



**Hazardous Materials & Waste Management  
Radiation Management Program  
4300 Cherry Creek Drive South HMWMD-B2  
Denver CO 80246-1530**

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**RADIOACTIVE MATERIAL LICENSE APPLICATION**

**INSTRUCTIONS:** Refer to OR-RH-11 for a detailed explanation of the requirements for completing this application. This application must be signed and dated. An application fee in the amount specified in Part 12 of the *Colorado Rules and Regulations Pertaining to Radiation Control* must accompany an application for a new license. Mail the completed application, attachments, and fee payment to the Colorado Department of Public Health and Environment, Radiation Management Program, HMWMD – B2, 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530. All radioactive materials licenses are issued in accordance with the general requirements contained in the State of Colorado *Rules and Regulations Pertaining to Radiation Control* and Title 25, Article 11, CRS.

1. Application for a New License:

Renewal:  or Amendment: of License No: **1102-01** Expiration Date: **12/31/2010**

(Fee payment attached if New Application):

2. Applicant Name: **Clean Harbors Deer Trail, LLC**

3. Tax Payer Identification Number:

4. Mailing Address: **Clean Harbors Deer Trail, LLC, 108555 East Highway 36**  
City: **Deer Trail** State: **CO** Zip: **80105-9611**

5. Department to use Radioactive Material: **Clean Harbors Deer Trail, LLC**

6. Contact: **John H. Kehoe**

Phone: **970-386-2293** Fax: **970-386-2262**

E-mail Address: **kehoe.john@cleanharbors.com**

Indicate if you wish to receive informational notifications by e-mail: Yes  No

7. Facility Address: **Clean Harbors Deer Trail, LLC, 108555 East Highway 36**  
City: **Deer Trail** State: **CO** Zip: **80105-9611**

8. Radioactive Material  
Element and Mass

9. Chemical/Physical Form,  
Manufacturer and Model Number

10. Maximum Activity

**Requested radioactive materials include naturally occurring radioactive material (NORM), technologically enhanced NORM (TENORM), and radium contamination resulting from activities involving purposefully concentrated radium-226. The specific radionuclides are limited to K-40 and all of the radionuclides in the decay series for U-238, U-235, and Th-232. The summed activity of all radionuclides per gram contained in such waste materials shall not exceed 2000 pCi (74 Bq). Additionally, the Ra-226 activity per gram shall not exceed 222 pCi. The physical form of the material includes but is not limited to soils, sludges, process residues, resins, and filters that are compatible with the design and operational criteria required by the CHWA permit.**

**In addition to the limits described above, the total uranium and thorium content shall be less than 0.05% by weight (500 µg per gram) of the materials received for disposal.**

**In addition to the limits described above, the licensee shall limit the total of all waste materials containing radioactive material to a total volume not to exceed 510,440 cubic yards.**

11. Purpose for Radioactive Material: (attach additional sheets if needed for items 8 through 11)

**Receipt, possession, analysis, storage, processing in support of on-site disposal, and final disposal**

12. The Radiation Safety Officer (RSO) is:

**At the time of application submittal this position is vacant and hiring of a qualified individual is in process. The Alternate RSOs are: Kirk Baker and Tracy Ikenberry, CHP. Their qualifications are listed in Volume 1 of the application under Facility Key Personnel and Authorized Users**

13. Individual Users: (attach additional sheets if needed)

- A. John Kehoe
- B. Daniel O'Brien
- C. Debra Phillabaum
- D. Ismael Hernandez
- E. Steven Hickman
- F. Joseph Sanchez
- G. Robert Shaw
- H. Randall Musgrave
- I. Terry Musgrave
- J. Leresa Atwood

**Documentation of training of authorized users is listed in Volume 1 of the Application under Facility Personnel.**

14. Radiation Detection Instruments

**A current listing of instrumentation used by CHDT is listed in Volume 1 of the Application. Use of the instrumentation is described in the Standard Operating Procedures.**

15. Calibration of Radiation Detection Instruments

**Instruments are calibrated annually or when otherwise needed by Ludlum Measurements, Inc., Sweetwater Texas, and by Dade Moeller and Associates, Inc., Gaithersburg, MD.**

16. Personal Monitoring Devices

Type of Device: Film Badge: \_\_\_\_\_ TLD/OSL:  X  Other:

Name of Supplier (must be NVLAP approved): **Landauer**

Radiation Detected: **Gamma** Exchange Frequency: **Quarterly**

Audible Radiation Dosimeter used (Y/N): **N** Manufacturer : **N/A**

Pocket Dosimeter is used (Y/N): **N** Manufacturer: **N/A**

(If audible and/or pocket dosimeters are used, attach calibration procedures)

**All full-time and temporary personnel will be monitored for external exposure using thermoluminescent dosimeters (TLDs) from Landauer, Inc. Internal exposure will be evaluated using facility air monitoring data.**

17. Facilities and Equipment

See attached volumes from the 2004 RCRA Permit Renewal Application

18. Attach a description of your radioactive materials program. The information must reflect your current program and procedures. (See instructions in OR-RH-11 for a list of procedures that must be included.)

See Volume 1, Attachment C

19. Waste Disposal

Any waste materials generated onsite are anticipated to be disposed in the active landfill cell. Any materials brought onsite that are not in compliance with license conditions will be disposed of in an appropriate facility.

20. Financial Assurance (refer to RH 3.9.5)

Financial Assurance is described in the Annual Reports and RCRA Permit Renewal Application.

21. CERTIFICATION:

THE APPLICANT AND ANY OFFICIAL EXECUTING THIS CERTIFICATE ON BEHALF OF THE APPLICANT NAMED IN ITEM 2, CERTIFY THAT THIS APPLICATION IS PREPARED IN CONFORMITY WITH COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT RADIATION CONTROL REGULATION AND THAT ALL INFORMATION CONTAINED HEREIN, INCLUDING ANY SUPPLEMENTS ATTACHED HERETO, IS TRUE AND CORRECT TO THE BEST OF OUR KNOWLEDGE AND BELIEF.

Applicant Named in Item 2: Clean Harbors Deer Trail, LLC

By:

*Phillip B. Retallick*

Date: 6-3-2010

Printed Name of Official: Phillip B. Retallick

Printed Title of Official: Senior Vice President, for Regulatory Affairs

Signature of Radiation Safety Officer: Jacq A. Skerby Date: June 3, 2010

Printed Name of Radiation Safety Officer: