



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

March 24, 2003

Certified Mail No. 7000 1670 0013 9129 3858

Roger Saterfiel, Director
Kootenai County Solid Waste Department
3650 Ramsey Road
Coeur d'Alene, ID 83814

RE: AIRS Facility No. 055-00044, Kootenai County Solid Waste Department, Coeur d'Alene
(Amendment)

Dear Mr. Saterfiel:

The Idaho Department of Environmental Quality (Department) is issuing amended Permit to Construct (PTC) No.P-020100 for the Kootenai County Solid Waste Department in accordance with IDAPA 58.01.01.200 through 228 *Rules for the Control of Air Pollution in Idaho*. This PTC is effective immediately and is based on your permit application received on January 9, 2002 to change the description of the design capacity.

This permit does not release Kootenai County Solid Waste Department from compliance with all other applicable federal, state, local laws, regulations, permits, or ordinances.

Since this project does not significantly change the terms of your permit, the Department will not contact you regarding a meeting to discuss the terms of the permit. However, if you wish to meet to discuss the permit terms and requirements, you may contact Tom Harman of the Coeur d'Alene Regional Office to schedule a meeting. If a meeting is scheduled, the Department recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Dan Salgado at (208) 373-0431 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

A handwritten signature in black ink that reads "S.E. West".

Stephen E. West, Administrator
Air Quality Division

Enclosures

CSA/DH/sd

G:\Air Quality\Stationary Source\SS Ltd\PTC\Kootenia County Landfill\NP-020100 Final Ltr.doc

C: Tom Harmon, Coeur d' Alene Regional Office
Dustin Holloway, AQ
Pat Rayne, AFS
Marilyn Seymore, AQ (PF)
Dan Salgado, Permit Coordinator
Laurie Kral, EPA Region 10
Sherry Davis, AQ Division/SF
Reading File



**Air Quality
PERMIT TO CONSTRUCT**

State of Idaho
Department of Environmental Quality

PERMIT NO.: P-020100

AIRS FACILITY No.: 055-00044

AQCR: 62

CLASS: B

SIC: 4953

ZONE: 11

UTM COORDINATE (km): 504.8 , 5264.2

1. PERMITTEE

Kootenai County Solid Waste Department

2. PROJECT

Permit Amendment

3. MAILING ADDRESS

3650 Ramsey Road

CITY

Coeur d'Alene

STATE

ID

ZIP

83814

4. FACILITY CONTACT

Steven Wulf

TITLE

Director

TELEPHONE

(208) 769-4402

5. RESPONSIBLE OFFICIAL

Steven Wulf

TITLE

Director

TELEPHONE

(208) 769-4402

6. EXACT PLANT LOCATION

Section 1, Township 48N, Range 5W on U.S. Highway 95

COUNTY

Kootenai

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Solid Waste Disposal Facility

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, *Rules for the Control of Air Pollution in Idaho*, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit is not transferable to another person, place, or piece or set of equipment. This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require Department approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.

C. STEPHEN ALLRED, DIRECTOR
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: March 24, 2003

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ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE

| | |
|------------|--|
| acfm | actual cubic feet per minute |
| AQCR | Air Quality Control Region |
| CFR | Code of Federal Regulations |
| Department | Department of Environmental Quality |
| EPA | U.S. Environmental Protection Agency |
| IDAPA | a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act |
| km | kilometer |
| MMBtu | million British thermal units |
| MMBtu/hr | million British thermal units per hour |
| ppm | parts per million |
| PTE | potential to emit |
| scfm | standard cubic feet per minute |
| SIC | Standard Industrial Classification |
| UTM | Universal Transverse Mercator |
| VOC | volatile organic compound |

AIR QUALITY PERMIT TO CONSTRUCT NUMBER: P-020100

| | | |
|---|------------------------------------|------------------------------------|
| Permittee: Kootenai County Solid Waste | AIRS FACILITY NO. 055-00044 | Date Issued: March 24, 2003 |
| Location: Coeur d'Alene, Idaho | | |

1. GAS COLLECTION AND CONTROL SYSTEM

SOURCE DESCRIPTION

1.1 Process Description

Kootenai County Farm Landfill is a municipal solid waste landfill where household, commercial, and industrial solid waste is placed in, or on, the land. The landfill has a maximum design capacity of 2.33 million tons of municipal waste. This landfill is located 13.3 miles south of Coeur d'Alene and approximately 1,500 feet west of U.S. Highway 95. The landfill will occupy approximately 70 acres of a 440-acre parcel of land and will be owned and operated by Kootenai County.

The Kootenai County Solid Waste Department uses a landfill gas flare and control system to remove and control excess methane gases generated at the landfill. The gas extraction system is a network of horizontal trenches and piping which collects and transports the gas to the flare station. The landfill gas is delivered by a gas blower, through a moisture removal system, to the enclosed flare for incineration. The enclosed gas flare is designed to incinerate up to 825 scfm at a maximum rated heat input capacity of 24.8 MMBtu/hr. The flare will operate at a minimum of 1500°F and for 24 hours per day. Emissions will vent through a stack to the atmosphere.

1.2 Equipment Specifications

Dry Scrubber Specifications

Manufacturer: Chemical Proof Corp.

Efficiency: 50% Moisture Removal

Enclosed Gas Flare Specifications

The flare is designed with five burner heads each having a six inch diameter outlet.

Manufacturer: John Zink Inc.

Maximum heat capacity: 24.8 MMBtu/hr input

Fuel type: Landfill gas

Maximum input capacity: 825 acfm

Stack Specifications

Minimum stack height: 40.0 feet

Stack diameter: 6.0 feet

Exit temperature: 1500°F

Volumetric flow rate: 825 acfm

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055-00044

2. EMISSION LIMITS

2.1 VOC Emission Limit

Volatile organic compounds (VOCs) shall be reduced to a maximum concentration of twenty parts per million by volume on a dry basis (20 ppmvd) out of the stack outlet as hexane at 3% O₂ (EPA proposed 40 CFR 60.752(b)(iii)(B), Subpart WWW, Fed. Reg. Vol. 56, No.104).

2.2 Fugitive Emissions

Fugitive particulate matter emissions from the landfill shall be reasonably controlled as required in IDAPA 58.01.01.651, Rules for the control of Air Pollution in Idaho. This shall include, but is not limited to, the application of dust suppressants on all unpaved roads.

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3. OPERATING REQUIREMENTS

3.1 Wellhead Gauge Pressure

The gauge pressure at each wellhead and in the gas collection header shall be maintained in accordance with 40 CFR 60.754.

3.2 Pilot Flame

A pilot flame at the flare device shall be maintained at all times.

3.3 Combustion Requirements

The combustion temperature shall be maintained at a minimum 1500°F. Combustion temperature shall be maintained at, or above, the temperature recorded during the most recent source test that demonstrated compliance with Section 2.1 of this permit.

3.4 Landfill Gas Flowrate

The landfill gas flowrate shall not exceed the maximum design capacity of the enclosed gas flare described in Section 1.2 of this permit.

3.5 Collection System

The collection system shall capture and collect landfill gas at sufficient extraction rates. Gas collection system expansion shall be performed for each area, cell, or group of cells for which future refuse will be accepted.

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4. MONITORING AND RECORDKEEPING REQUIREMENTS

4.1 Wellhead pressure

The permittee shall install a sampling port at each wellhead and measure the gauge pressure in the gas collection header on a monthly basis to determine compliance with Section 3.1 of this permit.

4.2 Pilot Flame

The permittee shall install, calibrate, maintain, and operate according to manufacturer specifications, a heat sensing device at the pilot light to detect the continuous presence of a flame.

4.3 Combustion Temperature

The permittee shall install, calibrate, maintain, and operate according to the manufacturer specifications, a temperature monitoring device equipped with a continuous recorder and having an accuracy of $\pm 46.7^{\circ}\text{F}$ of the combustion temperature to determine compliance with Section 3.3 of this permit.

4.4 Monitor Flow Rate to Flare

The permittee shall install, calibrate, maintain, and operate according to manufacturer specifications, a flow indicator that provides a record of gas flow to the enclosed flare at maximum intervals of every 15 minutes (40 CFR 60.755) to determine compliance with Section 3.4 of this permit.

4.5 Performance Tests

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct an initial performance test to measure the nonmethane organic carbon (NMOC) emissions from the landfill gas flare stack in accordance with 40 CFR 60.8 and 40 CFR 60.754.

4.6 Record Keeping Requirements

The permittee shall record the following information which shall remain onsite for a minimum period of two years and be made available to inspection personnel upon request:

- The landfill maximum design capacity, daily amount of refuse-in-place, and the yearly waste acceptance rate.
- The monthly gauge pressure reading in the gas collection header.
- All three hour periods when the average combustion temperature was more than 82°F below the average combustion temperature demonstrated during the most recent performance test required in Section 4.5 of this permit.
- All periods when the pilot flame or flare was absent and when the control device was not operating.
- All periods when the gas stream is diverted from the control device or has no flowrate.

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Location: Coeur d'Alene, Idaho

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5. REPORTING REQUIREMENTS

5.1 Performance Tests

The permittee shall submit a test protocol for each performance test required in Section 4.5 of this permit to the Department for approval at least thirty days prior to each test date. Each performance test report, including the required process data, shall be submitted to the Department within 30 days of the date on which the performance test is conducted.

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6. PERMIT TO CONSTRUCT GENERAL PROVISIONS

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the *Rules for the Control of Air Pollution in Idaho*. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq., and the permittee is subject to penalties for each day of noncompliance.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
5. The permittee shall notify the Department, in writing, of the required information for the following events within five working days after occurrence:
 - Initiation of Construction - Date
 - Completion/Cessation of Construction - Date
 - Actual Production Startup - Date
 - Initial Date of Achieving Maximum Production Rate - Production Rate and Date
6. If compliance testing is specified, the permittee must schedule and perform such testing within 60 days after achieving the maximum production rate, and not later than 180 days after initial startup. This requirement shall be construed as an ongoing requirement. The permittee shall not operate the source without testing within 180 days. If testing is not conducted within 180 days after initial startup, then each day of operation thereafter without the required compliance test constitutes a violation. Such testing must **strictly** adhere to the procedures outlined in IDAPA 58.01.01.157 and shall not be conducted on weekends or state holidays without prior written approval from the Department. Testing procedures and specific time limitations may be modified by the Department by prior negotiation if conditions warrant adjustment. The Department shall be notified at least 15 days prior to the scheduled compliance test. Any records or data generated as a result of such compliance test shall be made available to the Department upon request.

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The maximum allowable operating rate shall be limited to 120% of the average operating rate attained during any compliance test period, for which a test protocol has been granted prior approval by the Department, unless (1) the test demonstrates noncompliance; (2) a more restrictive operating limit is specified elsewhere in this permit; or (3) at such an operating rate, emissions would exceed any emissions limit(s) set forth in this permit.

7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
8. In accordance with IDAPA 58.01.01.123, all documents submitted to the department, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.