarised into four dimensions –	In accordance with their religious beliefs, community members have a very strong spiritual connection to grave sites and sacred areas. Due to the long history of the various tribes in the area, there is a profound connection to the land to which a great spiritual significance is attached. The weight attributed to this significance has	Not addressed.

		aesthetic, scientific, historic, and/or social value.”	been underestimated in the EIA. As most of the sites, some of which are very significant to the local community seems to be destined for destruction, further investigations into the perceptions of the people and their ties to these sites in these areas should be collated before they are destroyed.	
245	2	“First, potential impacts and the elements that combine to determine the socio-economic status of affected populations are multi-dimensional and interrelated. For example, insufficient access to services such as water, sanitation, health care is both a cause and an effect of poverty. (On the one hand, the lack of access to such services impacts negatively on health status, the opportunity to acquire market-related skills and the amount of time available for productive activities; on the other hand, poor people are often forced to live in areas where service delivery is limited or absent.) Thus, if a Project increases the availability of services in an area, the ability of surrounding communities to take advantage of these services may to some extent depend on their current socio-economic status.”	This is admitted in the document but the significance rating does not correspond to the importance reflected in this paragraph. There seems to be a disjunction between the significance professed to be taken into account when assigning significance and its actual translation into ratings. There also does not seem to be a formal plan for increasing the availability of services in the surrounding area by using the project as a vehicle.	Not addressed in the document. Addressed in the SLP but local economic development programs pertaining to basic services lack detail (see SLP comments).
246	2	“The proposed project has the potential to provide considerable employment to people within the local	How local content is to be identified is unclear. Numbers of jobs available do not seem to be certain. Skills required are not clear. The manner in which the youth and women	Not addressed in the EIA/EMP. Some of this is clarified in the SLP. The SLP

		and site-specific project area during the construction phase.”	will be focused on is not clear.	states that the tender conditions for contractors engaged during the 2014-2019 infrastructure development phase require all unskilled and 30% of semi-skilled labour to be recruited from local sending areas (SLP, 82).
246	3	“Platreef intends to employ at least 40% local labour for construction phase.”	More than 40% local content should be utilised. Local programs must be set up now in order to build the knowledge base in order to meet this local content goal.	Not addressed in EIA. An initiative in the SLP (business hub) is designed to address this but the details of the project are vague (see SLP comments).
247	1	“The proposed project will result in several economic benefits for local communities through direct and multiplier effects stimulated by capital expenditure and construction activities.”	Multiplier effect is not explained thoroughly enough. Which industries, how and when? The multiplier effect is often over-exaggerated with no solid implementation plans and verifiable to be considered plausible. In addition, there is invariably a corresponding negative multiplier effect through the harm mining causes to other sectors such as agriculture.	Not addressed.
247	4	“An important contribution of the proposed project will be the empowerment of previously disenfranchised communities.”	More information required on local procurement and local shareholding.	Not addressed in EIA/EMP. Procurement is addressed in one of the local economic development projects (the establishment of a business hub). The SLP does provide for shares being allocated to local communities, women &

				children, and employees but does not specify the arrangements for administration (including the make-up of the administration body and its relationship towards the intended beneficiaries).
248	3	“HDSA service providers might not be available, and those that are available might not have the capacity or skills to provide goods and services .”	Skills development of local service providers is necessary in order to contribute valuably to the project. No provisions for such skills development are indicated.	Not addressed in EIA/EMP. The SLP does respond to this issue through the establishment of business hubs where required skills and explanation of the vending list will be explained, though their proposed locations are still unclear (see SLP comments).
248	3	“A significant proportion of the construction and operational workforce will benefit from work experience as well a formal training programmes stipulated in the mine’s SLP, especially those individuals who start with a low level skill set.”	What are these numbers and how does the mine plan on achieving this? How does one quantify “significant”?	Not addressed in EIA/EMP. See SLP for targets.
248	3	“Early involvement of project beneficiaries.”	To our knowledge no beneficiaries have been contacted yet. When will this occur? The mine would like to begin operations next year but no beneficiaries have, to our	Not addressed.

			knowledge, been identified.	
250	1	“LED and CSI programmes have the potential to facilitate and catalyse socio-economic development within the project affected communities, as most of these communities have a relatively low socio-economic base.”	What types or programmes and who will be operating them?	Not addressed in EIA/EMP. The projects are contained in the SLP but many are insufficiently defined (see SLP comments).
251	2	“The nature and location of most project surface infrastructure options will result in economic displacement (where people lose access to cultivated land or other livelihood resources).”	What does “negotiate favourable outcome” mean? And favourable to whom? Who will be deciding the amount of compensation and how will it calculated? What are the thresholds for determining that a household is non-vulnerable?	Not addressed.
252	2	“Several sites designated for the mine infrastructure are [sic] situated on unpopulated, but arable land, often used for agriculture and grazing purposes. This will cause disruptions in the movement of the community in the area.”	The measures to combat this limitation in movement – which could have a severe impact on inhabitants’ ability to access services and economic opportunities - are unclear.	Not addressed.
253	3	“Construction activities are likely to result in an increase in traffic volumes on roads in the vicinity of the local project area. Traffic impacts affect the lives and well-being of people; it therefore also qualifies as a social impact.”	No mention of any plans for the improvement of roads in order to alleviate the traffic congestion.	Not addressed.
254	3	“The construction of the proposed	No practical mitigation measures are proposed which	Not addressed.

		project will represent a significant intrusion into the surrounding physical environment, which could impact on surrounding communities in various ways, this impact will likely continue into the operational phase of the project, but will be most prominent during the construction phase.”	would improve the levels of noise suffered by communities residing in close proximity to the mine.	
255	4	“An important contribution of the proposed project will be the empowerment of previously disenfranchised communities. Platreef intends to transfer a 26% stake in the mine to affected communities (most of which have HDSA status), women and children, and employees.”	How will the recipients be identified and who will be making these identifications? It is vital that traditional leaders should not be given carte blanche to identify recipients and hand over shares.	Not addressed.
256	3	“A proportion of the construction workforce for the project will be locals, while at least a certain percentage of semi and highly skilled employees will be sourced from elsewhere in South Africa.”	What percentage of local skilled workers will be placed with the mine?	
257	3	“An influx of job-seekers into the area, combined with the presence of an additional workforce, will place considerable pressure on local infrastructure and services.”	What plans has been made to effectively reduce the impact on a local level? As infrastructure pressure is already a problem how will additional pressure be countered? Co-ordination with government will be required on the necessary up-scaling of infrastructure and service provision.	Not addressed.
258	4	“An influx of job-seekers into the area, combined with the presence of an	Which financial and infrastructure plans have been made to prepare the area for this influx, this is not made clear.	Not addressed.

		additional workforce, will place considerable pressure on local infrastructure and services.”	Given that informal settlements are already a problem how will additional pressure be countered?	
260	1	“Impact of community attitudes and actions on the project. The impact assessed here pertains to the fact that perceptions regarding potential negative project impacts.”	Sustained negativity will not disappear if the concerns of the community are not meaningfully addressed.	Not addressed.
261	3	“Impact of community attitudes and actions on the project. The impact assessed here pertains to the fact that perceptions regarding potential negative project impacts.”	The SLP must be clear and implementable. If the community perceives the SLP to be a failure this could have serious consequences.	Several of the SLP initiatives lack clarity (see SLP comments).
262	3	“Impact of community attitudes and actions on the project. The impact assessed here pertains to the fact that perceptions regarding potential negative project impacts.”	What are the measures recommended for maximising benefits from local employment, skills and economic development?	See SLP.
263	3	“Dependency on Mine for Sustaining Local Economy.”	What are the long term plans that will ensure the mines legacy is a positive economic one?	Not addressed in EIA/EMP. SLP contains a section on post-closure arrangements as is required.
264	3	“The impact assessed here pertains to the fact that perceptions regarding potential negative project impacts.”	What types of education programmes will be provided to inform the public of the effects of the project?	Not addressed.