



**NEVADA DIVISION OF ENVIRONMENTAL PROTECTION (NDEP)
BUREAU OF SUSTAINABLE MATERIALS MANAGEMENT (BSMM)**

GUIDANCE FOR PREPARING AN APPLICATION FOR
A ***WRITTEN DETERMINATION*** (WD) OF HAZARDOUS WASTE RECYCLING

This guidance has been prepared by the NDEP Bureau of Sustainable Materials Management to assist applicants in preparing an application for a written determination of hazardous waste recycling. This guidance should be used along with the Nevada Administrative Code (NAC) 444.84555 and referenced sections of the Code of Federal Regulations (CFR) to prepare an application for review by NDEP.

OVERVIEW OF HAZARDOUS WASTE RECYCLING REQUIREMENTS

Generally, owner/operators of facilities that treat, store, or dispose of hazardous waste are required to obtain a Resource Conservation and Recovery Act (RCRA) permit. Owner/operators of facilities or mobile units in Nevada which only recycle (and do not treat, store, or dispose of) hazardous waste are not required to obtain a permit, but must obtain a Written Determination before starting recycling operations. Owner/operators of facilities that recycle hazardous waste they have generated, at a unit for the recycling of hazardous waste which is owned by them and is located at the same site at which the hazardous waste is generated, are not required to obtain a written determination.

In addition to obtaining a written determination, 40 CFR 261.6(c)(2) requires owners or operators of facilities that recycle hazardous wastes without storing them to:

- Provide a notification to EPA of hazardous waste activity under Section 3010 of RCRA (for further information contact BSMM at 775-687-9481 or go to our web site <http://ndep.nv.gov/bwm/hazard03.htm>); and
- Comply with 40 CFR 265.71 and 265.72 (which deal with the use of manifests and manifest discrepancies).

Furthermore, your recycling units may also be subject the RCRA air emission standards at 40 CFR Subparts AA and BB if they meet the applicability criteria listed at 40 CFR 261.6(d), 262.34(a)(1)(i)-(ii), 265.1030, 265.1050, 264.1030, and/or 264.1050.

As explained in 40 CFR 261.6(b), if you generate or transport hazardous wastes to be recycled, you must comply with 40 CFR Parts 262 and 263 and provide notification to EPA of hazardous waste activity under Section 3010 of RCRA.

POTENTIALLY APPLICABLE REQUIREMENTS

If the facility generates hazardous waste, universal waste, or used oil as a part of the recycling process, the owner/operator will also need to comply with the applicable generator requirements at 40 CFR Parts 262 and/or 266, 268, 273, and 279. The State of Nevada has additional manifesting, biennial reporting, container management, and inspection requirements at NAC 444.8655 through 444.8677.

Nevada has promulgated specific regulations for management of used antifreeze at NAC 444.8801 through 444.9071.

Facilities which engage in the following hazardous waste management activities must follow additional requirements in 40 CFR Part 266:

- use recyclable materials in a manner constituting disposal;
- utilize recyclable materials for precious metal recovery;
- reclaim spent lead-acid batteries;
- burn hazardous waste in boilers and/or industrial furnaces.

CONTENTS OF APPLICATION

NAC 444.84555 outlines the information required in an application for a written determination. Each of these requirements is printed in bold and explained in detail below:

- 1(a) The name and address of the owner and operator of the facility or mobile unit;**
- (b) The name and address of the property owner of the location at which a facility is proposed to be constructed**
- (c) A detailed description of the type of recycling proposed, including:**
 - (1) The manufacturer of the equipment to be used at the facility or mobile unit;**
 - (2) The nature of the recycling; and**
 - (3) An explanation evidencing that the:**
 - (I) Facility is a facility for the recycling of hazardous waste; or**
 - (II) Mobile unit is a mobile unit for the recycling of hazardous waste.**
 - Provide the name, address, phone number, and contact person for the manufacturer of the recycling technology or technologies to be used.
 - The applicant must include legible process flow diagrams and schematic drawings of the recycling process. Piping and instrumentation diagrams must also be provided and must clearly show locations of control instrumentation and operating parameters. A narrative description of the recycling process must be provided, including information on how the recycling unit(s) will be operated and maintained (key portions of operating manuals must be referenced or included as an appendix). A demonstration of the performance of the recycling technology (if available) should be presented, along with an explanation of how the system will be monitored for performance. A physical and chemical description (e.g. MSDS sheets) of any reagents used in the recycling process must be included, along with a physical and chemical characterization of any emissions, effluent, or process residuals (analytical results). This information must be given on a mass flow basis. If available and applicable, the recycled product quality should be compared against existing industry standards (e.g. ASTM).
 - Clarify whether the application is for a mobile unit to be transported for use at different locations or is for a recycling facility that will accept off-site hazardous waste for recycling. In the case of an off-site recycling facility, the applicant must describe how the facility will be operated such that hazardous waste will not be stored. This latter point is important since facilities, which store hazardous waste, are required to obtain a RCRA permit from NDEP.

(d) A description of the source and estimated amount of hazardous waste to be recycled on an average day and on a peak day.

- The description of the source of the hazardous waste to be recycled must describe the process, which generates the hazardous waste. The applicant must also describe the estimated throughput of waste to be recycled by the unit on an average day and on a peak day.

(e) A physical and chemical description of the type of hazardous waste to be accepted by the facility or processed at the mobile unit.

- Provide the EPA hazardous waste codes potentially applicable to the waste, 40 CFR Part 261 Appendix VIII constituents expected to be present in the waste, average amount of recyclable components in the waste, and relevant physical and chemical characteristics that affect safety in handling the waste or render the material unusable before it is recycled. This description must explain the likely variation of the waste types the facility will accept and how the owner/operator of the recycling unit will characterize the waste to ensure that it is recyclable.

(f) A detailed economic analysis of the recycling process to be used at the facility or by the mobile unit, including:

- (1) The projected costs to operate the facility or mobile unit;**
- (2) The fees that would be charged per unit volume to process waste transported to the facility or processed by the mobile unit; and**
- (3) The projected value that would be recovered per unit volume.**
- (4) The projected costs otherwise to manage, recycle, treat or dispose of the material as a hazardous waste**

- The projected costs to operate the facility or mobile unit must be provided on a time-averaged (e.g. monthly) basis, and should include: labor, materials, maintenance costs, overhead, transportation, and disposal fees. The fees that would be charged to generators and the projected resale value of the recycled product must be provided on a unit volume or unit weight of waste basis. The applicant should then combine this information together with the average daily process volume or process weight of waste to demonstrate the economic feasibility of the recycling operation.

(g) For a facility for the recycling of hazardous waste, a description of the markets and the uses for the products to be produced and the materials and energy to be recovered.

- The applicant must include price quotations in writing from potential buyers of the recycled products.

(h) A comparison of the economic and environmental impact of the proposed recycling process to a process, which uses material that is not, considered waste when producing the same product.

- The applicant should compare the costs of the recycling process to the costs of a process which produces the same product but which does not recycle hazardous waste. The applicant should also provide a comparison of the environmental impact of the two processes, which includes: wastes created by the process, air emissions, effluents, and raw materials used.

and

(i) An operating plan if the facility is a stationary facility and will recycle hazardous waste other than used antifreeze governed by NAC 444.8801 to 444.9071, inclusive, or precious metals

governed by 40 CFR Part 266. Such an operating plan must, without limitation, include a description of the procedures that will ensure safe operation and demonstrate compliance with:

- (1) The requirements for emergency preparedness and a contingency plan specified in 40 CFR Part 264, Subparts C and D;
- (2) The standards for containers and tanks specified in 40 CFR Part 264, Subparts I, J, AA, BB and CC; and
- (3) The applicable requirements for closure and financial assurance for closure specified in 40 CFR Part 264, Subparts G and H.

Additional Requirements

As provided by NAC 444.84555(2), NDEP may require the applicant to submit additional information before issuing a written determination. In most cases, NDEP will require the following from written determination applicants:

- 1) If the technology is already operating in another state, the applicant should provide a regulatory agency contact, title, and phone number for reference.
- 2) Once a proposed location is determined, the applicant must provide NDEP a list of local permits (e.g. sewer discharge permit, air quality operating permit, business license, fire department permit) required in order for the facility to operate in the municipal jurisdiction. Once these permits are obtained, the applicant must provide copies to NDEP.
- 3) Once a facility location is selected, written concurrence of hazardous waste recycling activities by the property owner must be provided to NDEP. The applicant must also provide proof of property ownership (e.g. property deed, land title and/or county assessor documents).

In certain cases, NDEP may require a physical demonstration of the technology before issuing a written determination.

Please note that, in accordance with NAC 444.84555(3), NDEP will not issue a written determination unless it determines, based upon the application that all of the following requirements are satisfied:

- (a) The facility or mobile unit will be operated as a facility or mobile unit for the recycling of hazardous waste.
- (b) The recycling process has economic value. A recycling process has economic value if:
 - (1) The applicant shows that the material recovered from or the products or energy produced as a result of the process have value in the marketplace; and
 - (2) The fees that the applicant charges per unit of volume to process the material are less than or equal to the cost otherwise to recycle, manage, treat or dispose of the material as a hazardous waste, except that the fees that the applicant charges per unit of volume may be offset by the recovered unit value of the material recovered from or the products or energy produced as a result of the process.
- (c) The probable beneficial environmental effect of the facility or mobile unit to the State outweighs the probable adverse environmental effect.

In accordance with NAC 444.84555 (4), before issuing a written determination for a facility, the administrator shall provide for a period of public notice and comment of not less than 45 days. The request for public comment must be noticed in a local newspaper of general circulation that is published daily or weekly and must be sent to all persons on a mailing list developed and maintained by the administrator. A person may request to

be placed on the mailing list by contacting the administrator. The administrator shall respond to all comments he receives during the period provided for comments before making his determination to issue or not to issue a written determination.

NAC 444.84555(5) states that the administrator may revoke, suspend or modify a written determination if, at any time, he determines that:

- (a) A facility or mobile unit no longer satisfies the conditions stated in the application upon which the administrator issued the written determination;
- (b) An applicant misrepresented or failed to disclose fully a relevant fact on his application;
- (c) The administrator receives information that was not available at the time he issued the written determination which would have justified the imposition of different conditions at the time the determination was issued; or
- (d) The standards or regulations on which the administrator based the written determination have been changed.

In accordance with NAC 444.84555 (6), a person may request a hearing before the state environmental commission concerning a final decision of the administrator to issue, deny, revoke, suspend or modify a written determination by filing a request, not more than 10 days after receiving notice from the administrator of his decision, on form 3 with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. The provisions of NAC 445B.875 to 445B.899, inclusive, apply to a hearing of the state environmental commission requested pursuant to this section.

FEES

NDEP assesses a fee for processing and review of applications for a written determination. The applicant is required to deposit the maximum fee of \$10,000 at the time of submission, unless the written determination is for a mobile recycling unit, in which case, the applicant must deposit at least 10 percent of the maximum fee. NDEP will keep an accurate account of the time spent reviewing the application and will bill the applicant \$50 for each hour of staff time spent, plus the amount paid to consultants by the division in connection with the application. Generally, NDEP does not hire consultants for review of applications for a written determination. If the amount submitted is greater than the fee for staff time and the amount paid to consultants, NDEP shall return to the applicant the excess amount. For mobile hazardous waste recycling units, if the fee for staff time and amount paid to consultants is greater than the deposit submitted, NDEP shall bill the applicant for the balance (not to exceed a total maximum of \$10,000); and payment from the applicant on the balance must be received by NDEP before it issues a decision on the written determination.

QUESTIONS?

If you have additional questions regarding written determinations or this guidance, please call Mike Leigh, Supervisor, RCRA Facilities Branch, Bureau of Waste Management at (775) 687-9465 or write to NDEP-Bureau of Sustainable Materials Management, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249 or e-mail mleigh@ndep.nv.gov.

Note: The recommendations set out in this guidance are not final agency action, but are intended solely as guidance. They are not intended, nor can they be relied upon, to create any rights enforceable by any party in litigation with the State of Nevada. NDEP officials may decide to follow the guidance provided in this document, or to act at variance with the guidance, based on analysis of specific site circumstances. NDEP also reserves the right to change this guidance at any time.