

Statement of Basis

Proposed Modification of Approval for Commercial Storage and Disposal of Polychlorinated Biphenyls (PCBs)

**US Ecology Nevada, Inc.
Beatty, Nevada
U.S. EPA ID: NVT330010000**

**Issued by
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1. Executive Summary

The United States Environmental Protection Agency, Region 9 (“U.S. EPA”) is requesting public comment on its (1) proposal to modify the November 5, 2012 Toxic Substances Control Act (TSCA) Approval (“TSCA Approval or Approval”) for US Ecology Nevada, Inc. (US Ecology), as facility operator, to construct and operate Trench 13, a new chemical waste landfill unit for disposal of wastes containing polychlorinated biphenyls (“PCBs”) at its facility in Beatty, Nevada (hereinafter “Facility”), and (2) determination under the National Historic Preservation Act (NHPA) that modification of the Approval to allow construction and operation of Trench 13 will have “No Adverse Effect” on historic properties. (see Section 9.a below). Specifically, the modification of the Approval will allow US Ecology to excavate, construct, and operate Trench 13, a 47.3 acre landfill unit, within the 400 acres of land that surrounds the current 80-acre facility. This Statement of Basis (“SB”) presents the terms of the proposed Approval modification and EPA’s rationale for proposing to approve it.

On November 5, 2012, EPA renewed and modified an Approval under TSCA for US Ecology to operate a PCB storage and chemical waste landfill facility near Beatty, Nevada. The renewed and modified Approval was issued pursuant to Section 6(e)(1) of the Toxic Substances Control Act of 1976, 15 U.S.C. § 2605 (e)(1), and 40 C.F.R. Part 761, including any amendments or revisions thereto. Under TSCA, the action is known as an "Approval". A TSCA Approval is essentially a permit. For instance, EPA follows a similar administrative process for Approval issuance, renewal and modification as a permit.

The proposed Approval modification is based on the written modification request titled “US Ecology Nevada, Inc., Class 3 Permit/Approval Modification Request, RCRA Permit No. NEVHW0025, EPA Toxic Substances Control Act (TSCA) Approval”, dated November 6, 2015, as revised on April 6, 2016 (collectively the “Modification Request”). The Modification Request applies to both the TSCA Approval overseen by U.S. EPA and the Resource Conservation and Recovery Act (“RCRA”) Permit overseen by the Nevada Division of Environmental Protection (“NDEP”).

Modifications proposed in the TSCA Approval include: (1) adding Trench 13 as an operating unit, (2) deleting Trench 11 as an operating unit since it completed closure, (3) adding Approval requirements to protect the desert tortoise from construction and operations at the Facility including implementation of the “Desert Tortoise Protection Plan” (see Condition IV.B.10), (4) deleting references to the construction schedule for upgrading the PCB Tank Farm secondary containment and for constructing the PCB Tank Truck Loading Pad since these actions have been completed, (5) updating Table 3, PCB Monitoring Wells, to include additional monitoring wells related to Trench 13, (6) adding landfill inspection requirements after a 0.25 inch or greater storm event to the Post-Closure

Care section (Approval Section VII.J), (7) removed references to the 400 acre butter zone, and (8) general administrative changes and clarifications including, but not limited to, updating U.S. EPA contact information.

U.S. EPA has concluded, based upon agency review of the Modification Request and supporting documents that the proposed modification of the Approval for US Ecology, along with the additional conditions included in the Approval, satisfies the requirements of TSCA and 40 C.F.R. Part 761 for disposal of PCB's in a chemical waste landfill. U.S. EPA has also concluded that PCB operations at the Facility do not pose an unreasonable risk of injury to human health and the environment.

U.S.EPA will make a final decision on the Modification Request after considering public comments. A 45-day public comment period will begin on April 27, 2016 and end on June 10, 2016. Comments may be submitted to U.S. EPA during the public comment period (see Section 3 below, Public Participation for Proposed Modification of Approval).

2. Introduction

This SB explains and justifies U.S. EPA's proposal to modify US Ecology's TSCA Approval to authorize construction and operation of a new landfill unit that expands disposal capacity for PCB wastes.

This SB is organized into the following sections: Section 1 - Executive Summary, Section 2 - Introduction, Section 3 - Public Participation for Proposed Approval, Section 4 - Facility Description, Section 5 - Proposed Action, Section 6 - Required Regulatory Determinations for Chemical Waste Landfills, Section 7 - Use of Omnibus Provisions, and Section 8 - Other Requirements.

3. Public Participation for Proposed Modification of Approval

U.S. EPA is requesting public comment on its proposed modification of the TSCA Approval for the US Ecology Facility in Beatty, Nevada. U.S. EPA is also, as required by the NHPA, requesting public comment on its determination of No Adverse Effect on historic properties from the Approval modification.

Since the construction and operation of Trench 13 involves modification of both the TSCA Approval and the RCRA hazardous waste permit overseen by the NDEP, U.S. EPA and NDEP will coordinate efforts and send out a single notification announcing a 45-day public comment period and requesting public comments on both the TSCA Approval and RCRA Permit. The public comment period begins on April 27, 2016 and ends on June 10, 2016.

Comments may be submitted to U.S. EPA during the public comment period in writing via mail and/or email.

Written comments on the TSCA Approval modification should be emailed or postmarked on or before June 10, 2016 and sent to:

Ronald Leach, Project Manager (LND-4-2)
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Phone number: 415-972-3362
Email: leach.ronald@epa.gov

By appointment, the public may review the Administrative Record (AR) which contains the documents and information that U.S. EPA considered in proposing to modify the US Ecology Approval. The AR is physically located at the U.S.EPA Region 9 Office, 75 Hawthorne Street, San Francisco, CA 94105.

Information repositories containing the most pertinent documents and an index of the AR are located at the Beatty Library, 400 North 4th Street, Beatty Nevada 89003-0129 and at the NDEP office in Las Vegas, Nevada at 2030 E. Flamingo Rd., Ste. 230, Las Vegas, NV 89119. If a document listed in the index of the AR cannot be found at the Beatty Library or NDEP Office, community members may call Ronald Leach at (415) 972-3362 and a copy will immediately be made available.

The most pertinent documents used in the decision making process can also be found on U.S. EPA's website at www.epa.gov/region9/pCBS/usecology/

4. Facility Description

The US Ecology Facility is located in the Amargosa Desert on a 480 acre site northwest of Las Vegas, Nevada, off Highway 95. The closest city is Beatty, Nevada, which is located approximately 11 miles northwest of the Facility (see Figure 1, Site Location Map). The Facility treats, stores and disposes of hazardous waste, PCBs, and non-hazardous industrial material. The site is owned by the State of Nevada and operated by US Ecology.

The Facility was established in 1962 by the Nuclear Engineering Company for disposal of low-level radioactive wastes (LLRW). In 1970, Nuclear Engineering Company obtained permission from the State of Nevada to dispose of hazardous chemical wastes on a portion of the property adjacent to the authorized LLRW disposal area, but separated by a 200-foot buffer zone. The chemical disposal facility has been in operation since 1970. The disposal of LLRW was discontinued in December 1992.

The Facility is currently operating under a RCRA permit issued by the NDEP in December 2011 to manage hazardous waste and a TSCA Approval from the U.S. EPA to dispose and store PCB waste that was issued November 5, 2012.

The Facility consists of nine pre-RCRA chemical waste trenches (closed), one LLRW landfill (closed), and the following four hazardous waste landfills: Trench 10 (closed),

Trench 11 (closed), Trench 12 (operating), and Trench 13 (if approved, under construction). Other operations at the US Ecology Facility include: batch stabilization and solidification, PCB storage in tanks, and storage of hazardous waste and PCBs.

5. Proposed Action

The modified Approval, if finalized, authorizes US Ecology to store, treat for disposal, and dispose of PCB wastes at the Facility as described in the table below:

Table 1
Approved PCB Units and Maximum Capacities

Waste Management Unit Name	Type and Number of Units	Authorized Activity	Maximum Total Capacity	Location in Approval
PCB Storage and Processing Building	1 Building	Storage	59,400 gallons	Section V
PCB Tank Farm	5 Tanks	Storage	28,000 gallons	Section V
PCB Tank Truck Loading Pad*	1 Pad	Waste Transfer	Not Applicable	Section V
Stabilization Tanks (a.k.a. "Treatment Pans")	Treatment Pans 4 and 5	Treatment for Disposal	137,000 gallons per day	Section VI
Evaporation Tank	1 Tank	Treatment for Disposal	10,000 gallons	Section VI
Trench 12	1 Landfill	Disposal	1.66 million cubic yards	Section VII
Trench 13	1 Landfill	Disposal	8.6 million cubic yards	Section VII

*The PCB Tank Truck Loading Pad is an ancillary or support unit to the PCB Tank Farm. The Pad provides containment for tanker trucks that receive PCB liquids from the PCB Tank Farm.

Trench 13, which is a new landfill unit, is being proposed for approval and is shown on Figure 2, Site Map Showing Active Landfill Units, US Ecology Nevada. All of the units authorized by the proposed Approval for PCB waste management, with the exception of the PCB Tank Truck Loading Pad, are also separately permitted by the State of Nevada to store, treat, and dispose of hazardous waste under RCRA.

The modified Approval includes the following significant changes from the previous Approval issued in 2012:

- Trench 13 is being authorized for construction and operation for PCB disposal. This includes new Approval requirements contained in Section VII, Conditions for Landfill Disposal of PCBs (e.g., maximum disposal capacity).
- Trench 11 has been deleted as an operating unit since it completed closure. A Notice of Acceptance for the Trench 11 Closure Certification was issued by the NDEP on April 10, 2014. Thus, references to Trench 11 have been deleted from the operational sections of the TSCA Approval including the closure cost estimate (Condition IV.J), but remain for financial assurance for post closure care, leachate management in the Response Action Plan, and for Post-Closure Care. Please note that using leachate from Trench 11 for dust suppression is no longer allowed since this unit is closed (see Condition VII.E.9).
- Approval requirements to protect the desert tortoise from construction and operations at the Facility have been added including implementation of the “Desert Tortoise Protection Plan” (see Condition IV.B.10).
- Condition IV.H.2 that requires weekly inspection of the perimeter fence to prevent desert tortoises from entering the Facility has been deleted because it is unnecessary due to the Desert Tortoise Protection Plan.
- A construction schedule for and references to upgrading the PCB Tank Farm secondary containment system and construction of the PCB Tank Truck Loading Pad have been deleted since these activities have been completed (Approval Conditions V.M and V.N deleted).
- Table 3, PCB Monitoring Wells, has been updated to include additional monitoring wells related to Trench 13.
- Landfill inspection requirements after a 0.25 inch or greater storm event have been added to the Post-Closure Care section (Approval Section VII.J).
- Removed references to the 400 acre leased buffer zone.
- General administrative changes and clarifications were made including, but not limited to, updating the U.S. EPA contact information.

6. PCB Unit Description

The Modification Request is for construction and operation of Trench 13, a 47.3 acre landfill unit.

a. PCB Disposal

Trench 12 and if the modification is approved, Trench 13 will be the only active landfills at the US Ecology Facility. Trench 12 is currently permitted to receive non-liquid RCRA

hazardous waste, non-RCRA waste and PCBs. Trench 13, once permitted, will be constructed in five phases and be able to accept both RCRA wastes and TSCA PCB wastes for disposal. Trench 12 and Trench 13 (once constructed) will have bottom and sidewall liner systems that incorporate primary and secondary liners as well as leachate collection and recovery systems. The base footprint of Trench 12 is approximately 11 acres (all three phases). The base footprint of Trench 13 is 47.3 acres. The locations of Trench 12 and Trench 13 are shown on Figure 2, Site Map Showing Active Landfill Units, US Ecology Nevada.

7. Required Regulatory Determinations for Chemical Waste Landfills (40 CFR § 761.75(c)(1) and 40 C.F.R. § 761.75(c)(3)(i))

U.S. EPA has evaluated the Modification Request including the supporting documents and determined that the requirements contained in 40 C.F.R. § 761.75(c)(1) and 40 C.F.R. § 761.75(c)(3)(i) have been satisfied for the disposal of PCB wastes in the Trench 13 chemical waste landfill at the US Ecology Facility. U.S. EPA's findings for each requirement are discussed below.

a. Initial Report/Renewal Application

As required in 40 C.F.R. § 761.75(c)(1), the Modification Request and supporting documents:

- Specify the location of the Trench 13 chemical waste landfill (TSCA Approval, Appendix B-17, Landfill Engineering Report, Section 1.2, Location);
- Include a detailed description of the landfill (TSCA Approval, Appendix B-17, Landfill Engineering Report, Sections 4 to 9);
- Describe how the landfill complies with the technical requirements specified in 40 C.F.R. § 761.75(b) (TSCA Approval, Appendix B-1, Facility Operations Plan, Appendix B-11, Environmental Monitoring Plan, Appendix B-12, Sampling and Analysis Plan, Appendix B-15, Response Action Plan-Trench 13, and Appendix B-17, Landfill Engineering Report);
- Describe sampling and monitoring equipment (TSCA Approval, Appendix B-11, Environmental Monitoring Plan and Appendix B-12, Sampling and Analysis Plan);
- Specify the expected waste volumes of PCBs (TSCA Approval, Appendix 17, Landfill Engineering Report, Section 1.4, Project Description);
- Provide a general description of waste materials other than PCBs that are expected to be disposed of in Trench 13 (TSCA Approval, Appendix 17, Landfill Engineering Report, Section 1.1, Facility Information);
- Include a Facility Operations Plan (TSCA Approval, Appendix B-1, Facility Operations Plan); and

- List local, State or Federal permits or Approvals (TSCA Approval, Appendix B-17, Landfill Engineering Report, Section 2, Regulations).

b. Technical Requirements for Chemical Waste Landfills (40 C.F.R. § 761.75(b))

As required in 40 C.F.R. § 761.75(c)(3)(i), the Modification Request and supporting documents, meet the technical requirements contained in 40 C.F.R. § 761.75(b). A detailed breakdown of how the requirements of 40 C.F.R. § 761.75(b) are satisfied is provided in the TSCA Review Checklist for Chemical Waste Landfills (see Appendix A of this SB).

8. Use of Omnibus Provisions at 40 C.F.R. § 761.65(d)(4)(iv) and 40 C.F.R. § 761.75(c)(3)(ii)

The TSCA regulations at 40 C.F.R. § 761.65(d)(4)(iv) and 40 C.F.R. § 761.75(c)(3)(ii) allow U.S. EPA to include other requirements in an approval that the agency finds necessary to ensure that PCB storage and disposal operations at a facility “will not pose an unreasonable risk of injury to health or the environment.”

The proposed modification of the Approval includes use of these provisions to include requirements that are not specifically delineated in the TSCA regulations, but are nonetheless necessary to ensure that operations at the Facility “will not pose an unreasonable risk of injury to health or the environment.” For example, the TSCA regulations for chemical waste landfills at 40 C.F.R. § 761.75 do not include the requirement for a closure plan. U.S. EPA is requiring that the Trench 13 landfill be included in the Facility Closure Plan using the omnibus regulation at 40 C.F.R. § 761.75(c)(3)(ii).

U.S. EPA’s justification for using the omnibus provisions of 40 C.F.R. § 761.75(c)(3)(ii) in the US Ecology Approval are provided in Appendix B.

9. Other Requirements

In addition to TSCA and the regulations at 40 C.F.R. § 761.75, U.S. EPA must comply with other requirements prior to approving a Class III modification of the TSCA Approval. These other requirements include Section 106 of the National Historic Preservation Act, Environmental Justice per Presidential Executive Order 12898, and Section 7 of the Endangered Species Act. U.S. EPA has evaluated the Modification Request and its supporting documents and determined that the proposal to modify the TSCA Approval for the US Ecology Facility is in compliance with these other requirements as discussed below:

a. Section 106 of the National Historic Preservation Act

U.S. EPA has determined that the proposed modification of US Ecology's TSCA Approval to increase its commercial disposal capacity for PCB wastes at the Facility will have "No Adverse Effect" on historic properties. U.S. EPA, as the permitting agency, is responsible for complying with the National Historic Preservation Act of 1966 (NHPA), as amended, 54 U.S.C. § 300101 et seq. The NHPA requires Federal agencies to take into account the effects of their actions (undertakings) on historic properties, and afford consulting parties and the public reasonable opportunity to comment. The requirements of the NHPA apply to U.S. EPA for the modification (class III) of the TSCA Approval for US Ecology to manage PCB wastes at the Facility. As discussed below, U.S. EPA's determination is primarily based on a U.S. Department of the Interior, Bureau of Land Management's ("BLM's") NHPA consultation with the Nevada State Historic Preservation Office (Nevada SHPO) on its transfer of the land and the proposed US Ecology expansion that includes the same 400-acre parcel. U.S. EPA also initiated government-to-government Tribal consultation with potentially affected Tribes to identify any sites of concern in the project area.

EPA's determination of "No Adverse Effect" is based on several factors: (1) the continued use of the 1962 facility represents continued use of its historic function; (2) the U.S. EPA's Area of Potential Effects (APE) is identical to that of the BLM transfer and can therefore rely on the BLM's identification effort for its land transfer; (3) the Nevada State Historic Preservation Office (SHPO) concurred with a BLM determination of "No Adverse Effect" on that agency's land transfer in the identical APE; (4) U.S. EPA undertook government-to-government tribal consultation with representatives of affected Native American Tribes and this consultation did not result in the identification of any sites of religious and cultural importance to the Tribes; and (5) the proposed TSCA modification introduces no new effects or demonstrable changes in the use of what has been a landfill facility since 1962 and likewise introduces no additional indirect (visual) effects. In a letter dated June 2, 2015, the SHPO concurred on EPA's determination of No Adverse Effect for US Ecology's Proposed TSCA Permit Modification. U.S. EPA's determination of "No Adverse Effect" and the SHPO's June 2, 2015 concurrence letter are contained in Appendix C of this SB.

U.S. EPA is requesting public comment on its determination that historic properties will not be affected by the modification of the US Ecology Approval. 36 C.F.R. § 800.2 (d)(2) requires that the implementing agency provide the public with information about an undertaking and its effects on historic properties and seek public comment and input.

b. Environmental Justice

Environmental Justice (“EJ”) is one factor that U.S. EPA must consider when taking an action such as making a permit decision. This is established by Presidential Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which was issued on February 11, 1994. The goal of the Executive Order is to ensure that all federal agencies identify and address, as appropriate, any disproportionately high and adverse impacts of their programs and activities on minority or low-income groups. In evaluating possible EJ concerns, the key question to consider is whether there is any basis to believe that the operation of the facility pursuing a permit may have a disproportionate impact on a minority or low-income segment of an affected community.

EJ is not a community concern for U.S. EPA’s decision regarding the proposed modification of the TSCA Approval for the US Ecology Facility. This conclusion, which was used to support issuing the November 5, 2012 Approval, is based on demographic information obtained from the Environmental Justice Geographic Assessment Tool (EJGAT) and on historical records of attendance at public meetings for the hazardous waste management permit for the facility. This rationale still applies today as nothing has substantially changed in the Beatty, Nevada community. For example, one person from the community attended the public meeting held by US Ecology on December 15, 2015 for the proposed permit modification request to allow construction and operation of Trench 13. Erika Gerling, a member of the Beatty Town Advisory Board, attended the public meeting and expressed her support for the new disposal trench.

Demographic data from the EJGAT indicates that there is no disproportionately high minority or low income populations within a 3-mile radius of the US Ecology facility. See Appendix D for more details on how the EJ determination was made. Moreover, there has been little or no community attendance at public meetings held to obtain comments on RCRA permit actions. EJ issues have also not been raised by the local community and there is no past history of EJ concerns. Appendix D of this SB contains U.S. EPA’s “Environmental Justice Considerations for Renewal and Modification of PCB Approval for US Ecology Facility, Beatty, Nevada”.

c. Endangered Species Act

Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. § 1536(a)(2), requires all Federal agencies, in consultation with the United States Fish and Wildlife Service (“USFWS”), to insure that any action they carry out, fund, or authorize (such as through a permit) is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. The desert tortoise

is the only Federally listed endangered species or candidate species likely to occur within the vicinity of the Facility.

U.S. EPA considers a Class III modification of the Approval as an “action” subject to the ESA. On September 28, 2015, U.S. EPA approved the “Desert Tortoise Protection Plan”, prepared by Knight and Leavitt Associates, dated September 23, 2015. The purpose of the Desert Tortoise Protection Plan (“DTPP”) is to minimize the effects on the desert tortoise and its habitat from any activities resulting from the modification or renewal of the TSCA Approval. The DTPP includes specific requirements to protect the desert tortoise and its habitat during the construction and operation of Trench 13, the proposed new 47.3 acre landfill at the US Ecology Facility. The U.S. EPA approved DTPP can be found in Appendix E of this SB.

U.S. EPA’s Class III modification of the Approval was evaluated in a broader ESA consultation lead by the BLM. The results of that consultation are described in the USFWS Formal Programmatic Biological Opinion dated January 2, 2013, as supplemented by USFWS, Action Appended to the BLM’s Southern Nevada District Programmatic Biological Opinion (File No. 84320-2010-F-0365 (March 25, 2015)) (“BO Amendment”). The BO Amendment concluded that the expansion of the Facility, including the implementation of the DTPP, would not jeopardize the continued existence of the desert tortoise or result in the destruction or adverse modification of designated critical habitat.