

Meeting minutes

**Environmental
Resources
Management**

Subject/Ref Air Products Acetylene Gas Production Facility:
Draft Environmental Impact Phase Public Meeting

Building 32
1st Floor
The Woodlands Office Park
Woodlands Drive
Woodmead, 2148

Venue Japie Greyling Primary School, Daleside

Date of Meeting 24 July 2014

Facsimile
Email

Time of Meeting 5:00 pm

Present

ERM

Warren Kok

Lisa Otten

Melissa Naidoo

Gary McFadden

Air Products

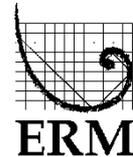
Barry Little

Tom Maclean

Public

Please refer to the Attendance

Register attached to these minutes



Melissa Naidoo welcomed the community for attending the public meeting and introduced the Project Management team. A detailed presentation was provided to the community highlighting the following:

- Project Team and associated companies;
- Purpose of the meeting;
- Project Background;
- Project Description;
- Social Contribution;
- EIA process;
- Impacts and mitigation;
- Major Hazard Risk Assessment; and
- Open discussion.

Attached:

Meeting Attendance Register
Presentation Slides

Meeting minutes

	Comment	Commentator
Comments received during the Open House Event		
1.	<p>How much local employment will be created as a result of the proposed project? Will service providers such as gardening, etc. be subcontracted?</p> <p><i>During construction an estimated 15 - 20 people will be employed. In addition 5 people will be employed during operation. Where possible service providers will be sourced locally first. Should the skills not be found within the area, it will be sourced from outside of the area.</i></p> <p>The local council already has a database of people who are unemployed in the area.</p>	<p>Clr. Rob Jones</p> <p><i>Melissa Naidoo</i></p> <p><i>Noted</i></p>
2.	<p>Is there a leak detection system in place?</p> <p><i>A leak detection system will be installed for the plant itself which will include area monitor alarms used to monitor acetylene in the atmosphere.</i></p>	<p>Midvaal Local Municipality</p> <p><i>Melissa Naidoo</i></p>
3.	<p>Worldwide, do you know of any accidents?</p> <p><i>To date the South African plants have not had any major incidents in the last 40 years. ERM will confirm if any accidents have occurred internationally.</i></p>	<p>Clr. Rob Jones</p> <p>???</p>
4.	<p>Will the two boreholes be utilised for process or domestic purposes? Will a WULA (Water use licence application) be necessary?</p> <p><i>The two boreholes will not be used during the construction and operation of the plant; therefore a WULA will not be necessary. Rainwater will be collected for the production process and will be supplemented by municipal water.</i></p>	<p>Midvaal Local Municipality</p> <p><i>Melissa Naidoo</i></p>
5.	<p>Is there enough water available, as the adjacent dolomite mine is also extracting and using water?</p> <p><i>Water will not be extracted for the Air Products Facility. As mentioned, rainwater will be harvested and used, supplemented by Municipal water supply when needed.</i></p>	<p>Clr. Rob Jones</p> <p><i>Melissa Naidoo</i></p>
6.	<p>Is there a sewer system?</p> <p><i>The plant will have its own chemical waste water and sewage treatment plant link into the existing sewer system. It should be noted that the total number of people on site during operation will be 10; therefore sewer system should not require additional capacity.</i></p>	<p>Clr. Rob Jones</p> <p><i>Melissa Naidoo</i></p>

Meeting minutes

	Comment	Commentator
7.	<p>Have Eskom been contacted for the substation? <i>Negotiations with Eskom have been undertaken and approval has been received in principal. A formal letter will be received in due course.</i></p>	Midvaal Local Municipality
8.	<p>What is the height of the stack? In terms of aviation, is authority comment required? <i>There is no stack; however the height of the plant will be between 10-12m. Thus aviation approval will not be required.</i></p>	<p>Clr. Rob Jones <i>Melissa Naidoo</i></p>
9.	<p>Is an air emissions licence needed? <i>Yes, an application to the local council has been made for an air emissions license. A license will only be issued once the project has been issued with an Environmental Authorisation.</i></p>	<p>Midvaal Local Municipality <i>Melissa Naidoo</i></p>
10.	<p>How will domestic and hazardous waste be controlled / disposed of? <i>Operational waste includes domestic waste (paper, tin, food etc.), scrap metals, waste lubricants, fluorescent tubes etc. The facility will identify and classify all wastes generated on site and a waste inventory developed. Only approved and licensed waste transport contractors will be used to collect and transport wastes off site to the respective suitably licenses disposal or recycling facilities.</i></p>	<p>Clr. Rob Jones <i>Melissa Naidoo</i></p>
11.	<p>Landfill sites that should be considered: Walkerville and Val Marina. Henley-on-Klip Landfill site has been closed. <i>Comments noted and will be included in the Final EIR.</i></p>	<p>Clr. Rob Jones <i>Melissa Naidoo</i></p>
12.	<p>Traffic impact study – both graphs in the report are labelled ‘morning’ traffic measurements. <i>ERM to rectify this in the Final EIR.</i></p>	<p>Clr. Rob Jones <i>Melissa Naidoo</i></p>
13.	<p>The Daleside access road should not be used because it is very steep. <i>This comment will be included in the Final EIR.</i></p>	<p>Clr. Rob Jones <i>Melissa Naidoo</i></p>
14.	<p>Will stormwater management be part of the WULA? <i>A WULA is not required. Catchment pits will be established on site for the collection of rain water, to supplement this supply municipal water will be utilised if necessary. Run-off from potentially dirty areas will be diverted to a recycled process water system for purification and reuse. Stormwater run-off</i></p>	<p>Midvaal Local Municipality <i>Melissa Naidoo</i></p>

Meeting minutes

	Comment	Commentator
	<i>from clean areas will flow into the catchment pits to the east of the site. A stormwater management plan and drainage design will be developed prior to construction and will be in accordance with the Air Products Design of Drainage Procedure (February 1999).</i>	
15.	<p>What measures are put in place for nesting birds on site?</p> <p><i>A portion of the site will not be developed, and the trees in this area will remain. In addition, no red data fauna or bird species were identified by specialists during the ecological scan and study.</i></p>	<p>Midvaal Local Municipality</p> <p>Warren Kok</p>
16.	<p>Are their plans to plant indigenous trees on in peripheral areas or off site?</p> <p><i>Trees in close proximity to the plant are a risk as they could be a combustion source. All vegetation used to rehabilitate the site will however be indigenous though.</i></p>	<p>Clr. Rob Jones</p> <p>Warren Kok</p>
17.	<p>Does visual impact need to be assessed?</p> <p><i>The visual impact was assessed in terms of height of the plant in relation to the surrounding environment. Since the maximum height of the building will be 10 – 12m, the visual impact was considered negligible.</i></p>	<p>Midvaal Local Municipality</p> <p>Warren Kok</p>
18.	<p>Are Air Products and ERM aware of the EIA process for a tyre pyrolysis plant (S24G)?</p> <p><i>Yes. This has been described in the Draft EIR and assessed as a cumulative impact. Further developments in the area have also been considered including the Daleside Oil Skip and the Glen Douglas Mine.</i></p>	<p>Clr. Rob Jones</p> <p>Warren Kok</p>
19.	<p>Have all specialist studies been conducted and signed off?</p> <p><i>All specialist studies have been conducted and reports submitted and included as annexures to the Draft EIR. Impacts raised by specialists have been rated as negligible – minor significance ratings except for the release of PM₁₀ emissions during construction which was given a moderate significance rating after mitigation.</i></p>	<p>Midvaal Local Municipality</p> <p>Warren Kok</p>
20.	<p>What will the maintenance of this site be like in 5-10 years? For instance, will they operate at night?</p> <p><i>The plant will operate for 24 hours/day, Monday to Friday.</i></p>	<p>Clr. Rob Jones</p> <p>Barry Little</p>

Meeting minutes

	Comment	Commentator
21.	<p>Is there a safety and emergency responses plan in place for trucks transporting products to and from the Plant?</p> <p><i>All transport will be in accordance with Air Products Standard Operating Procedures (SOP) for Product Distribution.</i></p>	<p>Midvaal Local Municipality</p> <p><i>Barry Little</i></p>
22.	<p>If a truck breaks down in the middle of summer – is there a way to transfer the product? How much time before an explosion etc?</p> <p><i>A replacement vehicle will be sent immediately. The site is not that remote from Johannesburg and vehicles can be dispatched the same day. The storage vessels are specifically designed to accommodate extreme conditions, the risk is therefore negligible.</i></p>	<p>Clr. Rob Jones</p> <p><i>Barry Little</i></p>
23.	<p>Should a fire occur will there be a linkage to the fire department? Will neighbouring properties be included in the evacuation process?</p> <p><i>The Fire department will need to sign off an authorisation: The Major Hazardous Installation (MHI) Risk Assessment and emergency response plan both will be signed off by fire department.</i></p> <p><i>The risk of fire/explosion is limited to the site itself therefore the evacuation procedures do not include the neighbouring properties. Stakeholder engagement will continue post approval by a grievance procedure.</i></p>	<p>Clr. Rob Jones</p> <p><i>Gary McFadden</i></p> <p><i>Barry Little</i></p>
24.	<p>What is the purity of the acetylene gas?</p> <p><i>The acetylene gas is an odourless gas produced in a closed system.</i></p>	<p>Derek Harry</p> <p><i>Barry Little</i></p>
Comments received during the Public Meeting		
1.	<ul style="list-style-type: none"> • What is the projected wind direction used for the MHI modelling? <p><i>The MHI model looks at max wind speed in all directions, using wind roses</i></p> <ul style="list-style-type: none"> • Are both products gas? <p><i>No, acetone will be in liquid form</i></p> <ul style="list-style-type: none"> • What kind of wall will be constructed? <p><i>A 2.2m semi-face brick perimeter wall will be constructed. The entrance to the plant will be a full face brick structure.</i></p>	<p>Sam Blake</p> <p><i>Gary McFadden</i></p> <p>Sam Blake</p> <p><i>Gary McFadden</i></p> <p>Sam Blake</p> <p><i>Gary McFadden</i></p>

Meeting minutes

	Comment	Commentator
	<ul style="list-style-type: none"> <li data-bbox="174 252 1039 279">• The area is conducive to severe lightning strikes. Has this been investigated? <i>Yes, this has been included in the MHI risk assessment. Lightning protection will be included in the roofs and ground, according to NFPA standards.</i> <li data-bbox="174 371 779 459">• What is the capacity of the holding water tank area? <i>4500m³ each</i> <li data-bbox="174 491 1563 579">• Will the boreholes be utilised? <i>This has been investigated, and considered not feasible as it is a - lengthy and costly process. Therefore rainwater will be collected and used.</i> <li data-bbox="174 611 1496 699">• Has a dolomite assessment been undertaken? <i>A dolomite screening has been undertaken. Air Products have appointed civil engineers for the design and construction of the plant.</i> 	<p data-bbox="1682 252 1800 279">Sam Blake</p> <p data-bbox="1682 311 1845 338"><i>Gary McFadden</i></p> <p data-bbox="1682 371 1800 399">Sam Blake</p> <p data-bbox="1682 430 1845 458"><i>Gary McFadden</i></p> <p data-bbox="1682 491 1800 518">Sam Blake</p> <p data-bbox="1682 550 1800 577"><i>Barry Little</i></p> <p data-bbox="1682 611 1800 638">Sam Blake</p> <p data-bbox="1682 670 1800 697"><i>Warren Kok</i></p>
2.	<p data-bbox="174 727 551 754">How will the unemployed benefit?</p> <p data-bbox="174 786 1653 898"><i>The plant will consist of the latest technology, and a small staff complement will be required, this has the added benefit that few people will be at risk if an accident occurs. The Plant Manager has already been appointed because of the highly skilled nature of the role. Other semi-skilled and unskilled positions will be sourced from the local community where possible. Further employment through peripheral services such as security and cleaning services exist. Air Products will advertise for jobs in 2015.</i></p>	<p data-bbox="1682 727 1872 754">Tebogo Mokoena</p> <p data-bbox="1682 786 1800 813"><i>Barry Little</i></p>
3.	<p data-bbox="174 935 1536 962">Would the staff located at the Kempton Park and Pinetown plants be retrenched as a result of the decommissioning of the plant?</p> <p data-bbox="174 994 1352 1021"><i>These plants are both part of bigger production facilities and therefore the employees will be utilised elsewhere at the plant.</i></p>	<p data-bbox="1682 935 1800 962">Sam Blake</p> <p data-bbox="1682 994 1800 1021"><i>Barry Little</i></p>
4.	<p data-bbox="174 1054 1659 1114">Why was this date/time proposed for the public meeting? This is an inconvenient time for the community. Is there the possibility of another meeting taking place which can be advertised better e.g. newspaper advert?</p> <p data-bbox="174 1145 1621 1198"><i>This is a possibility and depending on feedback from the community and comments received further on the Project, it will be considered. From ERM's experience, weekday nights are usually better and the time of this meeting was brought forward on public request.</i></p>	<p data-bbox="1682 1054 1832 1082">Abbie Carson</p> <p data-bbox="1682 1145 1800 1173"><i>Barry Little</i></p>

Meeting minutes

	Comment	Commentator
5.	<p>800 SMS's sent out to community via the Volunteer Group and many couldn't attend because of the time. Need to advertise better.</p> <p><i>Comment noted. Notification and stakeholder engagement efforts have been aligned with the relevant EIA Regulations.</i></p>	<p>Leon Kirchner</p> <p>Warren Kok</p>
6.	<p>What are the health risks to the community?</p> <p><i>A variety of specialists have been consulted to address the potential impacts on the community including health and safety. The biggest concern is fire/explosion which is addressed in the MHI. This risk will mostly be an on-site risk.</i></p>	<p>Unknown</p> <p>Gary McFadden</p>
7.	<p>Any Smells?</p> <p><i>Acetylene gas is odourless. While acetone is associated with an odour, product will be stored and transported in closed units while the production process itself is in a closed facility.</i></p>	<p>Leon Kirchner</p> <p>Barry Little</p>
8.	<p>What grade is the lime? Where is it specifically used? Suggested proposal to Air Products to not sell/give lime away but instead contribute towards an NPO and in turn uplift the community.</p> <p><i>The Lime is a by-product of the production process and is in hydroxide form (so yes it is hydrated).</i></p> <p><i>Limeco: will remove the dewatered "cake" which will be trucked to KZN for a variety of purposes, including the whitewashing of walls. The alkaline nature of lime makes it also useful for furnace processes.</i></p> <p>A suggestion by Peter Falke has been noted, who has asked if it would be possible for Air Products to give the lime away instead of selling it. A Not-Profit Organisation could be established to benefit local communities, who would then sell the lime on or use it in other applications.</p> <p><i>Air Products committed to exploring this further in future.</i></p>	<p>Peter Falke</p> <p>Barry Little</p> <p>Barry Little</p> <p>Peter Falke</p> <p>Barry Little</p>
9.	<p>Will the plant be another Heineken facility that claims not to create any odour, but once constructed does not live up to this claim, would Air Products close the facility?</p> <p><i>Barry Little (Air Products) had stated that in the event of the emission of a bad odour emitting from the plant, Air products is committed to stopping production until the odour problem has been dealt with.</i></p>	<p>Stan Wallis</p> <p>Barry Little</p>

Meeting minutes

	Comment	Commentator
10.	<p>Has rezoning already been done?</p> <p><i>Yes, site is zoned Industrial 3.</i></p>	<p>Leon Kirchner</p> <p><i>Barry Little</i></p>
11.	<p>Are you aware that you will be opposite the Glen Douglas Mine and the proposed smelter to be constructed at the mine?</p> <p><i>Air Products responded yes, and that they are a registered I&AP for this project. ERM have considered the cumulative impacts of this Mine.</i></p>	<p>Stan Wallis</p> <p><i>Barry Little</i></p>
12.	<p>“I have worked next to the Air Products plant in Vanderbijl Park for a number of years. I have noticed that a lot of gas is released into the environment on a number of occasions. Will the releasing of these gases be considered safe to the environment?”</p> <p><i>The plant in question is the Arcelor Mittel Plant for which Air Products supply gas. This includes the separation of air to its separate components such as oxygen, nitrogen, argon, carbon dioxide and methane. The gas emission you see is the release of excess air gasses particles back into the environment, which is perfectly safe to the environment and people. The I&AP is therefore referring to this release of gases from storage tanks which is quite safe.</i></p>	<p>Yusuf</p> <p><i>Barry Little</i></p>
13.	<p>What are the operating hours for the plant?</p> <p><i>24 hours/ 5 days a week. Noise disturbance will be negligible as 6 compressors will be set in water baths, within the plant building.</i></p>	<p>Allan</p> <p><i>Barry Little</i></p>
14.	<p>Have sound tests been done?</p> <p><i>Yes, decibel level – 85 Db. Staff will not need to wear ear protection. Nuisance sound level – negligible.</i></p>	<p>Abbie Carson</p> <p><i>Barry Little</i></p>
15.	<p>Why is it necessary for the plant to operate for 24 hours?</p> <p><i>For financial feasibility reasons this is necessary as the gas production is a 12 hour process. Process will be in a shift cycle (6am – 6pm) (6pm -6am). Trucks will move during day time to minimise risks.</i></p>	<p>Abbie Carson</p> <p><i>Barry Little</i></p>
16.	<p>What is the size and scale of driers?</p> <p><i>The driers are 3.5m x 4m. These may be replaced by the Pressure Swing Adsorption (PSA) system. The plant itself will be about size of the school hall with the height at a max of 10 - 12m.</i></p>	<p>Sam Blake</p> <p><i>Barry Little</i></p>

Meeting minutes

	Comment	Commentator
17.	<ul style="list-style-type: none"> • How will the water in the Dams be neutralised? <i>Dam water is harvested rainwater therefore doesn't require neutralisation. The process water will be cooled and re-used in a closed loop system</i> • Will the Calcium Carbide (CaCO₃) create an odour? <i>The Calcium Carbide container will be sealed at all times during the process. On the off-chance that there are problems at the supply point CaCO₃ may be supplied in drums.</i> • How much Nitrogen Oxide (NO_x) will be released into the environment. ? <i>Negligible NO_x emissions are expected during the operation phase.</i> • Who will be the watchdog? <i>Air Products will be responsible for monitoring themselves.</i> <i>There are national authorities that also provide a watchdog function, and a community based Environmental Monitoring Committee can also be established if the community would like.</i> 	<p>Allan</p> <p>Barry Little</p> <p>Allan</p> <p>Barry Little</p> <p>Allan</p> <p>Barry Little</p> <p>Allan</p> <p>Barry Little</p> <p>Warren Kok</p>
18.	<ul style="list-style-type: none"> • The community is highly sensitive to a plant that will generate noise or odour. The community should not have to police/monitor these plants. <i>Air products agreed with this statement.</i> • Biggest concern - will the Meyerton Fire Department be able to manage an incident? Has this been confirmed? <i>Air Products has had a meeting with the fire chief and appointed Robbie Wouters Tim Brackenhurst, a fire consultant, to do an assessment of the site. Air Products will have an on-site and off-site emergency plan.</i> • Air Products' community involvement shouldn't include the upgrade of Tilliet road as this should be part of the Municipality bulk contribution for rezoning, mainly given to municipality to improve services. Upgrading the road would be to Air Products own 	<p>Wynand Engelbrecht</p> <p>Barry Little</p> <p>Barry Little</p> <p>Noted</p>

Meeting minutes

	Comment	Commentator
	<p>advantage.</p> <ul style="list-style-type: none"> • A Geological investigation has been undertaken by a group of banks which identified the area as prone to sinkholes. Has this been considered? <p><i>The plant itself will be a "light" structure. Detailed investigation will be undertaken if requested by the Authorities.</i></p> <ul style="list-style-type: none"> • Public meeting, as suggested, was made at an inconvenient time. <p><i>Noted.</i></p> <ul style="list-style-type: none"> • Community hopes that a friendly relationship with Air Products will continue once the plant is operational. <p><i>This is appreciated and Air Products further suggests that there needs to be relationship between both parties. Air Products commit to an open day when the plant becomes operational and an on-going relationship with the community.</i></p>	<p>Wynand Engelbrecht</p> <p><i>Barry Little</i></p> <p>Wynand Engelbrecht</p> <p><i>Barry Little</i></p> <p>Wynand Engelbrecht</p> <p><i>Barry Little</i></p>
19.	<ul style="list-style-type: none"> • Air Products should take note that the community has been faced with a double "threat" with Air Products and Glen Douglas. The Community are appreciative of the transparency demonstrated by Air Products during this meeting. <p><i>Noted</i></p> <ul style="list-style-type: none"> • With regards to the Air Quality significance rating, the air quality is already so poor so it seems unlikely that any new projects could possible make it worse. • Rain water collection points - are these all the over the site? <p><i>The slope of the plant will mean that the maximum amount of rainwater will be collected in the dams during the 6 month rainfall period. Air Products therefore hopes to commence with the construction of these dams in January to capitalise on the rainy season.</i></p>	<p>Sam Blake</p> <p><i>Warren Kok</i></p> <p><i>Noted</i></p> <p>Sam Blake</p> <p><i>Barry Little</i></p>
20.	<p>High volumes of lime as a by-product are therefore expected. Will white strips of lime on roads occur? Will the lime pits be open or closed?</p> <p><i>Pits have got an additional safety volume to prevent spills. Contractors have ensured their capacity for removal of 100% of the lime. A high pressure hose will be used to wash the lime allocation area and trucks before they leave the site. Tanker Services are currently used to remove the lime slurry at the</i></p>	<p>Yusuf</p> <p><i>Barry Little</i></p>

Meeting minutes

	Comment	Commentator
	<i>existing sites and will likely be used at this site too. Lime cake will be bagged prior to transport and are not expected to create any mess.</i>	
21.	<ul style="list-style-type: none"> <li data-bbox="174 285 1675 341">• The Department of Minerals and Energy (DME) requires social labour plans – is this the same for gas producers? Are the social upliftment plans regulated or up to the proponent to decide and implement? <i>The social and labour investments at mining operations are governed by the Minerals and Petroleum Resources Development Act, which regulates all mining activities. The proposed acetylene production facility is regulated under the National Environmental Management Act (NEMA). Under this Act, the applicant is not obliged to submit social or labour plans and their only obligation is to mitigate any impact on the community. Anything extra is above and beyond. Social upliftment / contribution is at the discretion of the applicant.</i> <li data-bbox="174 520 1675 608">• Does the Municipality have any authority in this application? <i>The Municipality has authority with regards to by-laws, rates and taxes, and approval of building plans.</i> <li data-bbox="174 639 1675 727">• Is Air Products commitment to social development in the area ad-hoc or long-term? <i>Air Products have committed to a long term development. This may be documented in the EMPr which will therefore become legally binding.</i> 	<p data-bbox="1682 285 2110 320">Allan</p> <p data-bbox="1682 373 2110 408"><i>Warren Kok</i></p> <p data-bbox="1682 520 2110 555">Allan</p> <p data-bbox="1682 576 2110 611"><i>Warren Kok</i></p> <p data-bbox="1682 639 2110 675">Allan</p> <p data-bbox="1682 695 2110 730"><i>Barry Little</i></p>
22.	<p data-bbox="174 732 1675 767">What is the approximate amount Air Products are paying for local rates and taxes on their Site?</p> <p data-bbox="174 788 1675 847"><i>Paying rates and taxes on even as two separate entities. – +/-R2500 per month for both however this is not definite. Should be noted that one Erf has no infrastructure.</i></p>	<p data-bbox="1682 732 2110 767">Stan Wallis</p> <p data-bbox="1682 788 2110 823"><i>Barry Little</i></p>
23.	Warren Kok thanked the public for attending and providing their feedback and comment. The meeting was adjourned at 7:45pm.	

Melissa thanked the community for attending the meeting and adjourned the meeting at 8:15pm.