

DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
Site Investigation & Restoration Section



Guidance for Conditional No Further Action
Determination under Regulations Governing
Hazardous Substance Cleanup

February 2017

1.0 Introduction

1.1 The purpose of this document is to provide guidance for Section 9.2.6.6 of the Regulations Governing Hazardous Substance Cleanup with regards to Conditional No Further Action Determination.

1.2 The guidance discusses the procedures that may be followed to determine whether a site is eligible to receive Conditional No Further Action based on the available data.

2.0 Glossary

“Conditional No Further Action” means that based on the information available following an initial investigation or facility evaluation, the Department determines that: (a) there has been no release or there is no imminent threat of release; (b) a release has occurred which does not pose a threat to public health or welfare or the environment above the acceptable site specific risk under current conditions; or (c) action by another authority is appropriate. The Conditional No Further Action Determination lists all the conditions that have to be met in order to maintain the CNFA Determination under current and future land use scenarios and should be placed in the property record.

“Current Condition” means the land use at the time of the investigation and CNFA determination.

“Facility Evaluation” means an investigation to identify a release of a hazardous substance and generate data to perform an initial screening and make a decision regarding future action at the facility.

“Initial investigation” means a process for identifying a suspected release or imminent threat of release. It includes review of existing information, facility visits, interviews with facility owner or operator and adjacent property owners, or other persons with knowledge of the facility.

“Initial screening” means the process of comparison of the maximum observed concentrations of analytes found in environmental samples to background levels and performance of a preliminary risk assessment based on the maximum observed concentrations found in each environmental medium from the results of a facility evaluation or equivalent investigation to determine whether a release poses a threat to human health, welfare or the environment above the acceptable site specific risk.

“Land Disturbing Activity” means activities that physically take place on the facility and include digging, drilling, excavating, grading, clearing, earth moving, filling, or performing any subsurface work, but excludes all environmental investigation, planning, designing, or

engineering work related to the facility, as well as any physical activity performed off the facility in preparation for, or related to, construction and development activities that will occur on the facility.

“Phase I Environmental Site Assessment” or **“Phase I”** means an investigation performed in accordance with ASTM International’s Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E 1527), as amended.

“Phase II Environmental Site Assessment” or **“Phase II”** means an investigation performed in accordance with ASTM International’s Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process (E 1903), as amended.

“Limited Risk Assessment” means the analysis of the potential for adverse human health effects or adverse effects on ecological receptors caused by contamination for a particular environmental media under the current use scenario using representative data.

“Release” means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing of a hazardous substance, pollutant or contaminant into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes: (a) any release which results in exposure to a person solely within his or her workplace, with respect to a claim which such person may assert against his or her employer, provided, however, that this exclusion does not apply to any such release which also results in exposure to the environment; (b) emissions from the engine exhaust of a motor vehicle, rolling stock, aircraft, vessel or pipeline pumping station engine; (c) the appropriate application of fertilizers and pesticides; and (d) any discharges in compliance with State permits issued in conformance with Title 7 of the Delaware Code and federally permitted releases under CERCLA.

3.0 Conditional No Further Action Determination Process

A flowchart showing the steps that are recommended to be followed to determine whether a site qualifies for Conditional No Further Action (CNFA) is included in Appendix A. The steps in the process are described below:

3.1 Evaluate the Facility Evaluation or equivalent investigations including Phase II Environmental Site Assessment (ESA), Site Inspection and determine if the data is of sufficient quantity or quality for the CNFA determination.

3.2 Compare the maximum observed concentrations (MOC) of analytes for each environmental media to HSCA screening levels.

3.3 If the MOC does not exceed the HSCA screening levels then the site can be administratively closed.

3.4 If the MOC exceeds the HSCA screening levels, perform an Initial Screening using the MOC to determine if the risk under the current site condition is acceptable.

3.5 If the Initial Screening indicate that risk under the current condition is acceptable, then send a letter to the responsible party indicating that the site is eligible for CNFA status. See section 4.0 of this guidance for details.

3.6 If the initial screening using maximum observed concentrations show an unacceptable risk under current condition, then the site owner or operator can enter into a settlement agreement to perform a supplemental investigation to collect representative samples for the media of concern in order to perform a limited risk assessment. If the limited risk assessment indicates acceptable risk under the current exposure scenario, then a CNFA can be issued with the requirements that the current site conditions and any other restrictions imposed by the CNFA determination are maintained.

4.0 Implementation and maintenance of CNFA Status

This section discusses the steps in the CNFA determination by DNREC-SIRS.

4.1 DNREC-SIRS evaluates all the available information including the Facility Evaluation and Initial Screening and prepares a memo documenting the CNFA determination and the conditions that have to be maintained to continue the CNFA status for the site. See Appendix B-1 for the CNFA memo template.

4.2 DNREC-SIRS sends a letter to the responsible party with a draft Notice of Conditional No Further Action for a Release of a Hazardous Substance stipulating the conditions that need to be recorded in the deed of the property in order for the site to maintain CNFA status. See Appendix B-2 for the letter and B-3 for the template of CNFA deed notice.

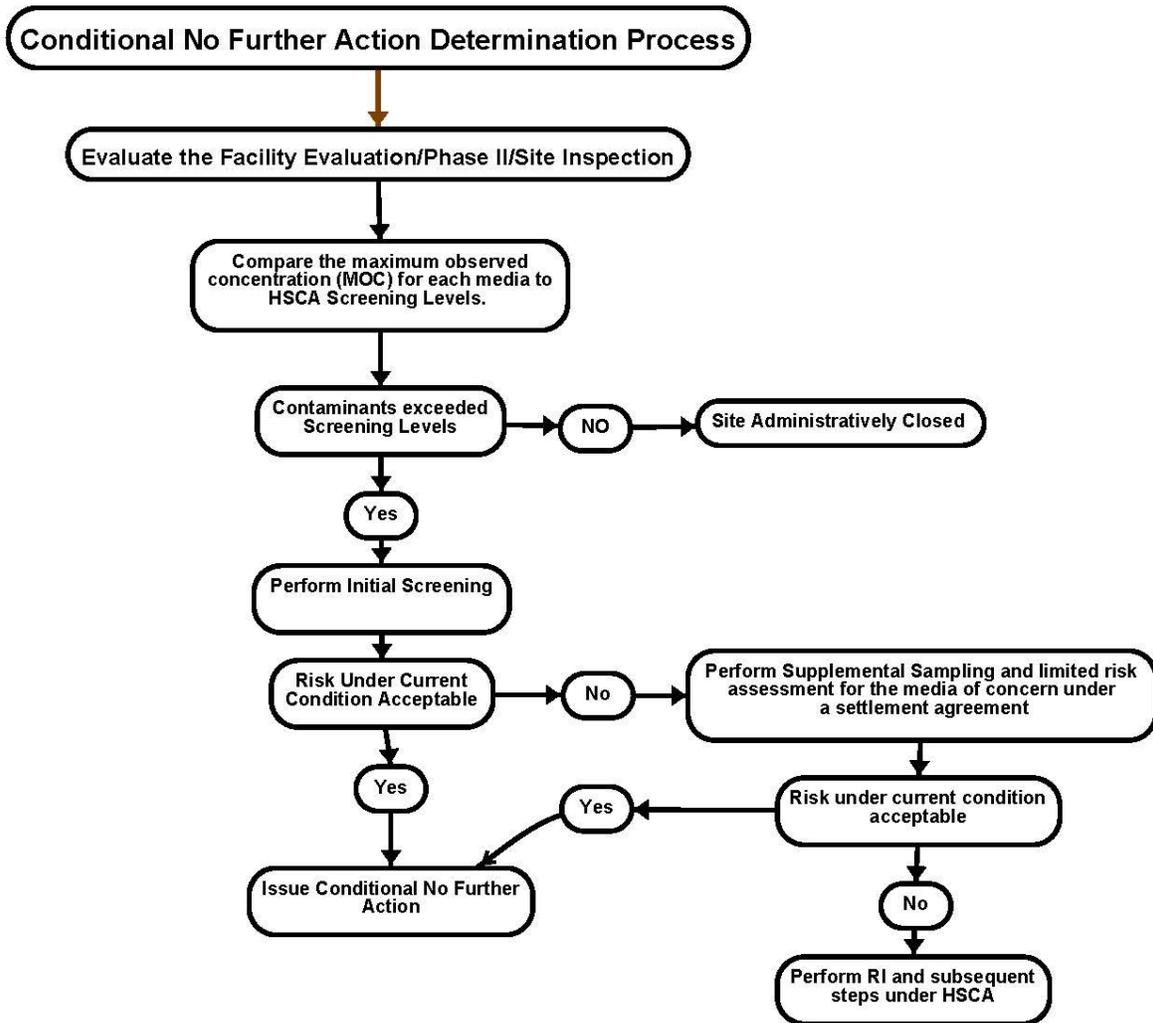
4.3 Once the notice to the deed is finalized, the property owner will record notice to the deed and upon receipt of the confirmation of deed notice, DNREC-SIRS will issue a public notice.

5.0 Long Term Stewardship Requirements

5.1 The Site is subject to the Long Term Stewardship program, and DNREC-SIRS will inspect the site regularly to determine if the current site conditions are maintained.

5.2 If circumstances change or any new information becomes available that relates to the release of hazardous substances at the Site, DNREC-SIRS reserves the right to require additional measures to ensure the continued protection of human health and the environment.

Appendix A: Conditional No Further Action Determination Process



Appendix B-1 Conditional No Further Action Determination Memo

DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
SITE INVESTIGATION & RESTORATION SECTION
MEMORANDUM

To: XXXX Site, DE-XXXX
Through: Qazi Salahuddin or Paul Will, Program Manager II, SIRS
From: XXXXXXXXXXXX, Project Officer, SIRS
Date: XXXX, 2016
RE: Conditional No Further Action Determination, DE-XXXX

The purpose of this memo is document the evaluation of the existing data including the Facility Evaluation and the outcome of the initial screening to determine whether the Site has met the Conditional No Further Action status under Hazardous Substance Cleanup Act (HSCA).

DNREC-SIRS reviewed the Facility Evaluation (FE) performed at the XXXX Site in XXXX 2016 by the consultant XXXX on behalf of DNREC-SIRS. The Site is a former metal scrap yard located at XXXXX (**Figure 1**). The results of the FE and initial screening are discussed below:

During the FE, XX surface soil samples, XX subsurface soil samples, and XX groundwater samples from monitoring wells were collected. All soil samples were screened by the DNREC-SIRS laboratory. A portion of the soil samples were also analyzed by a HSCA certified laboratory for Target Compound List (TCL) Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Pesticides, Polychlorinated biphenyls (PCBs), and Target Analyte List (TAL) metals. All groundwater samples were analyzed by the HSCA certified laboratory for TCL VOCs, SVOCs, Pesticides, PCBs and TAL total and dissolved metals. The soil and groundwater sample results were compared to the most recent HSCA screening levels from July 2016 (**Attachment 1 – Tables 1 and 2**). A total of XX analytes in surface soil and XX analytes in groundwater were detected at concentrations that exceed HSCA screening levels. **Figure 3** illustrates the sample locations.

Soil:

XXXX was detected in surface soil sample at a maximum observed concentration of XXX mg/kg, exceeding the HSCA screening level of XXX mg/kg. XXX was also detected in surface soil sample at a maximum observed concentration of XXX mg/kg, exceeding the HSCA screening level of XXX mg/kg. All other analytes in surface and subsurface soil were either not detected or were detected below the HSCA screening level.

Utilizing the Risk Assessment Information System (RAIS), a web-based risk assessment tool, human health risk calculations for exposure by a potential future resident indicate that the risk

posed by iron and zinc in the surface soil at does not exceed the acceptable cancer risk of 1×10^{-5} (1 in 100,000). However, there would be a non-cancer risk to a potential future child resident if exposed to surface soil at the Site. This risk is driven by the iron concentration in the surface soil which exceeds the hazard index of 1 for a potential future child resident only (**Attachment 2**).

But since the Site is vacant and there are no current plans to develop it, the current exposure pathway would be to a trespasser only. An adolescent aged 6 – 16 years old would be the trespasser receptor. Since adolescents are a more sensitive receptor than adults and their exposure to OU-1 would be equal to or greater than adults, only the risk to the adolescent trespasser was evaluated. Utilizing RAIS, human health risk calculations for exposure by an adolescent trespasser (recreator) indicate that the risk posed by XXXX in the surface soil does not exceed the acceptable cancer risk of 1×10^{-5} (1 in 100,000) or a hazard index of 1 (**Attachment 3**).

Groundwater:

Cobalt and manganese were detected in all groundwater samples at the Site at concentrations exceeding the HSCA screening levels. The maximum observed concentrations in unfiltered (total) groundwater at Site were Cobalt: XXX J ug/l and Manganese: XXXX ug/l

The groundwater, if ingested, does not exceed the acceptable cancer risk of 1×10^{-5} (1 in 100,000) but does present a non-cancer risk to human health under a potential future residential use scenario (**Attachment 4**). However, there are currently no drinking water wells on the property and adjacent to the site.

Summary:

In summary, the initial screening showed no exceedance above the acceptable risk at the Site under current conditions and DNREC-SIRS determined that the Site met CNFA status. The current conditions at the Site include a vacant lot with no drinking water wells. The conditions that shall be maintained for the CNFA to be effective are:

- Maintain current condition of the property as a vacant lot;
- No groundwater wells shall be installed, and no groundwater shall be withdrawn from any well, on the Site without the prior written approval of DNREC-SIRS and DNREC Division of Water; and
- No land disturbing activities shall be performed at the Site without the prior written approval of DNREC-SIRS.

The Site is subject to the Long Term Stewardship program, and DNREC-SIRS will inspect the site regularly to determine if the current site conditions are maintained. If circumstances change or any new information becomes available that relates to the release of hazardous substances at the Site, DNREC-SIRS reserves the right to require additional measures to ensure the continued protection of human health and the environment.

XXX:xxx
XXX160xx.doc

DE XXXX II A 3

Appendix B-2 Conditional No Further Action Determination Letter Template

Date

Mr./Mrs. XXXX
Address, DE

RE: Conditional No Further Action Determination
XXXX, Wilmington, DE #
Tax Parcel No. ###

Dear Mr. and Mrs. XXXX:

The Delaware Department of Natural Resources and Environmental Control - Site Investigation and Restoration Section (DNREC-SIRS) has determined that your property identified as tax parcel number XXXX and also known as the XXXX Site (DE-0226) is eligible for Conditional No Further Action (CNFA). This CNFA recommendation is based on the review of the Facility Evaluation performed at the Site in XXXX by XXXX and the performance of an Initial Screening in XXXX 2016.

The Conditional No Further Action Determination memo (**Attachment A**) showed no exceedance above acceptable risk at the Site under current conditions which includes elimination of the exposure pathway. The conditions that shall be maintained for the CNFA to be effective are:

- Maintain current condition of the property as a vacant lot;
- No groundwater wells shall be installed, and no groundwater shall be withdrawn from any well, on the Site without the prior written approval of DNREC-SIRS and DNREC Division of Water; and
- No land disturbing activities shall be performed at the Site without the prior written approval of DNREC-SIRS.
-

As the property owner, you will need to place a notice in the deed stipulating the conditions. The text of the required notice is attached (**Attachment B**). **Please sign this notice, file it with the Sussex County Recorder of Deeds, and send a copy back to DNREC-SIRS.**

The Site is subject to the Long Term Stewardship program, and DNREC-SIRS will inspect the site regularly to determine if the current site conditions are maintained. If circumstances change or any new information becomes available that relates to the release of hazardous substances at the Site, DNREC-SIRS reserves the right to require additional measures to ensure the continued protection of human health and the environment.

Details of the investigation and other pertinent information are included in the fact sheet for the site (**Attachment C**). A map for the site showing the site boundary is included as **Attachment D**. All the documents related to the site are archived by DNREC-SIRS.

Please contact me at 302-395-2600 if you have any questions regarding this letter.

Sincerely,

XXXX

Environmental Scientist/Project Officer

Enclosures: Attachment A – CNFA Determination Memo
Attachment B – Notice of CNFA for a Release of a Hazardous Substance
Attachment C – Site Factsheet
Attachment D – Map of Site Boundary

cc: XXXXXXXX, Program Manager II, DNREC-SIRS

:xxx

XXX16xxx.doc

DE XXX II A 3

Appendix B-3: Deed Notice Template

Tax Parcel No.: a portion of parcel
XXXXXX

Prepared By: Department of Natural Resources
and Environmental Control
391 Lukens Drive
New Castle, DE 19720

Return To: Timothy T. Ratsep
Environmental Program
Administrator
DNREC-SIRS
391 Lukens Drive
New Castle, DE 19720

NOTICE OF CONDITIONAL NO FURTHER ACTION FOR A RELEASE OF A HAZARDOUS SUBSTANCE

Pursuant to 7 Del. C. § 9115, when the Secretary of the Delaware Department of Natural Resources and Environmental Control (“DNREC”) has determined that a release of a hazardous substance has occurred at a facility or property on which the facility is located, and that the release poses a threat to public health and/or the environment, the owner of the property shall place a notice in the records of real property kept by the Recorder of Deeds of the County in which the property is located.

Consistent with the above cited statutory notice requirement, DNREC has determined that a release of a hazardous substance has occurred at or from the XXXX Site (the “Site”) (DE-XXXX), located at XXXXX, Delaware. The Site is further identified as a portion of Kent County tax parcel number XXXXXX, and is more specifically described in Exhibit 1 attached hereto. XXXXXX are the current owners of the Site (“Owners”).

Pursuant to the Hazardous Substance Cleanup Act (HSCA), DNREC performed an Initial Screening on May 3, 2016 based on the Facility Evaluation that had been conducted at the Site in July 2013. From the Initial Screening DNREC determined that the Site is eligible for a Conditional No Further Action (CNFA) as provided for in Section 9.1.4.5 of the HSCA Regulations. DNREC issued a Conditional No Further Action letter for this Site after contacting the Owners who agreed to record this Notice and to abide by the conditions stipulated in the CNFA letter attached hereto as Exhibit 2. The conditions require that:

- Use of the Property shall be restricted solely to non-residential use (within the Site boundaries only); and
- No groundwater wells shall be installed, and no groundwater shall be withdrawn from any well on the Site without the prior written approval of DNREC-SIRS and DNREC’s Division of Water.

- No land disturbing activities shall be performed at the Site without the prior written approval of DNREC-SIRS.
- Add any other conditions, if applicable

The CNFA letter will remain in the property records unless and until DNREC determines that an additional remedy is necessary to ensure the protection of public health or the environment. In furtherance thereof, DNREC reserves the right to require that additional remedial measures be taken as warranted.

Owner agrees that this Notice shall not be removed from the property records of the Recorder of Deeds of Kent County without the prior, written approval of DNREC.

By executing this Notice, I acknowledge and affirm that I am authorized to bind the Owners, XXXX, to the terms and conditions of this Notice.

XXXXXX {owner's name}

Signature

Printed Name and Title

Date

State of Delaware

ss:

County of XXXXX

Before me, a notary public, in and for said county and state, personally appeared _____, a duly authorized representative of _____, who acknowledged to me that *he/she* did execute the foregoing instrument on behalf of _____.

IN TESTIMONY WHEREOF, I have subscribed my name and affixed my official seal this _____ day of _____, 201__.

Notary Public