

**Dragon Products Company, Thomaston**  
**Applications for Closure and Reclamation of CKD and Waste Clinker Piles**  
**Scope of Board of Environmental Protection Proceeding**  
**Relevant Review Criteria**

Dragon Products Company (Dragon) has applied for closure of the cement kiln dust (CKD) and waste clinker stockpiles at its cement manufacturing facility in Thomaston. Dragon is also seeking approval to reclaim the waste from the closed stockpiles over time for use in its existing manufacturing process or elsewhere, thus gradually reducing the volume of the stockpiles. Accordingly, the statutes and rules governing solid waste facility closure and reclamation activities apply.

No other aspects of Dragon's cement manufacturing facility are being reviewed by the Board in this licensing proceeding. Hence, any issues related to mining operations and air emissions from the manufacturing process are beyond the scope of the Board's proceeding. In addition, the Board need not determine the timing of the stockpiles' growth in order to make a decision on closure and reclamation, therefore any discussion of alleged unauthorized expansion of the stockpiles is also outside the scope of the Board's proceeding.

In order to make a decision on the proposed closure, the Board must examine (1) the waste stockpiles themselves, (2) the associated stormwater management, erosion & sedimentation control, and leachate collection structures, and (3) the associated ground water and surface water monitoring network.

In order to make a decision on the proposed reclamation, the Board must examine the manner in which the reclamation of waste is proposed to take place and the types of environmental controls that are required for this activity.

**Statutory Review Criteria**

- 38 MRSA section 1310-N(1)(A): "The facility will not pollute any water of the State, contaminate the ambient air, constitute a hazard to health or welfare or create a nuisance..."
- 38 MRSA section 1310-N(1-A): Surface water protection: the facility may not cause an "...unreasonable threat to the quality of a classified body of surface water..."

These overarching statutory criteria apply to the proposed reclamation activities and are deemed met if the solid waste management rules governing reclamation activities are complied with. While these statutory criteria are not directly applicable to, and cannot be used to prevent, the closure of a solid waste facility, the solid waste management rules pertaining to closure contain standards protective of air, land and water, and public health and safety, including the requirement that any existing contamination of ground water be eliminated within the post-closure period (see list below).

## **Rules Pertaining to Closure of the CKD and Waste Clinker Piles**

The standards governing landfill closure and post-closure monitoring and maintenance are set forth in Chapter 401.5 and 401.6, and in applicable sections of Chapter 400.

- 401.5.B General performance standards for landfill closure: Closure must be designed, constructed, monitored and maintained to (1) mitigate hazards to public health or safety or to the environment, (2) monitor the effectiveness of the closure system and (3) function with a minimum of maintenance.
- 401.5.D Application Requirements: The application must address the following requirements of Chapter 400:
  - 400.3 Solid waste licensing process.
  - 400.4.B Financial ability.
  - 400.4.C Technical ability.
  - 400.4.J Soil types that are suitable; closure will not cause unreasonable erosion.
  - 400.4.M Closure must not unreasonably cause or increase flooding.
  - 400.10 Liability insurance.
  - 400.11 Financial assurance for closure and post-closure monitoring and maintenance.
- 401.5.E Site Investigation.
- 401.5.F Site Assessment Report.
- 401.5.G Design Standards for Closure. Section 401.5.G(6) requires that if there is contamination of ground water or surface water, the owner must implement corrective action(s) to meet the performance standards in 401.5.B.
- 401.5.I Engineering Report: including engineering report for surface water control, leachate management, gas management, final cover system, and stability assessment.
- 401.5.K Quality Assurance Plan for final cover components.
- 401.5.L Construction Contract Bid Documents.
- 401.5.M Requirements during Construction.
- 401.6.A Post-closure Monitoring and Maintenance Plan.
- 401.6.B Post-closure performance standard: The facility site may not contaminate ground water outside the solid waste boundary and may not discharge contaminants to surface water without a license pursuant to 38 M.R.S.A. Section 413. Facilities that have implemented or are required to implement corrective action(s) must demonstrate that successful corrective action will occur prior to the end of the post-closure period.

Other post-closure monitoring and maintenance requirements include monitoring of ground water, surface water, gas, leachate, stability and the final cover system; maintenance of all monitoring and final cover systems; inspections. Monitoring of ground water and surface water must comply with Chapter 405.
- 401.6.C Reporting Requirements.
- 401.6.D Landfill Reclamation: This provision provides for a facility owner to obtain a license to conduct reclamation activities at a closed landfill.
- 400.4.A Title, right or interest.
- 400.12 Criminal or civil record disclosure.

## **Rules Pertaining to Reclamation Activities**

Chapter 401.6.D, Landfill Reclamation, provides that “An owner must obtain a license pursuant to Chapter 400 in order to conduct landfill reclamation at a closed landfill.” The following provisions of Chapter 400 apply to Dragon’s proposed reclamation of CKD and waste clinker from the closed stockpiles:

- 400.3 Solid waste licensing process.
- 400.4.A Title, right or interest.
- 400.4.B Financial ability.
- 400.4.C Technical ability.
- 400.4.D Traffic movement. In this instance, the applicant must submit information pertaining to 400.4.D(1)(d),(e), and (f) and (2)(g) pertaining to interior roadways and interior traffic movement associated with the proposed reclamation activity.
- 400.4.F No unreasonable adverse effect on existing uses and scenic character.
- 400.4.G No unreasonable adverse effect on air quality.
- 400.4.H No unreasonable adverse effect on surface water quality.
- 400.4.I No unreasonable adverse effect on other natural resources. If a protected natural resource will be impacted by the proposed reclamation activity, the applicant must propose how the provisions of the Natural Resources Protection Act will be met.
- 400.4.J Soil types that are suitable; reclamation activity will not cause unreasonable erosion.
- 400.4.K(b)&(c) Reclamation activity will not pose an unreasonable threat to the quality of a significant sand and gravel aquifer or the quality of an underlying fractured bedrock aquifer.
- 400.4.M Reclamation activity will not unreasonably cause or increase flooding.
- 400.10 Liability insurance.
- 400.11 Financial assurance.
- 400.12 Criminal or civil record disclosure.