

Industrial Approval: Pioneer Coal Ltd.

Summary:

Pioneer Coal Limited's proposal for a surface mine at Point Aconi has undergone a standard environmental assessment and an industrial assessment imposed by the Environment Act.

What is an Environmental Assessment? It's a standard process, set out in the Environment Act, through which the environmental effects of a proposed project are predicted and evaluated, and a subsequent decision is made on the acceptability of the undertaking. The purpose of an Environmental Assessment is to promote sustainable development while protecting and conserving the environment.

What is an Industrial Approval? This process deals specifically with the daily operational aspects of the proposed project; the engineering requirements to meet the conditions of the Environmental Assessment. These approvals are very specific and may include conditions such as: Monitoring, sampling, restricting operations within defined parameters, record keeping and reporting.

The 316 page Industrial Approval document pertaining to Pioneer Coal Ltd. contains over 50 requirements and restrictions the company must meet.

Restrictions and conditions which Pioneer Coal Ltd. must meet include:

1. Minimizing aesthetic changes. Rock, soil and green growth moved during the mining operation will be continually put back in place as work goes on. This is known as progressive rehabilitation. After seven years, the company must also conduct a final and complete reclamation of the site to return it to a presentable natural area.
2. Protecting groundwater. The company must conduct extensive and ongoing monitoring of surrounding water supplies within the prescribed area of 800 meters to guard against any effect from the operation of the mine. In the unlikely event of a complaint of loss of well water quantity or quality, the company must supply the residence with a temporary water supply and arrange for an independent third party to investigate the matter promptly.
3. Monitoring wetlands. The company must submit a wetlands mitigation plan to be reviewed by the department of Environment and Labour (NSEL) and the Department of Natural Resources (DNR). Affected wetlands must be restored or replaced in a manner consistent with Nova Scotia's Wetlands Compensation Policy.
4. Protecting wildlife. The company must adhere to their agreed upon Environmental Protection Plan for wildlife protection. They must also consult with the Department of Natural Resources and/or Canadian Wildlife Services. The open surface mine will

remove dangerous deep holes from previous mining activity which are currently a threat to wildlife.

5. Informing Citizens. The company must continually inform nearby residents via advertising, phone calls, direct mail and other means about the mine's scheduled mine blasts. As well, the company must meet regularly with the Citizen's Liaison Committee which was struck as a condition of the province's assessment process.

6. Meeting legal and administrative conditions. The company must obtain all necessary leases, permits and licences to access the lands and to operate mining equipment on the site and to transport materials from the site.

7. Conducting only low level blasting. Ground vibration from blast events will be restricted to 0.05 inches per second which is one quarter of the probability threshold for damage to occur in foundations. Residents within the 800 meter radius are encouraged to participate in the pre-blast survey program which will document existing conditions of the residential structure.

8. Constructing in environmentally safe ways. The company must build the facility and prepare the site using methods that control soil erosion using sedimentation ponds. No discharge will be permitted outside the approved site footprint. These controls must be maintained for the duration of the seven year project.

9. Minimizing Sound Levels. The company's operations will be restricted to specified sound levels that must be met at the property boundary of the site. This is to minimize the level of sounds experienced by the nearest residents. Sound restrictions will be more strict during evening and nighttime hours. The company has conducted a baseline noise survey at key areas of the site. Acceptable sound levels during times of day will be as follows at the property boundary: 7am-7pm: 65 dBA(decibel level); 7pm-11pm: 60 dBA ; 11pm-7am-55dBA. A 65 dBA sound is similar to the sound of a regular office environment.

Air concussion limits associated with blasting will be restricted to 128 dBA, a sound similar to an airplane taking off though the sound would be less than one second in duration. If a complaint is received by the company, the matter will be forwarded to the Underwriter's Adjustment Bureau for its independent investigation. Blasting will be prohibited on Sunday's, provincial holidays and during evening and nighttime hours (6pm-8am).

10. Reducing dust levels. Source points where dust emissions usually originate must be identified by the company and dealt with by using water sprays and acceptable dust suppressants. The company must set up an effective monitoring program of all equipment and trucks. The Air Quality Regulations in the Environment Act must be complied with.

11. Complying with site specific rules. Mining restrictions that are specific to this Point Aconi mine site must be followed, including: that the site be legally surveyed to ensure work is contained only where permitted; also, that materials to be stockpiled be listed to

prevent any foreign material from being added. Foreign materials must be disposed of at approved facilities.

The above key conditions –and dozens more– will be enforced by provincial inspectors based in Cape Breton. They will monitor the mine site through unannounced inspections, prearranged visits, sampling for analysis and other regulatory practices.

The company must post a bond with the Department of Natural Resources (DNR) under the Mineral Resources Act in a value which will ensure rehabilitation to the satisfaction of DNR and NSEL. Failure to comply could be met with a range of responses: an inspector's warning letter, suspension of operations, prosecutorial action, loss of the company's posted bond.

To review the complete Industrial Approval document contact the Sydney office of Nova Scotia Environment and Labour at 295 Charlotte Street, LHC Building, 3rd floor, or by phone at 902 563 2100.