



State of New Hampshire  
DEPARTMENT of ENVIRONMENTAL SERVICES

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SOLID WASTE FACILITY PERMIT

PERMIT NUMBER:

DES-SW-87-022

FACILITY LOCATION:

Tax Map #419, Lots #22 & #23  
Trudeau Road  
Bethlehem, New Hampshire 03574

FACILITY OWNER/OPERATOR:

Sanco, Inc.  
PO Box 550  
Bethlehem, New Hampshire 03574

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Waste Management Division





State of New Hampshire  
 DEPARTMENT OF ENVIRONMENTAL SERVICES  
 WASTE MANAGEMENT DIVISION

6 Hazen Drive, Concord, NH 03301-6509  
 603-271-2900

SOLID WASTE COUNCIL  
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 JOHN A. MINICHELLO  
 ACTING DIRECTOR

*RUN COOL PAPER*  
 CERTIFIED MAIL  
 RETURN RECEIPT REQUESTED

June 30, 1987

Roy Sanborn, President  
 Sanco, Inc.  
 PO Box 550  
 Bethlehem, N.H. 03574

RE: SANCO, INC. - PERMIT TO CONSTRUCT AND OPERATE A SOLID WASTE LANDFILL, BETHLEHEM, NEW HAMPSHIRE.

Dear Mr. Sanborn:

The permit application submitted by Sanco, Inc. to the New Hampshire Department of Environmental Services, Waste Management Division (Division) for the construction and operation of a solid waste landfill facility is approved. This facility is located on property designated on Tax Map #419 as Lots #22 & 23 off Trudeau Road in Bethlehem, New Hampshire. This approval is granted pursuant to RSA 149-M:10 and the New Hampshire Department of Environmental Services' Solid Waste Rule He-P 1901.04(g)(4).

However, please note that all permit terms and conditions must be met and the site shall be constructed and operated in accordance with permit application and the New Hampshire Department of Environmental Services' Solid Waste Rules.

If you have any questions, please feel free to contact Thomas L. Sweeney at 271-2925 or me at 271-2906.

Sincerely,

John A. Minichiello  
 Acting Director  
 Waste Management Division  
 Department of Environmental Services

*for*

JAM:gmt/8420w

cc: Alden H. Howard, Commissioner, DES  
Timothy W. Drew, PIP  
Harry Stewart, P.E., WSPCD  
Fred Elkind, WSPCD  
Paul Sanborn, GZA  
Ronald Cook, Clark, Cook, and Molan  
Laurence Gardner  
Selectmen's Office, Bethlehem  
Barry Hager  
Date Book  
Thomas L. Sweeney/SW Bethlehem File  
DES-SW-Permit File

Authorization to Manage Solid Waste  
under the New Hampshire Solid Waste Act (RSA 149-M)

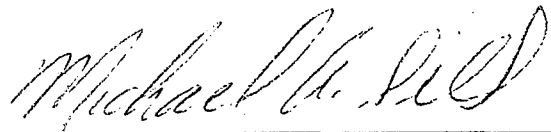
PERMIT NUMBER: DES-SW-87-022

FACILITY LOCATION: Tax Map # 419, Lots #22 & 23  
Trudeau Road  
Bethlehem, New Hampshire 03574

FACILITY OWNER/OPERATOR: Sanco, Inc.  
PO Box 550  
Bethlehem, New Hampshire 03574

Pursuant to RSA 149-M:10 and the New Hampshire Department of Environmental Services' Solid Waste Rule He-P 1901.04(g)(4), a permit is hereby issued to Sanco, Inc., Bethlehem, New Hampshire 03574 to construct and operate a solid waste landfill at the above-cited location. This permit is subject to the attached conditions and terms.

Failure to comply with these conditions and terms from the New Hampshire Department of Environmental Services' Solid Waste Rules in effect at this time, or as amended, could result in civil penalties, suspension, or revocation of the permit.

*for*  


John A. Minichiello  
Acting Director  
Waste Management Division  
Department of Environmental Services

6/30/87  
DATE

CONDITIONS AND TERMS

- [1]. This permit is not effective until all other applicable Federal/State/District/Local permits required for the construction and operation of the facility have been obtained. Such permits may include a groundwater discharge permit from the New Hampshire Department of Environmental Services' Water Supply and Pollution Control Division (WSPCD), an air emission permit from the Air Resources Division (ARD), an updated solid waste transport vehicle registration with the New Hampshire Public Utilities Commission (PUC), and contact with the Upper Grafton and Lancaster Areas (UGLA) Solid Waste Districts pursuant to RSA 149-M:17 and RSA 149-M:18.
- [2]. The site shall be constructed and operated in accordance with New Hampshire Department of Environmental Services' Solid Waste Rules. The terms and conditions listed herein, and the facility design as presented within the permit application documents. The permit application documents include:
  - a. New Hampshire Permit Application Document, Sanco, Inc. Solid Waste Landfill Expansion, Bethlehem, New Hampshire, Kimball Chase Company, Inc., Portsmouth, New Hampshire, March, 1987.
  - b. Attachment A, New Hampshire State Permit Application Document, Volume I, Hydrogeologic Study, Sanco Landfill Expansion, Bethlehem, New Hampshire, Goldberg-Zoino & Associates, Inc., Manchester, New Hampshire, March, 1987.
  - c. Attachment A, New Hampshire State Permit Application Document, Volume II, Hydrogeologic Study, Sanco Landfill Expansion, Bethlehem, New Hampshire, Goldberg-Zoino & Associates, Inc., Manchester, New Hampshire, March, 1987.
  - d. Attachment B, Sanco Landfill Expansion, Preliminary Facility Design Plans, Bethlehem, New Hampshire, Kimball Chase Company, Inc., Portsmouth, New Hampshire, March, 1987.
- [3]. At a minimum, this facility shall conform to the criteria set forth in, but not limited to, Solid Waste Rules:
  - a. He-P 1901.05 (a) General Standards.
  - b. He-P 1901.05 (b) Standards for Sanitary Landfills.
- [4]. At least thirty (30) days prior to initiation of construction, Sanco, Inc. shall submit to the Division for review and approval a copy of the final construction design plans that detail all major components of the facility. The construction design drawings shall include the following required modifications:

1. Pages 7-11 and 7-12 of the application discuss the worst case conditions for run-off collection and recycle. The landfill design shall be modified so that all of the run-off from such an event can be pumped and removed within a 24 hour period without the aid of recycle back to the landfill.
2. Page 8-2 describes the sequence of cover material above the synthetic liner. As a minimum the drainage layer of sand shall be 12 inches thick.
3. A more detailed analysis of the adequacy of the soil layer to be used as an anchor for the HDPE liner.

Any additional changes to the preliminary design drawings (Attachment B listed in Condition 2d above) shall be identified and include the rationale for such changes.

- [5]. At least thirty (30) days prior to initiation of construction, Sanco, Inc. shall submit to the Division for review and approval a copy of the final design plans for the closure of the existing (active) landfill phase and its associated lined, extension areas (Attachment B, Sheet No. 2 of 19). As-built drawings depicting final elevations, slopes, capping sequence, monitoring well system, and all other closure design systems and details shall be submitted to the Division within thirty (30) days following closure. A program that addresses post-closure care shall also be included with these submissions. In no way shall the closure of this existing phase be physically integrated with the new phases for the landfill expansion addressed by this permit.
- [6]. A preliminary design for any required pretreatment facility for the leachate generated shall be submitted to the Division within 180 days following initial placement of waste in the landfill.
- [7]. The design, construction, and operation of each phase of the landfill expansion shall be separate and distinct from each other. This excludes such total facility components as the leachate collection main, surface water diversion structures, access roads and final cover.
  - a. From Attachment B, Sheet No. 9 of 19, a cross-section of the "Final Cover System" is depicted. The anchorage of the two synthetic liner systems shall be extended laterally to allow bonding and integrated anchorage with the synthetic cap membrane to produce the "envelope" to isolate disposed solid wastes from the environment.

b. From page 8-4 of the Kimball Chase, Inc. New Hampshire State Permit Application Document, each phase shall undergo closure, and be isolated from subsequent phases, upon exhaustion of phase design life. Therefore, at no time shall leachate from a closed phase be pumped and recirculated onto new refuse deposited on the next sequenced active phase. Any remaining leachate in closed phases shall be directed to the leachate main for collection and further management.

[8]. Within Section 7.3 of the Kimball Chase, Inc. New Hampshire State Permit Application Document, leachate tanks are discussed. The tank specifications are listed in Section 9.0 (02744-4, Tank Testing), and depicted in detail on Sheet No. 10 of 19 in Attachment B.

These underground leachate storage tanks (and associated appurtenances) shall consist of cathodically protected steel or fiberglass-reinforced plastic, housed in concrete containment vaults to achieve secondary containment protection. These tanks shall be monitored by audible/visual leak detection system for fluid level in primary containers and for evidence of leakage in secondary containment from primary container, or other system failure (e.g., leachate pipe leakage). Any leakage event discovered shall be reported to the Division within 24 hours following discovery.

[9]. As part of the post-closure of any phase of the landfill expansion, Sanco, Inc. shall include within its daily operations an inspection regimen to monitor the performance and integrity of, but not limited to, the final cover system, slope stability, leachate collection system, gas vents, surface water drainage control, and any differential subsidence of the surfaces of closed phases.

[10]. From Attachment A, Volume I, Hydrogeological Study, Sanco Landfill Expansion, Bethlehem, New Hampshire, subsurface information appeared to suggest a hydrogeological "link" between the overall site and the Ammonoosuc River to the North. Therefore, as a potential source of contaminant flow to the Ammonoosuc River. The groundwater monitoring system shall be designed to intercept any release of contaminants from the Sanco, Inc. site that would flow towards the Ammonoosuc River.

Notification to the Division within 24 hours of discovery and the initiation of pre-approved remedial measures shall be the responsibility of Sanco, Inc.

[11]. Sanco, Inc. shall have at least one (1) employee on duty at the landfill expansion site during all normal operating hours. The normal operating hours shall extend from 7:00 A.M. to 3:00 P.M. Monday through Friday and 7:00 A.M. to 1:00 P.M. on Saturday.

Vehicles containing solid waste shall not be received before 7:00 A.M. nor after 2:30 P.M. (weekdays) and after 12:30 P.M. (Saturday). Solid waste shall not be held within container or trailer vehicles at the site for periods that exceed forty-eight (48) hours' storage time before disposal.

- [12]. The types of solid wastes permitted to be disposed at the landfill shall include:
- a. Residential solid wastes;
  - b. Commercial, non-hazardous solid wastes;
  - c. Industrial, non-hazardous solid wastes.
- [13]. This facility shall not collect, store, transport or dispose of any waste liquids such as drilling fluids, paints, or off-specification chemicals (including pesticides). No waste oils shall be collected, treated, transferred, or disposed at this facility.
- [14]. No infectious, pathogenic, or pharmaceutical wastes shall be accepted at this facility.
- [15]. No hazardous wastes, as defined by RSA 147-A:2 VII and the New Hampshire Department of Environmental Services' Hazardous Waste Rule He-P 1905.03, shall be allowed at this facility. Therefore, all site personnel shall understand and be able to recognize what materials are prohibited.
- [16]. Signs clearly stating the landfill facility rules and restrictions on permitted wastes shall be posted at the entrance to the site and at conspicuous places within the facility.
- [17]. Provisions and contingency handling procedures for "hot loads" of solid wastes that may come to the landfill intact, or mixed with permitted wastes listed in Condition Number 11, shall be established in writing, with copies distributed to all personnel. All such materials shall be segregated from other combustible solid wastes until cooled.
- [18]. Excess dusts, malodors and noise shall be controlled to the greatest extent possible. All windblown solid wastes originating on-site shall be picked up by the end of each working day and placed on the working face and covered before daily shutdown of operations.. Any potential disease-carrying vectors such as rats, mice and flies shall be eliminated upon discovery through the retention of services involving a certified pest control firm, registered with the New Hampshire Pesticide Control Board.
- [19]. The Town Health Officer shall be allowed to conduct spot inspections at reasonable times and conditions whenever he/she deems it necessary.



[20]. Sanco, Inc. shall develop and submit to the New Hampshire Department of Environmental Services, Waste Management Division (and shall maintain) a preventative maintenance plan for all equipment, buildings and emergency apparatus. This plan shall include, but not be limited to, such occurrences as:

[21]. Equipment Failure:

In the event of an equipment failure, solid wastes scheduled to be accepted at this facility shall be transferred directly from collection routes to a permitted solid waste management facility.

[22]. Injury:

In the event of a personal injury, an existing procedure must be in place and understood by all employees to treat and/or transport the victim(s) to the nearest medical facility for immediate professional care.

[23]. Fire or Explosion:

In the event of a fire or explosion, sufficient fire protection measures shall be employed (such as the use of a hand-operated or automatic sprinkler system, CO<sub>2</sub>, or dry powder fire extinguishers) and segregation of explosive items (such as bottled gas cylinders and gasoline containers) to quell or eliminate the initial emergency conditions. Prior arrangements with the local fire department and rescue team shall also be completed and documented in case conditions rapidly deteriorate to an uncontrollable event.