

Posco Hume Coal movements on existing Moss Vale Unanderra rail line.

Posco intends to move 70 million tons of Coal along the existing Moss Vale Unanderra rail line to the Port Kembla on the east coast of NSW.

The rail line opened on August 20th 1932. It has a length of 70 kilometers and another 10 kilometers currently under an EIS for the consent of a development application. This will be added to the existing rail line and the coal facilities site with a rail loop for loading arrivals and departures of rail coal movements.

### **No1 QA Quality Assurance Australian and International World Standard and Current Berrima rail loop EIS.**

Over the past 85 years of rail transportation, operational freight on the rail line has been susceptible to falling rocks, rock boulders, heavy snow sleet, high wind and wet weather, the rail line track has vertical movements of up to 100 cm up and down on the rail line causing locomotive derailments pulling the rail line apart when rail accidents occurred.

The fair maintenance schedules were due to insufficient System Safety Accident Investigation procedures and application techniques SSAI applied under the code of the Australian Standards QA AS 5022:2016. One example of this fair maintenance schedule is that the rail line still uses timber sleepers in some sections with some shredding of the original 1932 couplings in place.

High Rail Haulage heavyweight and frequency have increased over these 85 years.

They will run 24/7 should the proposed Posco Hume Coal Project be approved by the consenting authorities and the independent planning commission.

The rail line's current narrow 1067mm gauge would be better upgraded to a broad gauge at 1267mm for such heavy, frequent haulage of coal freight, adding further stability and Safety to the coal cargo, freight drivers, and rail line.

Posco Hume Coal intends to freight large loads of coal carriages ( 60 tons in weight @ 50 carriages in number ) in conjunction with the existing moving freight loads coming from the Boral Cementworks, Ingham's and Omya in Berrima.

The current EIS for the rail loop to be constructed is not comprehensive and incomplete. The Preliminary Environmental Assessment (PEA) only covers the environmental impacts of the mining-related works such as the primary processing plants, facilities for storage, loading and receiving the transported Coal. It does not protect or cover the whole rail transportation line from departure at the Berrima loading facility to the unloading destination at Port Kembla.

This has potentially a high safety risk as a consequence of the frequent heavy Coal haulage.

### **No 2 The Consenting Authorities and Public interest.**

Mr. David Kitto, Director of Major Projects and Mining Assessment from the Department of Land and Environment, The Right Honorable Clady Berjiklian Premier NSW, Gabrielle Upton, Minister for the Environment NSW, Andrew Constance Minister for Transport and Infrastructure NSW and our local Member Wendy Tuckerman and previously Pru Godward NSW, must have ensured in their evaluation processes, that the Public Safety is the first essential requirement before any consent can be given to the Posco coal rail EIS.

Bob Stokes, Minister for planning, must also prioritize the Safety of the public interest on the Hume coal project as he is the ultimate authority.

The complete rail line from the Berrima Rail loop to Port Kembla must be of World-Class Safety Standard to declare the project a "State Significant Development" (SSD).

Suppose Posco Hume Coal proposes to use 70 kilometers of rail for hauling 70 million tons of Coal. In that case, it is only reasonable for the interest of Public Safety and the rail Engineering authorities to have the entire 70 kilometers of rail evaluated within an EIS.

The EIS is limited and only considers a small part of the rail line that Hume Coal will use. This rail line was built in 1932 and had structural and infrastructure deficiencies. To rail the heavy haulage of Hume coal on a 24/7 basis, including the Boral cement works haulage, the Ingham's haulage and Omya haulage safety issues will occur as increases will result over 20 years. Production increases will place a heavy demand on the rail line; therefore, rail upgrades are necessary.

Ensuring Quality Assurance (QA) and World Standard of Safety regulations for Hume coal can only be achieved with a complete EIS (Environmental Impact Study) on the impacts over the whole Rail line.

An SIS (Species impact Study) must also incorporate the impacts of the rail line haulage on threatened species, ecological habitats, people of the Southern Highlands, people of the south Illawarra and people of East Coast to Port Kembla.

**How many Australian marsupials will be killed with the blinding lights at night from the Posco Hume Coal Freight trains? Our highways now are killing great numbers of our wombats and wildlife at night startled by lights; how many more will be killed by Hume Coal Freight trains? The right Honorable National Minister for the Environment and the IPC should ensure a completed EIS on the Rail line is done before any consent is given to the Proposed Posco Hume coal rail line.**

It is, however, an honor to acknowledge our early railroad builders from the Charles Hoskins steel factory, making steel for the rail line in 1926 at Port Kembla and to the present Rail track builders. Their work on the rail line has lasted nearly a century.

**No 3 Single-headed rail Signal flash lighting at railway/highway crossings, terminals and stations.**

The freight rail line has single-headed signal lighting to control moving freight haulage trains with 2,400 tons of Coal or more travelling at 80 kms per hour coming into a slowing or stopping position. Rail Freight drivers have acknowledged that safety regulations are the most critical aspects of all rail freight undertaken, and the Unanderra line still has single-headed Red Lighting.

Posco Hume Coal and the authorities IPC must acknowledge the question: is this lighting infrastructure for drivers approaching road crossings and arriving into Terminals of World Class standard for safety regulation?

On pedestrian traffic crossings, twin-headed red light signals are flashing approaching the rail crossings over highways; however, there are "No warning lights" on approaches.

Stoplights in some areas are camouflaged by vegetation and no "Word Descriptive signals" as those on our roadways. There are no "Rail guard staff "to monitor the Safety of rail freight approaches and pedestrian-vehicle traffic on highway-rail crossings.

Rail train signal lighting along the junction of Illawarra highway, Hoddle Street Robertson and the Sheep Wash Road Avoca crossing red signal lights are camouflaged by vegetation. On terminal approaches, some red lights are camouflaged by overhanging electricity lines and vegetation for train drivers.



On Kangaloon road Robertson crossing, there are absolutely no lights for the approaching rail freight trains. There are no red light signals for stopping motor vehicles or agricultural vehicles; no lighting at all. How are train drivers expected to navigate this rail line with Rail safety regulation?

**How does the EIS of the Berrima rail loop and the department of planning authorities intend to address such an unsatisfactory situation for Train haulage drivers and the public interest?**

This is of "Extreme high risk to the existing residences of Old Kangaloon Road" that have to cross the rail line each day at several times and an Extreme significant risk to children going to and arriving from school. This infrastructure is inadequate and insufficient for extremely heavy haulage by the Posco Hume coal project.

A haulage train with 50 coal carriages at 60 tons each carriage, a diesel locomotive and an electric locomotive and carriage weighting and hauling 2,400 tons of Coal presents a "Public Safety Risk . A tragic Consequence "waiting to happen" should the necessary infrastructure not be put in place?

The NSW planning department infrastructure manager David Ditto states the rail line for Hume coal is a High risk (his statement document is available to the IPC)

The Risk assessment on infrastructure and facilities needs to be part of a separate Hume Coal Rail EIS with appropriate parameters for signaling infrastructure at all levels of Rail haulage. Public risk assessment has been identified on the pedestrian public pathway at Hoddle Street and the Illawarra highway Robertson, a path used by local residences, visitors, horseback riders, dog walkers and school children in the village of Robertson. There is no signal lighting or ~~wad~~ descriptive safety signage, no fences, no barriers to protect school children going to and coming from school. Young mothers push babies in strollers across this path over the railway track. The IPC should consider it unconscionable to allow Posco Hume coal to haul heavy coal carriages where primary school children cross rail lines.

**The question here for Posco Coal and the Consenting Authorities is how do they intend school children and the general Public to navigate 2,920 rail crossings per year on this pedestrian pathway that goes across the rail haulage line?**

No authority can consent to the Posco Hume coal project proposed EIS without a more comprehensive completed EIS showing the impacts of the rail haulage on the general Public using pathways and rail crossings.

The process has to maintain consistency and procedural fairness with the Safety and well-being of the public interest and the Safety of school children.

**No 4 Time loss on business, social services and the general Public interest.**

To move 3.5 million tons of Coal per year, the rail crossings will experience unprecedented coal haulage rail traffic. Effectively there will be 2,920 rail crossings per year or 8 crossings per day 24/7 days per week for the Hume Coal Project. Add to that the Boral Cement Works, the Ingham's and Omya freight movements.

So the Impact of all these rail movements will ensure the rail line and rail crossings will come under a condition of "Rail freight stress for the Drivers "and "Rail freight stress for the rail line and the Public.

Single signal lightening at stations, ports, Coal departures, arrival stations and terminals with Twin lighting at the rail highway intersections' and no lighting signals on pedestrian rail crossings need to be addressed by the IPC.

Sheep Wash Road Avoca is a Main road artery to The Illawarra highway, The Old Hume Highway, Moss Vale, Wollongong, Goulburn and the M7 expressway via Bowral to Sydney. The Hoddle Street and Illawarra highway-rail crossing in Robertson is a significant highway to Moss Vale south and the East Coast, the tourist centre of the south and along the Jamberoo escarpment at these locations rail safety issues Risks are of grave concern.







There will be approximately a Twenty-minute wait or more for the Public for diesel and electric locomotives hauling 50 steel carriages of loaded Coal to pass from the approaching rail line crossing the highways and pedestrian paths.

Accumulation and spent labour time for the general Public become excessive. The crossings and the major highway arteries will be halted and stopped for approximately 62 days per year or 1,460 hours per year or approx. 4 to 5 hours a day by Hume Coal across the network.

And add to this the extra rail haulage of freight time needed by Boral, Ingham's and Omya. It will be very challenging to keep timetable schedules at the correct times for Hume Coal delivering Coal to Port Kembla.

Should this circumstance prevail, it becomes highly likely that the speed of the rail freight trains will increase to keep timetables scheduled, which is at a higher risk to the Public Safety and OHS for rail freight drivers.

**The question here for the Consenting Authorities, The Federal, State and Local governments, is how the disruption and time lost impacting the community be compensated for?**

The social services of the community will face lost time and disruption, Ambulance, Rural fire service with volunteer firefighters, the fire brigade Social carers, School children arrivals to school and departures from school, Police, Police highway patrol, Essential services of Telecommunications and Electricity, Post and Waste collections Local and Interstate business, trades and agricultural farmers timetables, Passenger vehicles, buses and timetables and truck freight time tables. Many people commute to the City of Sydney, Canberra, and Goulburn for work. **Who will compensate these hard-working people for the loss in their time already impacted by distance with no fast train to Sydney or Canberra?**

**.If a business or member of the general Public needs to make multiple rail crossings each day, this will have an adverse impact on the cost of their time. The loss of time on business schedules and delays for the general public results in an economic loss for the surrounding villages and townships of the Southern Highlands.**

**No 5 Rail line Safety and accidents on the Moss vale Unanderra line, rail infrastructure deficiencies and Posco Hume coals make good policy. Single-headed rail lighting.**

The peoples of the southern highlands, tourists, visitors and children need to be safe from high volume Hume Coal freight rail traffic from Berrima to Port Kembla. Agricultural Wire fences on the rail line are inadequate, old worn loose agricultural wire is still present, the rail line is easily accessible by school children and the general Public, they require to be changed and repaired and in many places have wide-open gaps far in excess.

This presents a Safety risk for School Children and the Public interest. The EIS must address the fencing issue of the rail line in the townships of the southern highlands. Agriculture wire fences were not made to protect rail lines and rail stations and terminals with the heavy movement of coal freight. Instead, they were put there to protect livestock in their paddocks.

**Will the Posco Hume Coal EIS address the deficiencies and safety issues on the fencing infrastructure of the rail line from Berrima to Port Kembla travelling through and within surrounding villages of the southern highlands? Will Posco Hume Coal have a make Good Policy and have a Corporate Citizen Social Responsibility incorporated into their project to cover the cost of safety rail signals and repair rail barriers and fence**

- Rail single head lighting signals are partly obscured with vegetation on highways and by overhead rail powerlines. On August 31st 2015, the accident at the level crossing on the Pacific Highway and Nolan Street Unanderra was an example.
- The B9162 derailment when a single-headed red light was missed and passed by the locomotive driver in Unanderra on July 28th 2004. The locomotive driver was fully aware of his controls and mental faculties and was not responsible for the accident. Here again, a single-headed light caused a signal error.
- The rail accident on April 23rd 2017, where a freight train lost its ability to brake as it hurled towards Unanderra, was another derailment event that proved single-headed lighting is an insufficient and dangerous method of lighting for safe regulatory rail transport to continue across road intersections giving ample warning to all pedestrian traffic on road and on foot and Rail drivers OHS.



**The Consenting Authorities IPC for the rail transportation of the Korean Posco Hume coal project needs to consider the current Highway rail crossing with single and twin signal headed lighting sufficiently safe for Public pedestrian traffic on highways and within southern highlands. Townships? Many of these rail crossings are close to local businesses, residential housing, agricultural farms engaging registered tractors and farm implements that cross rail lines, doctors surgeries, pharmacies, police and ambulance, health carers , the general Public, and of course, our precious infants in primary schools.**

- The Hume Coal Rail EIS has not considered all the above impacts for the Safety of the public interest. The IPC need to ensure this is done to world standard before any consent can be deemed.

**No 5 the Unanderra rail line deficiencies, 1932, 1 in 35 steep gradients, Safety, accidents and Environmental concerns.**

It is well known by the consent authorities and the general Public that the Unanderra rail line was never designed for heavy haulage traffic of Coal by diesel and electric locomotives. The line was built in 1932 and was an integrated rail line for the movement of single load carriages to the East Coast from the Highlands.

The Unanderra rail line climbs up the Illawarra escarpment to the summit tank encountering some 25 kilometers of 1 in 35 steep gradients. Parts of the rail line remain unfinished as unfinished stanchions' are evident as part of the proposed complete electrification of the rail line. Most coal haulage trains run with two locomotives. One diesel locomotive and the other electric locomotives have their benefits when hauling long heavy loads; however, all is fine for driver's safety regulations and the haulage of coal cargo when both diesel and electric locomotives are in operation.

The two locomotives, diesel and electric, have more rail stability balance ratios, more horsepower for acceleration and slowing, and more braking power overall more conscious control of the locomotives by the driver.

When the locomotive with haulage hit un-electrified rail line, especially on a decent of 1 to 35 gradient, the total weight of the locomotives, the steel carriages, and coal tonnage depends on one diesel locomotive. If any braking issues occur as in the case of the de Raiment of Pacific Nationals service B9162 on July 28th 2004, missing a red flashing signal at 80klms per hour and the Freight Corp haulage train of a 40 wagon freight train losing its ability to brake on April 23rd 2017 as it hurled towards Unanderra uncontrolled incorporating the issue of inadequate unsafe single signal lighting for the Drivers:

Secondary brake cocks were not used in either accident as they were not fitted to the locomotives, which secondary drivers could have used in emergencies. Freight Corp locomotives do not incorporate emergency braking cocks or vigilance control buttons activating a slowdown or immediate stop position.

This shows clearly that the Moss Vale Unanderra line has severe speed weight ratio restrictions and possible locomotive haulage issues for train drivers to contend with. The train Drivers investigated in these incidents were all cleared from any wrong procedural actions as their driver training followed all the safety rules.

A rail crossing accident occurred on August 31st 2015, where a passenger vehicle and train haulage locomotive collided on the Princess Highway and Nolan street crossing. This is indicative with the high frequency and speed of the locomotives at rail crossings that effective adequate safety signals of World Class Standard and manned rail guards are necessary and a priority for the Safety of the Public.

- The Australian transport safety Bureau (ATSB) has to be included in evaluating the Moss Vale Unanderra line to Port Kembla within the Posco Hume CoalRail EIS and the IPC evaluation of the project.

Accidents have a high probability of reoccurring, with over 3,000 heavy rail haulage accidents per year. Should such consequences happen again as the above accidents, the increased rail traffic of the Posco Hume Coal will have implications on Public Safety, the Social Services of the southern highlands community, the public interest and the Minister.

Such consequences will have enormous economic/cost impacts on local services, Government and considerable effects on the Hume Coal Project reducing transit times.

Rail transportation is the most efficient environmentally sound method of coal transportation. If Best World Standard infrastructure and Electrified rail are used, it should be the safest and have the World's Best Practice.

The Posco Hume Coal rail EIS has to take this World's Best Practice into account. The rail line on the Unanderra line where the gradient is 1 in 35 steep in descent, where speed weight load ratios on the locomotives exist, the non-electrification of sectional rail and the drivers abilities to control locomotives under extreme conditions needs further clarification by the IPC.

A water catchment area of Sydney lies to the eastern side of the Unanderra line, and the escarpment houses the World heritage Pristine Morton national Park, which houses an abundance of flora and fauna. A rail incident or disaster with coal haulage would impact a sensitive environmental area, therefore, an (SIS) is needed by the IPC from Hume coal.

**What guarantees have the General Public, The federal, state and local Government have from the Hume Coal project that a make good policy is in place for clean-up should an accident occur? If it can be cleaned up. Should environmental consequences occur damaging our flora and fauna Hume coal is responsible.**

The Australian System of Safety Accident investigation (SSAI) has applied techniques under the quality assurance standard AS5022:2001 to enforce the Safety of the structure of rail line and integrity of operations of locomotive operators and Coal industry using locomotives for haulage of Coal to their destinations to comply with all legal, regulatory requirements.

**Have the consenting authorities shown this compliance above is met by Hume Coal in the proposed EIS in its current form?**

**No 6 The Robertson Village and all villages and Townships of the Southern Highlands, Noise levels of haulage rail traffic, Impact's on the community, Buildings, school children in education classes and coal dust particulate.**

Not only has the Robertson rail crossing at Illawarra Highway and Hoddle street going to be impacted for hours per day of halting vehicle traffic and pedestrian traffic, but the village itself will feel enormous impacts of the 3,000 rail movements thru the township. The General Public is not protected from the rail line. It is unsafe with large open areas exposed to the rail line and waiting for an accident. The General Public's pedestrian pathway to cross is hazardous, with no signage lighting or rail guards to assist the Public crossing the rail. There are no fences to reduce noise levels and vibrations of the 3,000 rail movements per year. The village will be encompassed by rail noise.

The Robertson primary school, which houses our infants, will be subjected to immense higher than normal noise levels for education to proceed. This will disrupt the quality of the teaching staff giving their lessons and will interrupt the teaching staff from delivering quality education. The school has currently medical issues with children for their concern and is under the control of the teaching staff. These school infants range from ages of 5 to 12 years old.

School children are in the developing and most formative learning years of their school infant's lives, and The Korean Hume Coal Rail trains will impact the ability of these children to learn and develop. (Danny Pullicin BA (UNSW).DipEd (USYD) past high school teacher)

The rail noise and vibrations are within 10 meters of the school boundary. This distance is not sufficient to make the school safe for its school infants. Hearing disabilities with children are highly probable and common under normal conditions. With exposure to high-frequency rail noise, the crisis will accelerate children exposed to high noise levels for six years of their early formative education. As a past teacher who has worked within the education system, this is an unfair environmental noise polluting hazard for these children to be exposed to.

**Will the Federal, State Government, Local Government or Posco Hume Coal guarantee the school children and parents that no hearing health concern for the children will occur as a result of the high noise levels created by the coal haulage rail movements within 10 meters of the primary school in Robertson and will the State or Federal governments or Posco Coal compensate parents on costs if an action has to be taken?**

The Federal and State Minister with the Premier Clady's Berjiklian needs to be involved in the Hume Coal Project to prevent any consent from being given to the proposed Hume coal rail EIS to harm our children. The Impact on these infants is not a tolerable situation for the people of the Southern Highlands or the peoples of Sydney. The EIS for Hume coal has a responsibility to address this concern, and the Government has a responsibility to protect its school infants from harm's way. The loaded coal locomotives and carriages make high noise levels and on the return trip back to Berrima when they are empty. Container vacuum vessels were making more increased levels of noise that will undoubtedly impact the hearing of school infants.

The Hume coal rail EIS must address the impacts of high noise pollution. Poor fencing, inadequate lighting infrastructure on rail and road-rail crossing safety for the community township of Robertson and other villages in the southern highlands. The rail line is also unsafely fenced, being within 20 meters of Infant school, children can have access to the rail line thru fence gaps. The infant primary school is the responsibility of the State Education Minister, the Federal Education Minister.

**Where are the addresses or statements from the ministers or the Premier over the effect of high noise levels on the Robertson primary school children?**

Noise and vibration affect and impact the residential and business buildings on the west side of the rail line. Dilapidation reports on buildings can show the Impact of the current rail movements on buildings. Vibration cracks and subsidence of building is occurring.

**What provisions have been made with the Government or Posco Hume Coal to compensate children and their parents should school infants to receive impacts on their hearing from this noise pollution levels and Vibration levels of The Hume Coal rail haulage movements? Who will compensate the residential and business building owners should impact occur to their facilities and land from rail vibrations?**

**No8 Coal Dust particulate from coal haulage by Hume Coal. Coal ash and chemical content and its effects on villages of the southern highlands, its peoples and school children.**

Coal dust particulate is a polluting poison that will impact the Robertson infant primary school and the Robertson community, and the surrounding villages.





- Rail carriages that are not covered or rail carriages covered are still the cause of coal dust contaminants. Once Coal is unloaded out of coal carriages, the dust is exposed in the carriages themselves and free to move inside or outside. More Co2 in the air and polluting coal contaminants that are chemically toxic will create health conditions for the community.
- **What compensation has been placed by the Government or By Posco Hume coal to compensate any infant who falls ill due to coal Dust contaminate being found in their bodies resulting in poor health? The risk assessment on Public health has not been addressed in the Hume Coal rail EIS and the consenting authorities IPC under the EPA act 2016 have an obligation to the public interest to ensure that all consenting decisions are met with caution and researched with evidence-based data and that any decision process is always subject to clarification by the public interest.** Therefore, on public health, the consenting authorities must ensure that all measures have been taken before any consenting approval is made and must take as a privilege the public interest of the peoples of the southern highlands, the City of Sydney, and of course our children.

Statement by

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