



Successful Drilling Rehabilitation in State Forests

Drilling in State Forests requires negotiation with Forestry Corporation of NSW district officers and lessees for regulatory approvals. Special attention is paid to flora and fauna in construction of drill pads and best practice rehabilitation is undertaken after drilling cessation. White Rock Minerals Ltd undertakes successful drilling rehabilitation on its exploration and mining leases in northern NSW.



Background

White Rock Minerals explores in State Forest and woodland terrain of the Northern Tablelands of NSW. Successful rehabilitation of drilling sites is a combination of initial communication with Forestry Corporation officers, Forest lessees, drilling contractors, and ecologists followed by best practice management of planning, site construction, operation, and final restoration.

Local Forestry Corporation officers know their terrain and offer key guidance to minimise potential impacts on flora and fauna. Compensation for track construction and unavoidable tree removal is negotiated in an agreement that spans from months to several years depending on the life of the exploration drilling program.

Preparation in State Forests

- Meet Forestry Corporation Officers and/or forest lessees, such as graziers and beekeepers, on site to discuss drill planning and compensation payable prior to drafting an agreement.
- Submit Surface Disturbance Notice EDG10 (SDN) and/or Review of Environmental Factors (REF) documentation depending on Category 2/3 (drilling) activities in Forest Management Zones.
- Carry out a site ecological assessment to submit with the REF. Heightened awareness of flora and fauna sensitivities are vital before operations can begin.
- Allow 1 to 2 months for regulatory approvals before starting drill site preparation works.
- Consult with the drilling contractor to ascertain safest and smallest drill equipment footprint site set-up.
- Engage earthmoving contractors familiar with Forestry Corporation guidelines for surface disturbance and access track construction.
- Upon approvals from agencies cited, construct small footprint tracks and drill pads. Avoid clearing habitat trees. Stockpile vegetation and topsoil, covering the latter with coconut fibre matting to prevent washaway and sediment runoff in wet conditions.
- Prudent sediment fencing downslope of drill pads and access tracks is essential to prevent and contain any sediment load dispersion from rainfall runoff.
- Perimeter bunded pads to be underlain by thick plastic sheeting and overlain by coconut fibre matting for grip in wet conditions and absorption of potential drill fluid spills.
- Above ground plastic portable drilling tanks and vessels negate need for in-ground sumps.
- Induct operational personnel into the sensitivities required of operating in State Forests.



Environmentally sensitive State Forest exploration drilling set-up. Note matting, sheeting and tanks



Replacement of topsoil and vegetation promotes natural revegetation



Natural restoration after 9 months



Drill site restoration after 2 years

Rehabilitation

- Once drilling has finished and equipment removed, all plastic sheeting, liquid drill contaminants and stored drill cuttings are collected and disposed of at the nearest waste facility. Coconut fibre matting is collected and can be recycled up to 3 times.
- Drillhole PVC collars are trimmed, plugged with cement, impregnated with pieces of iron and buried up to 400mm below the re-contoured surface. The iron helps to detect buried collars by metal detectors if required in future.
- Each drill site and access track is rehabilitated by an articulated earthmoving vehicle such as a backhoe to carefully distribute stored topsoil by re-contouring to original state. Stockpiled vegetation matter can be replaced to promote early re-establishment of natural grasses and seedlings by stabilising soil and adding natural nutrients.
- Post rehabilitation photography and monitoring of site recovery and associated downslope sediment fencing can be maintained at 3, 6, 12 and 24 month intervals.
- Compensation is agreed upon between the explorer and Forestry Corporation. Post drilling inspection by Forestry Corporation officers is encouraged.

White Rock Minerals has shown that by co-operative discussions with Forestry Corporation operatives, State Forest lessees, drilling contractors, earthmoving contractors and company field staff, successful rehabilitation and restoration of sites disturbed by drilling can be successfully achieved and documented.

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