

DRAFT RESPONSE FROM COMBINED WG to DRAFT BLAST MANAGEMENT PLAN:

Outcome measurement criteria needed

- S6 C9: *ensure no adverse impacts on*
 - *Public safety*
 - *Human comfort*
 - *3rd party property (inc. stock)*
 - *Adjacent land use*
 - *Air craft or*
 - *Other receptors*

from air blasts, fly-rock and vibration caused by blasting.

REQUIREMENT: Need performance indicators/measurement criteria against which the achievement of each of these outcomes can be assessed. These to be developed in consultation with local community before blasting commences.

Justification: same as for air quality emissions. Even if DSD assumes that compliance with S2 blasting conditions will be proof that these outcomes are being achieved, this may not be the case. Therefore measurement criteria based on community assessments of blasting impacts are needed to validate DPC's assumption and to accord with the Govt's statement that these are the minimum standards Rex must meet.

Terminology

Question: How are the following defined:

- *Adjacent:* - see S 2 c 6: Rex must notify property owners "adjacent to land."
 - Are these only those whose land is contiguous with the mining lease or
 - Does it include eg RP and PP residents and nearby farmers whose land is not contiguous with the mine tenement boundary?
- *Adjoining:* S2 c 10.4: *Blasting protocol and blasting schedule to be developed in consultation with residents adjoining the land.* How does this differ from adjacent"?

Limits for air overpressure and vibrations exceeded for sections of St Vincent's Highway

According to Table 5, limits set for ground vibration and overpressure are based on human comfort levels at residential premises. Is this why Rex are allowed to exceed the limits for sections of the redirected Yorke Highway, on the basis that vehicles moving along the road are not residences. eg

- Vibration - Fig 3 shows max vibration impact contour of 10mm/sec extends over highway for north east section of road.
- Air overpressure impacts (Fig 4) - larger area of NE section of diversion falls within the 120 db(L) maximum limit.
- **Question:** Why aren't all segments of the Highway required to be located outside of the maximum air overpressure and vibration impact zones?

Baseline measurement

Questions:

- Validity of modelling? Based on only one month study period (p 6) and assuming 'favourable' met. conditions (p 7).
- Was modelling based on blasts located around perimeter of pit?

Control measures: air pressure and vibration

- At June meeting, Rex presenter noted: if met. conditions are unfavourable, could delay blasting "*for several hours if need to*". **Questions:** What happens if conditions remain unfavourable for an entire day or several consecutive days. Will blasting be postponed for this extended period?
- **Questions:** What is the earliest/latest Rex can blast on any given day? Can Rex blast during night hours?

Fly rock control measures

- P 9; Rex assurances that "*no damage or injury to personnel, livestock, property etc... from fly-rock*". **Question:** What responsibility does Rex have (eg compensation) if damage does occur?
- *the blast exclusion zone will, on occasion, impinge on a small area of adjacent agricultural land and may restrict access for short periods.... Rex Minerals will work with landowner to develop an agreed Landowner Communication Protocol.* **Question:** When will this Protocol be developed?
- *All blasts will be internally reviewed by Rex?* **Question:** Will there be any review by an independent agency?

Mitigation measures (p. 9)

- MP states these will be detailed in SOP. **Questions:** Will this be made publicly available and when? Which agency approves the SOP?

Consultation

- **Requirement:** Additional methods of publicising weekly blasting schedules are required. Tourists visiting the area will not know to check the Rex website or look on the Hillside Mine notice board. At very least, need notices inserted on Pine Point, RP notice boards and weekly advertisements in the YPCT.
- *Rex will notify property owners adjacent to... ML of all blasts at least 48 hrs in advance via SMS network.* **Question:** Which property owners will be automatically included in this, and which need to request inclusion?
- **Requirement:** Option to be included on SMS messaging system needs much broader publicity (similar to Call for Expression re Rainwater Tank Testing). At the very least, use HMCV, Progress Association etc. email networks.

Community response process (complaints)

- *Preliminary investigations will commence/response will be provided as soon as practical.* **Requirement:** Need performance indicators based on time to commence investigation/report findings to complainant/resolve the complaint to satisfaction of complainant (repeated below).
- Complaints register – s2 c45 – 49; Comments as per HMCV Air quality WG Report document.

Communications and Operating Protocol

- Three terms used in MP:
 - Blasting Protocol and Blasting Schedule (s2 c10.4)
 - Communication and Operating Protocol (s2, C 42).
 - Landowner Communication Protocol re fly rock incursion (MP page 9)

Questions:

- Are these the same, or different?
- If different,
 - When will each protocol be developed?
 - Which parties will be consulted for each? (eg farmers within the land only, nearby residents etc.)
- Page 21, Appendix 2: Landholder Communication Protocol:
“This protocol will be used with landowners from approximately year 5 onwards when open pit perimeter extends South and West.” **Question:** Why is the protocol to only be used from year 5 onwards?

Monitoring

- Saros report p 12: *With Respect to Ground vibration and air overpressure it is recommended the compliance monitoring program should include a minimum of two locations and where possible, adjacent to the closest sensitive receptors.* Rex has opted for this minimum number. Inadequate – see below.
- Automated real time monitoring for air over pressure and vibration. Nothing for fly rock.
Question: How does Rex intend to monitor fly rock to ensure no exceedance of exclusion zone, especially along St Vincent’s Highway and in SW area adjacent to the pit?
- Monitoring locations:
 - permanent monitors: only two: P2 makes sense, but why is the other – P1 – located a considerable distance from the pit and in a NW direction? Reason for P1 location cited as “residential location” yet there is only one house at P1, compared with multiple dwellings at RP and PP (the latter of which is much closer to the pit). **Question:** Why is there a permanent monitor at this location?
 - No permanent monitoring at RP, PP or Receptor 25 – these only get a portable monitoring unit which, according to MP:
 - **MAY** be undertaken if there is a complaint (note; Saros report P. 12: *... in the case where a registered complaint is received monitoring **SHOULD** be conducted at the complaint location for sufficient period of time to check compliance.*)
 - Will continue in use until sufficient data has been obtained.....
 - Table 6 states frequency will be “ad hoc”
 - One portable unit (B4) located NE of pit on coastal side of E WRD, but outside (to the north) of that section of the road which sits within the 10mm/s limit for vibrations and the 120 db(L) limit for air overpressure.
- **Questions:**
 - Why isn’t it positioned inside of both of these limits?
 - Why isn’t there a permanent monitoring station along the eastern section because this would provide the best indication of any exceedances of limits on road users?

- Why is the purpose of this one listed as “*industrial monitor*”. Not aware of any industry at this point!

Recommendations:

- Permanent monitors be located at
 - Pine Point as a priority
 - Rogues Point (when blasting in northern section of pit)
- The portable monitor at B4 be replaced by a permanent monitor, and relocated southward to a position which puts it within that section of St Vincent’s Highway which, according to the modelling, will experience in excess of the max limits set for air overpressure and vibration levels.
- Saros report P. 12: *also recommended video records be captured for open pit blast activities... should be analysed as part of the post-blast analysis and is a useful tool when assessing rock movement and air overpressure controls.*

Questions: Will this be done? If not, why not?

Reporting

- Re exceedances: Rex Minerals will conduct investigation to ascertain cause and prepare a detailed report which **may** be provided to *relevant agencies* (MP page 14). Why not mandatory? And why restrict circulation of results to agencies?

Recommendation: all reports re exceedances to be provided to community and HMCV as soon as they become available.

- ACR unacceptable.

Performance indicators

Requirements

- As noted earlier, community- based performance indicators/ measurement criteria needed for each outcome category listed in s6 c9.
- **Requirement:** Need performance indicators based on time to commence investigation/report findings to complainant/resolve the complaint to satisfaction of complainant.
- 6 or 12 monthly community satisfaction survey required (as per Air Quality and Noise) .

APPENDIX

Issues/questions raised at Pine Point meeting 18th June 2017

(Most of these covered in Rex response to issues raised at Pine Point meeting. Not reiterated in draft WG response but useful for subsequent circulation to community).

- Ground Vibrations:
 - Port Wakefield proof range blast vibrations compared with mine blast vibrations?
 - Distance from blast re structural damage: What distance away from blast would you need to be re house structure impacts? We live 2 kms away – any potential for damage to brick house?
- Blasting times and frequency per day/per week

- Why no blasting until excavate to 40/180 metres when Ardrossan dolomite mine blasted from day 1.?
- Impact on house prices
- Storage of explosives:
 - How much explosive stored at site?
 - How secure will it be?
 - How transported to mine?
 - With the amount stored at the mine, will the community be safe?
 - Do you actually mix [the ammonium nitrate and fuel] as it goes down the hole or pre-mix?

Signatories to this document:

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Joy Wundersitz (YPLOG)

Bob Sleath (Pine Point Progress Association)

Dorothy Bradshaw (James Well/Rogues Point Progress Association)

Peter Klopp (South Kilkerran Ag Bureau)

Graham Mattschoss (Black Point Progress Association)

Tania Stock (YP Council)

Stewart Lodge (Petersville Ag Bureau)

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Note: feedback still pending from Max Young, and Cathy and Malcolm Reddings