CHUNXING ULAB
Community Liaison Committee Meeting
08.09.2021
7.00pm
Zoom Meeting

Agenda Items & Minutes

Topic	Host
Welcome Committee Members and Visitors	Richard Elkington
Apologies	Richard Elkington
Approval of Minutes from Last Meeting Leanne Norwood did not approve the previous meeting minutes, specifically the donation of $10000 made to the Lions Club. Leanne believed the only community group suggested was the Gippsland Emergency Relief Fund by Lorraine Bull, as they were specifically set up for fire and flood relief across Gippsland, and would not single out any one group or town. Leanne was surprised and disappointed that a discussion was had after the CLC meeting between Dr Lakshman and other committee members. Leanne believed it was something everybody should discuss. Richard Elkington agreed with Leanne. Mark Richards also confirmed the donation wasn't decided at the meeting. Richard advised we needed to vary the minutes to reflect this. Dr Lakshman advised he wanted to give the donation to a grass root level organisation. Dr Lakshman advised he had supported GERF in the past and preferred to give the donation to a direct fund to be used immediately. Dr Lakshman agreed it was not decided during the meeting, but after being presented with several options decided to donate to the district Lions Club. Dr Lakshman advised it is Chunxing policy to give donations directly to the community. Dr Lakshman also advised he had previously given $5000 to GERF and had not received any acknowledgement of the donation. Richard Elkington moved that it be recorded that the decision was made post the meeting to give the money to the Gippsland Lions Club. Philip Reichert acknowledged the CLC had several email communications regarding the donation after the CLC meeting, and due to the nature of the disaster was important to get the money to the community members in need in a timely fashion. Philip suggested in the future the CLC committee give Chunxing the top three suggestions to consider for donations in similar situations. Richard requested the current minutes recognise that Chunxing did not make the decision to donate at the previous CLC meeting, but has subsequently donated $10000 to the Gippsland Lions Club. The remainder of the minutes were approved.	Richard Elkington

Project Status Report Robin Krause advised Chunxing have submitted eight reports to the EPA. The EPA have requested additional information on three of these reports. Chunxing have employed previously engaged consultants and additional new consultants to assist in providing the additional information, including a more detailed design of the storage ponds and concrete bund wall. Consultants are also updating the plant pumping and water management systems. Chunxing plans to submit the updated reports next week. The baseline land and ground water report have also been updated to include additional details for the EPA. Additional details have also been added to the Construction Environmental Management Plan and the Communication and Engagement Plan. The EPA has agreed that when approved these reports will allow Chunxing to move forward with construction. Robin advised an additional four reports will be considered for approval by the EPA at that time. Robin advised an additional six reports have been submitted to Latrobe City Council. Four of these reports required some additional information. Chunxing are ensuring all reports submitted to the various government departments are identical, including drawing numbers and revisions to ensure consistency. Richard asked what the regulatory role in the Latrobe City Council is. Robin advised the Council assess the water management plan, carparking, landscaping, environmental discharges, and water treatment. These reports are being updated and will be resubmitted. Additionally Chunxing have been looking at the civil construction sequences, movement of materials around the building site, and planning final concrete levels. Pro Draft have being providing up to date drawings for this stage of planning. The next part of the submission will include final contour and building levels. Richard asked if Chunxing was experiencing any delays from the EPA or Latrobe City Council. Robin advised responses were timely. Chunxing have been asked to expand areas of the reports that the consultants considered were complete, but now require more detail. A number of sections needed expanding and have had some extra sections added before being resubmitted. Maggie Jones asked if movement of materials and getting ready for construction could start before the reports had been endorsed. Robin advised Chunxing had to have approvals to begin construction, but while waiting for the reports to be finalised and resubmitted, were moving forward to the stage that when approvals were granted construction could begin. This would avoid a three or four month delay in starting construction. Robin advised the next stage will be getting the equipment and installing it in the building. Richard asked if there were any shovels in the ground yet, Robin advised no, but they may be soon to install the air monitoring station on the block.	Robin Krause
Baseline Background Air Monitoring Robin advised that Chunxing have been engaged in finding a consulting and manufacturing company that can provide continuous air monitoring. Chunxing are looking at two consultants that have similar products. Chunxing are looking at installing an air monitoring system at the plant in the south east corner and one close to Hazelwood North Primary School. Bronwyn Woodward is looking at allowing Chunxing to install an air monitoring tower on her property, which will allow recording of background monitoring of what is currently occurring in the Latrobe Valley. Chunxing will be monitoring carbon dioxide, sulphur dioxide and nitrous oxide. Chunxing will also conduct dust sampling using a heated element that is not affected by moisture. The dust will be collected monthly and analysed in a lab that will provide a background level of lead or any other contaminants in the air prior to Chunxing starting construction.	

Dr Lakshman advised we are still negotiating with Bronwyn on placement of an air monitoring station on her property. Bronwyn advised she has agreed to the placement in principal but will have to check on the most beneficial site. Bronwyn advised she will discuss with Robin where the best place for the tower would be. Bronwyn explained both sites are on the southwest/east side, and the prevailing winds are more south westerly, so the wind may not hit the monitoring stations. Karen Egan from Latrobe City Council asked if Chunxing had checked the zoning of the land where the air monitors are planned on being installed and if permits are required to put them in place. Robin advised Chunxing are looking at sites before progressing to the next stage. Richard asked if there was going to be some contractual arrangement to ensure the towers stayed in place for a period of time, for example if Bronwyn was to sell her property, to avoid inconsistency with monitoring. Mark also asked about the neighbouring magnesium plant that was planning to go into production in 2022, presuming they will be doing earth movements prior to opening and disturbing materials with contaminants and potentially lead . Mark asked if that had been taken into consideration and how does Chunxing mitigate that. Robin advised air monitoring on Chunxing's site is upwind of the magnesium plant. The Chunxing towers are placed to monitor how our site and other nearby industries are affecting the baseline air quality. Mark asked if we were going to pay someone to place the air monitoring tower on their property, Robin agreed this may be the case. Maggie asked if the monitoring stations were fence line monitors or if we were adding additional fence line monitors. Robin advised the air monitoring towers were external to the plant and that Chunxing also has pollution monitoring on the stack, and the 5 stages before the stack, which allows for adjustment of process to minimise any dust contamination. Robin advised there are three levels of filtration, baghouse, lime dosed scrubbers and a wet matrix. If the gas has any dust still present it goes through a water filtrate system, so that all that is going out the top is gas and no dust. Maggie asked if there were any fence line monitors to capture any potential fugitive emissions, or ground level concentrations within the site. Robin advised that was why we had an air monitoring station on the southeast corner of the block in line with the westerly winds and the chimney. Maggie asked if there was going to be a monitor near the site cooling pond, which isn't under full enclosure. Robin advised the pond has a canopy over it and is under negative pressure. Maggie asked if there was a monitor on the west side to see if the plant was emitting fugitive emissions. Robin advised there wasn't, but Chunxing would consider this area for a monitor. Richard Elkington speculated that the EPA would have an interest in the cooling pond enclosure. Richard asked Stacey Clark if she had a position on the issue. Stacey advised it was too far in the future to consider operating licences and what monitoring conditions might be required of Chunxing, but it could be something that's required.	Robin Krause
Questions & Responses from Previous Meeting Community Forum - Robin advised Chunxing will be pleased to hold a community forum when covid restrictions allow. Site pond water - Robin advised there would be no uncontrolled discharge from the site. Chunxing is organising a trade waste agreement with Gippsland Water to discharge trade waste to the sewer. Reports - Robin discussed previously in the meeting. No water leaving site - Robin will discuss in storm water controls. Is there time to test water prior to release - Robin advised because we have eight ponds Chunxing can test the water at various levels and will mainly be discharging from the plant water pond into trade waste, not from rainwater.	

How can negative pressure be maintained - Robin advised that Chunxing will have controls on the doors that can be locked if the plant started to lose negative pressure. Chunxing also has a third fan for extra assurance, which is above and beyond the negative pressure design requirements. Chunxing has 2 x 110Kw fans, and 1 x 200Kw fan. Leanne asked if Gippsland Water is taking trade waste and if no clean water will be discharged into the sewer. Leanne wanted to know if this water goes into the swap line. Robin advised there was a sewer line on the south edge of the Chunxing site boundary, which is allocated to discharge trade waste. Robin advised that he thought the water goes into the water treatment collection system. Leanne advised she was told that if it was part of the swap line that goes to the Firmins Lane pumping station, where a lot of industry water goes, from there it gets pumped out to sea. Mark Richards advised that Yallourn Power Station, Loy Yang and Hazelwood Mine bore water also pump into this system which then goes to Duttson Downs. Mark also advised it is a controlled system, flow measured, and ph tested. Robin advised Chunxing have to meet the trade waste agreement conditions. Chunxing require ph monitoring and control to discharge plant water. Mark and Richard advised it would be considered industrial waste rather than sewerage. What is category C soil - Robin advised Category C can be used on an Industrial Zone 2 Site. If removed from a Zone 2 Site it becomes a hazardous material. Baseline measurements have been taken to confirm it is category C. Richard asked what was in the soil. Robin advised he doesn't have all the information but due to use from the Lurgi gas plant there are some minor hydrocarbons and some heavy metals in some areas. There are two contamination zones on the site that cannot have an enclosed building constructed over the top as it has the potential to leak hydrocarbons into an enclosed building. The concrete bund area is inside the zones so the contaminated areas remain undisturbed. How is the soil reconditioned - Robin advised Chunxing may blend clay with the silt material, compacting the silt by itself, or have an additive like lime or cement to consolidate the materiel. A compaction factor of 25% would be used. Seasonal factors, will wind blow lead dust across the community - Robin advised there were no measurable levels of lead in the soil. During construction Chunxing will control dust with water suppression and runoff will be controlled and captured by a stormwater collection pond. Managing Questions - Robin advised we would prefer all questions are submiited to the Chunxing Contact Us page, as it's regularly checked by Tania. This avoids loosing continuity having one collection point. It's also fine to send questions to Richard as long as he forwards the questions to Chunxing. Bronwyn asked about other heavy metals that can be blown from the site. Robin advised Chunxing would do the excavation and consolidation in sections to minimise dust and disturbance. The building's steel frame will be erected as quickly as possible, and then the internal concrete and external pavement completed. Leanne asked if there was any asbestos on site. Robin advised that after the soil testing and rehabilitation there was no measurable level of asbestos. Chunxing are going to add to the Construction and Environmental Management Plan that if any suspect material is found it will be tested and delt with in line with legislative requirements. Chunxing doesn't believe there is any loose asbestos on the site. Chunxing have completed approximately 380 soil samples on the block, none of them register asbestos in the historical testing after rehabilitation.	Robin Krause

Leanne asked if we would consider getting baseline measurements of the other heavy metals that the plant will emit including chromium, arsenic, antimony and cadmium. Robin advised any dust collected would be analysed. Dust collection is by a negative system, sucked into the filter. This will be analysed by a laboratory that will list everything Chunxing want tested to prove whether it is in the environment. Leanne asked if Chunxing was able to get real time monitoring systems. Robin advised that the gas would be continuously online monitored and that the dust would be collected and analysed monthly. Leanne asked if the public would be able to see the real time air monitoring on the Chunxing website. Robin advised that would be Chunxing's intention - online continuous monitoring. Stacey Clark confirmed that the gases would be continuously monitored and published on the website but the dust would be sent off site for analysis monthly and uploaded to the website. Robin advised that was the most efficient way to do the analysis to get a full result for each constituant measured.

Mark Richards asked about category C soil, he advised the EPA has a document that states category C soil can have all sorts of consituants such as arsenic, cadmium, chromium, copper, lead, cyanide, fluoride etc. The soil on site could have these levels of contaminant. Lead upper limits can be up to 1500mg/kg. Theoretically category C could have any of these items present to the upper limits. Robin advised there is a baseline land and groundwater survey report initially submitted to the EPA, with all leves of contamination in the lower bracket for category C soils..

Maggie advised in Mt Isa they use XRF technology for external testing so they can have some continuous emission monitoring and then capture the dust to validate the data. Maggie asked if that was something that has been considered? Robin advised Chunxing are implementing continuous online monitoring of the gas, and lab testing the dust. Maggie advised Mt Isa have real time monitoring of lead through XRF technology, and because XRF can have a margin of error they also capture the dust to validate the data. Robin advised he would look into this technology. Maggie advised XRF can be used to monitor a number of other heavy metal contaminants but is being trialed in Primary Lead Smelter towns. Dr Lakshman advised he would explore the possibilities of XRF monitoring. Chunxing uses lab dust testing to get the most accurate results.

Leanne asked if she could share the questions and answers with the general public, Robin advised yes, and Tania advised that the minutes and questions would be published for the public on the Chunxing website.

Storm Water

Robin presented the drawing that shows the site water management systems. The drawing shows:

- Three emergency site water tanks in the south west corner.
- Three storage ponds for collecting rainwater off the roof.
- Site water pond that collect water from the east side of the pavement.
- Plant water pond that collects all the process water.
- Plant water goes into the water treatment plant, then into the treated water pond, then goes back into the plant as recycled water.
- Storm water off the roof will be used as our primary source of water for the process, which goes directly to the water treatment plant, where it is filtered, chlorinated, and circulated through the plant.
- The emergency site water is pumped to the site water pond, the site water goes to the water treatment plant it is filtered, treated, chlorinated and used in the process.
- Chunxing have a totally enclosed concrete bunded and floored site. This assists with controlling storm water on the site. The drawing shows details of the ponds and bunding.
- The pumping system is being designed by a consultant.

• The pumping system is designed for collecting water from the site in a one in one hundred year rain event, which is equivalent to 170l/s of rain over a period up to 7 days. • There are three pumps in parellel to handle that amount of rainwater, 60l/s each. • For a normal average flow you would only use one pump. The yearly average would only use one pump to manage the water. • Balance pipes are installed between the ponds to manage the water flows. The external pavements are sloped to assist in capturing water in open culverts with grating covers to collect water for the full width and each side of the property. • A culvert runs around the office area to collect all the site water that falls in that area as well. • There are two discharge points, one is domestic grey water, which includes toilets and kitchens. • All other water used on site, including laundry, shoe wash, showers, handwash, truck wash and wheel wash go into the plant water system and processed in the water treatment plant. • All water is treated to ensure it is safe for the operators. • All water collected after the process is pumped back into the plant water pond and recycled. Mark Richards asked about the discharge to sewer. Robin confirmed it is just from the toilets and kitchens, as Chunxing don't have biological treatment, and are part of the normal grey water system. Mark asked about provisions to stop staff exiting the smelter area to the offices and lab. Robin advised staff could not exit without going through the change house. Policy will require no one enters the factory without going through the change house with complete change of clothing down to underwear and socks before entering the plant. To leave the plant, personel must remove all clothing, be fully showered including hair washed. Robin advised that Chunxing would monitor who goes in and out of the plant. Shane Mynard, asked about entry of emergency staff to the plant in an emergency, and if emergency staff are required to change their protective clothing before entering the building. Robin advised no, as the emergency services would already be in the appropriate gear to assess an emergency and also have the correct breathing apparatus. Uniform would need to be decontaminated as usual process after attending an emergency. Leanne asked how truck drivers and visitors were kept safe from lead exposure. Robin advised all truck drivers come in through the security building, are inducted, and are supplied with a disposable coverall. In the unloading area they stay inside their cab. If they need to leave their cab they can only exit by a specific area, and they are not allowed into the breaker area or smelter. Once they exit the plant they remove their overalls and they go into a disposal bin. For entry to the smelter or breaker area, a full change of clothing is required. Shane asked if organisations doing regular inspections will have facilities to change into protective equipment. Robin advised Chunxing would provide a full change of clothing including underwear and respirator to be able to enter the smelter and breaker areas. The plastics area is separated with its own ventilation system and is considered a low risk area and doesn't require full protective equipment. To leave the site it is required that you shower. Dr Lakshman advised he is interested in any comments from the various stakeholders if any improvements can be made to the system.	Robin Krause
Community Questions and Comments	

Leanne thanked Chunxing for suppling information on blood lead levels. Leanne asked If staff were rotated to less risky jobs if blood lead levels were high. Robin advised Chunxing would have a policy that our levels would be less than 20udgl. Our plant would have less exposure to lead than the Chinese Plant, and all staff would have baseline measurements and then tested 3 monthly to ensure they were maintaining hygiene and low lead levels. If staff get above 15udgl they will be assessed where and how they work. There are only two main reason why people will have high blood lead levels, they don't follow hygiene procedures, or the are complacent on the job and remove their masks without washing their hands and face, or don't shower and wash their hair when they leave the site. Leanne asked if staff realized that even in low risk jobs peoples bodies don't excrete all the lead, that your body thinks it's calcium and is stored in your bones and teeth. Robin advised we can only put in policies to control peoples work behaviours and ensure employees follow the hygiene rules. Richard asked if inductions and operation training would be available for employees. Robin confirmed this would be the case. Robin advised at Port Pirie the staff were advised what the medical and physiological changes were with high blood lead levels.

Leanne was concerned that the families of the workers were not tested for blood lead levels in China. Dr Lakshman advised that if anyone in our plant displayed blood lead levels close to 20udgl that we would have a policy here to request testing of the families. In China, blood lead levels in the general public are much higher than those in Australia due to different levels of background pollution.

Maggie asked about the proximity of the staff car park to the ULAB stacks. Maggie believes due to the low flue temperature there will be a considerable amount of fallout on the immediate region. Maggie is concerned lead dust will accumulate on the cars and be taken back to family situations. Robin advised there was a wheel wash in and out of the plant. Maggie asked about the rest of the car. Robin advise Chunxing would consider that question, the legislation only requires a wheel wash, but will investigate the issue. Dr Lakshman agrees a carwash is a constructive idea, and will consider installing a car wash, although there should be zero fallout, as this is monitored and controlled by negative pressure within the building. Any fallout would be a breach of the plant operations.

Maggie asked if ground lead levels would be measured as negative pressure systems don't negate fugitive emissions, and is there is an allowance of up to 55kg of lead emissions per year by the EPA works approval. Will the plant shut down and investigate any apparent fugitive emissions. Robin advised that Chunxing's pollution control system eliminates the possibility of dust escaping through the stack. There are three systems of dust collection. There are five monitoring points, any high levels of dust will be investigated. Only two zones of the baghouse need to operate, so inspections and repairs can be carried out on the off line unit. There are two seperate sets of scrubbers, only one set needs to be operational to run the plant, the water wash in the bottom of the stack will pick up any particles. Chunxing's intention is to collect and process all dust. Lead will be processed into ingots, other material will be processed into slag and disposed of in an approved landfill. Any change in the process will be investigated to ensure Chunxing are within the minimum operating boundaries.

Mark Richards advised for Maggie's benefit that Chunxing had agreed to baseline lead testing of families associated with the plant. Mark asked if the trucks are washed, and can truckdrivers also be blood tested. Robin advised all staff that visited site more than once in a week would be in the testing program. Robin advised we would have approximately eight trucks per day on site. Robin confirmed emergency services attending site could also be included in the testing.

Robin Krause

Lauren Krell advised she would send most of her questions to the Contact Us page. Lauren asked how often might there be a problem, such as in the bags. Robin advised in his experience they last around 12 months and would have regular inspections throughout the life of the bag. Robin advised the baghouse is the most susceptible plant equipment to breakdown.

Lauren asked how often would Port Pirie have breakdowns. Robin advised he worked in different areas and couldn't comment on their breakdowns, but did explain they did regular shift inspections, weekly, monthly, three and six monthly maintenance and yearly shutdowns. Robin acknowledges things do breakdown and go wrong. Robin advised that is why we monitor our pollution control system for dust burden. If the dust increases you shut down the plant and investigate the problem. Dr Lakshman advised there is no comparison between Port Pirie and Chunxing. Chunxing furnaces operate on a batch basis and any leak would be identified immediately and the furnace would be stopped with 15-20 minutes. Lauren asked when leaks happen where the leaks go to. Mark Richards advised that there is no leak to the outside atmosphere. If all bag houses failed at once the dust goes through the water screening area. Mark advised we had a drawing of this process. This drawing is on the Chunxing website "Presentation of Emission Control" in the ULAB CLC tab. Lauren insists that there must be a possibility that something could go wrong that would leak lead into the atmosphere. Richard suggested that may not actually be possible. Robin advised the baghouse is enclosed, and that any dust in the gas would go to the scrubber system which would collect and neutralise the dust. The lime scrubber turns the sulphur dioxide into gypsum. The monitoring system is very robust and monitors each of the flows through each baghouse. It looks for changes in pressure drop or increase, dust burden, and volume of materiel on a continuous basis to negate any lead dust being released to the atmosphere. Richard suggested we run through those processes again in another meeting. Phil Reichert asked how the laundry process is handled. Robin advised we have a full laundry that manages all the overalls, underwear and socks run through a steam process that releases the lead. This water is cycled back to the plant water pond. The clothes then go through a normal laundry washer and dryer. Shane thanked all the community members and visitors for attending, and for the open and transparent communication of information. Leanne asked if Chunxing is still going to emit 17kg of lead a year. Robin advised this would be a maximum, and that we actually intend to emit none. Leanne asked if we has considered using WESPs as a pollution control. Robin advised he had reviewed it, but they are designed for larger pieces of equipment and much higher volumes of air and gas, they are not practical or economical to use on a small scale. The scrubbers are an as good or better system and WESPs fail to collect dust that is too fine. Richard asked when it is possible to meet at the Chunxing site. Robin advise there is nothing out on site yet, and won't be beginning until approvals have been granted by the EPA and Latrobe City Council. The exception to this is the air monitoring poles. Stacey Clark asked if an earlier time might be considered for the CLC meeting, as 7.00pm was quite late. A poll will be conducted when the minutes are emailed out to CLC members. Dr Lakshman advised he was happy to consider the constructive ideas brought up by the community members for the Hazelwood site, such as the full car wash.	
Agenda items for next meeting by 29th September 2021 to tania.brown@jschunxing.com	Richard Elkington
Next Meeting Wednesday 27th October 2021 time & venue to be confirmed.	Richard Elkington
Close	