



ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 300

[EPA-HQ-SFUND-1983-0002; FRL-9997-52-Region 5]

**National Oil and Hazardous Substances Pollution Contingency
Plan;**

**National Priorities List: Deletion of the Duell & Gardner
Landfill Superfund Site**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: The Environmental Protection Agency (EPA) Region 5 is publishing a direct final Notice of Deletion of the Duell & Gardner Landfill Superfund Site (Duell & Gardner Site), located in Dalton Township, Muskegon County, Michigan, from the National Priorities List (NPL). The NPL, promulgated pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended, is an appendix of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This direct final deletion is being published by EPA with the concurrence of the State of Michigan, through the Michigan Department of Environment, Great Lakes and Energy (MDEGLE) because EPA has determined that all appropriate response actions under CERCLA, other

than operation and maintenance, monitoring and five-year reviews, have been completed. However, this deletion does not preclude future actions under Superfund.

DATES: This direct final deletion is effective [insert date 60 days after date of publication in the *Federal Register*] unless EPA receives adverse comments by [insert date 30 days after date of publication in the *Federal Register*]. If adverse comments are received, EPA will publish a timely withdrawal of the direct final deletion in the **Federal Register** informing the public that the deletion will not take effect.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-SFUND-1983-0002, by one of the following methods:

https://www.regulations.gov. Follow the on-line instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include

discussion of all points you wish to make. EPA will generally not consider comments or comment contents located outside of the primary submission (*i.e.*, on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www2.epa.gov/dockets/commenting-epa-dockets>.

Email: cano.randolph@epa.gov.

Mail: Randolph Cano, NPL Deletion Coordinator, U.S. Environmental Protection Agency Region 5 (SR-6J), 77 West Jackson Boulevard, Chicago, IL 60604, (312) 886-6036.

Hand deliver: Superfund Records Center, U.S. Environmental Protection Agency Region 5, 77 West Jackson Boulevard, 7th Floor South, Chicago, IL 60604, (312) 886-0900. Such deliveries are only accepted during the Docket's normal hours of operation, and special arrangements should be made for deliveries of boxed information. The normal business hours are Monday through Friday, 8 a.m. to 4 p.m., excluding Federal holidays.

Instructions: Direct your comments to Docket ID no. EPA-HQ-SFUND-1983-0002. EPA's policy is that all comments received will be included in the public docket without change and may be made available online at

<http://www.regulations.gov>, including any personal information provided, unless the comment includes information claimed to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Do not submit information that you consider to be CBI or otherwise protected through <https://www.regulations.gov> or email. The <https://www.regulations.gov> website is an "anonymous access" system, which means EPA will not know your identity or contact information unless you provide it in the body of your comment. If you send an email comment directly to EPA without going through <https://www.regulations.gov>, your email address will be automatically captured and included as part of the comment that is placed in the public docket and made available on the internet. If you submit an electronic comment, EPA recommends that you include your name and other contact information in the body of your comment and with any disk or CD-ROM you submit. If EPA cannot read your comment due to technical difficulties and cannot contact you for clarification, EPA may not be able to consider your comment. Electronic files should avoid the use of special characters, any form of encryption, and be free of any defects or viruses.

Docket: All documents in the docket are listed in the <https://www.regulations.gov> index. Although listed in the index, some information is not publicly available, e.g., CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, will be publicly available only in hard copy. Publicly available docket materials are available either electronically in <https://www.regulations.gov> or in hard copy at:

U.S. Environmental Protection Agency, Region 5,
Superfund Records Center, 77 West Jackson Boulevard, 7th
Floor South, Chicago, IL 60604. Phone: (312) 886-0900.
Hours: Monday through Friday, 8 a.m. to 4 p.m., excluding
Federal holidays.

Dalton Township Hall, Superfund Site Information
Repository, 1616 East Riley Thompson Road, Muskegon, MI
49445. Phone: (231) 766-3043. Hours: Monday through
Friday, 8 a.m. to 4:30 p.m.

FOR FURTHER INFORMATION CONTACT: Randolph Cano, NPL
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I. Introduction

EPA Region 5 is publishing this direct final Notice of Deletion of the Duell & Gardner Site, from the NPL. The NPL constitutes Appendix B of 40 CFR Part 300, which is the NCP, which EPA promulgated pursuant to Section 105 of CERCLA of 1980, as amended. EPA maintains the NPL as the list of sites that appear to present a significant risk to public health, welfare, or the environment. Sites on the NPL may be the subject of remedial actions financed by the Hazardous Substance Superfund (Fund). As described in 40 CFR 300.425(e)(3) of the NCP, sites deleted from the NPL remain eligible for Fund-financed remedial actions if future conditions warrant such actions.

Section II of this document explains the criteria for deleting sites from the NPL. Section III discusses the procedures that EPA is using for this action. Section IV discusses the Duell & Gardner Site and demonstrates how it

meets the deletion criteria. Section V discusses EPA's action to delete the Duell & Gardner Site from the NPL unless adverse comments are received during the public comment period.

II. NPL Deletion Criteria

The NCP establishes the criteria that EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making such a determination pursuant to 40 CFR 300.425(e), EPA will consider, in consultation with the State, whether any of the following criteria have been met:

- i. Responsible parties or other persons have implemented all appropriate response actions required;
- ii. All appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or
- iii. The remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate.

Pursuant to CERCLA Section 121(c) and the NCP, EPA conducts five-year reviews to ensure the continued protectiveness of remedial actions where hazardous

substances, pollutants, or contaminants remain at a site above levels that allow for unlimited use and unrestricted exposure. EPA conducts such five-year reviews even if a site is deleted from the NPL. EPA may initiate further action to ensure continued protectiveness at a deleted site if new information becomes available that indicates it is appropriate. Whenever there is a significant release from a site deleted from the NPL, the deleted site may be restored to the NPL without application of the hazard ranking system.

III. Deletion Procedures

The following procedures apply to deletion of the Duell & Gardner Site:

(1) EPA consulted with the State of Michigan prior to developing this direct final Notice of Deletion and the Notice of Intent to Delete co-published today in the "Proposed Rules" section of the **Federal Register**.

(2) EPA has provided the State thirty (30) working days for review of this action and the parallel Notice of Intent to Delete prior to their publication today, and the State, through the MDEGLE, has concurred on the deletion of the Duell & Gardner Site from the NPL.

(3) Concurrently with the publication of this direct final Notice of Deletion, an announcement of the

availability of the parallel Notice of Intent to Delete is being published in a major local newspaper, the Muskegon Chronical. The newspaper notice announces the 30-day public comment period concerning the Notice of Intent to Delete the Duell & Gardner Site from the NPL.

(4) EPA placed copies of documents supporting the proposed deletion in the deletion docket and made these items available for public inspection and copying at the Duell & Gardner Site information repositories identified in the **ADDRESSES** Section of this rule.

(5) If adverse comments are received within the 30-day public comment period on this deletion action, EPA will publish a timely notice of withdrawal of this direct final Notice of Deletion in the **Federal Register** before its effective date and will prepare a response to comments and continue with the deletion process on the basis of the Notice of Intent to Delete and the comments already received.

Deletion of a site from the NPL does not itself create, alter, or revoke any individual's rights or obligations. Deletion of a site from the NPL does not in any way alter EPA's right to take enforcement actions, as appropriate. The NPL is designed primarily for informational purposes and to assist EPA management.

Section 300.425(e) (3) of the NCP states that the deletion of a site from the NPL does not preclude eligibility for future response actions, should future conditions warrant such actions.

IV. Basis for Site Deletion

The following information provides EPA's rationale for deleting the Duell & Gardner Site from the NPL:

Site Background and History

The Duell & Gardner Site (CERCLIS ID: MID980504716) is an 80-acre parcel of land located at 1285 East Bard Road in Dalton Township, Muskegon County, Michigan, approximately five miles north of the City of Muskegon, Michigan. See Figure 1 in the Docket. The landfill consisted mostly of municipal debris and waste spread out over an eight-acre area in the southern half of the property. During the cleanup, the waste was consolidated into a four-acre area and covered with a landfill cap.

The Duell & Gardner Site is not fenced; however the entrance road to the landfill is gated. The landfill is secluded and is posted with warning signs and permanent markers around the perimeter indicating that the landfill is a hazardous waste site.

The Duell & Gardner Site is located in a primarily residential and agricultural area. Two single family homes

and an agricultural field are located in the northern half of the Duell & Gardner Site property. These residences are supplied with drinking water from two wells that are located upgradient of the landfill. These wells are not impacted by contaminants from the Duell & Gardner Site. Several residential wells are located approximately one-half mile in the general downgradient direction of the landfill. Twenty-one private wells located within this area were sampled during the investigations and were found not to be contaminated by the Duell & Gardner Site.

The Duell & Gardner Site owners used the property for waste disposal activities from the mid-1940s to 1973. From the 1940s until 1969, the property owner/landfill operator disposed municipal and industrial waste in trenches, depressions and on the ground surface of approximately eight-acres of the 80-acre property. In 1969, new owners began operating the landfill as a licensed solid waste disposal facility. From 1969 until 1973, the landfill operators disposed waste, including liquid waste, in unlined trenches excavated on the property.

The Muskegon County Health Department (MCHD) periodically inspected the landfill from 1969 through September 1973. In 1971, the Michigan Department of Public Health (MDPH) stipulated that liquid waste could not be

disposed in the landfill. In 1973, MCHD noted that the landfill operators were disposing liquid waste in the landfill. The Michigan Department of Public Health (MDPH) ordered that the landfill be closed in January 1974, after which the landfill ceased accepting waste.

Initial concern regarding possible groundwater contamination at the Duell & Gardner Site arose in 1977 when the MDPH was considering approving the construction of a community water supply in the area. In 1979, the Michigan Department of Natural Resources (MDNR) (subsequently known as the Michigan Department of Environmental Quality, or MDEQ, and now MDEGLE) collected soil and drum samples from the property. The samples indicated that polychlorinated biphenyls (PCBs) were present in the soil.

EPA collected surface water samples from a tributary of Bear Creek in 1981. In 1982, EPA installed and sampled four groundwater monitoring wells at the Duell & Gardner Site. EPA determined that the groundwater below the property was generally flowing to the southeast. EPA did not detect any significant concentrations of organic or inorganic compounds in these groundwater monitoring wells.

EPA proposed the Duell & Gardner Site to the NPL on December 30, 1982 (47 FR 58476). EPA finalized the Duell &

Gardner Site NPL listing on September 8, 1983 (48 FR 40658).

In 1984, the MDNR and EPA found and sampled drums in a wooded area adjacent to the landfill. The samples showed evidence of organic and inorganic contamination. MDNR investigated further and identified 21 distinct drum and waste disposal areas at the Duell & Gardner Site in September 1985. MDNR found approximately 550 drums in various stages of deterioration scattered in the woods adjacent to the landfill in groups of 9 to 140 drums. MDNR also found hundreds of small laboratory bottles, areas of refuse and debris and piles of unidentified sludge-like material scattered around the base of the landfill.

EPA conducted a CERCLA removal action at the Duell & Gardner Site in 1986. EPA removed 550 drums in various stages of deterioration from the Duell & Gardner Site for off-site disposal. EPA also removed some of the laboratory bottles, sludge-like material and soil for off-site disposal. EPA implemented the CERCLA removal action to prevent contaminants from leaching into the groundwater. This action reduced the risk of ingesting contaminated groundwater and the risks from direct exposure to contaminants through dermal contact and incidental ingestion.

Remedial Investigation/Feasibility Study

MDNR initiated a Remedial Investigation/Feasibility Study (RI/FS) at the Duell & Gardner Site in 1986. The purpose of the RI/FS was to quantify the residual contamination at the Duell & Gardner Site and to identify and evaluate cleanup alternatives. MDNR also conducted a Treatability study to identify technologies which might eliminate or reduce the toxicity, mobility and/or volume of the contaminants present in the soil and groundwater at the landfill. MDNR conducted the RI/FS using Federal Superfund funding.

MDNR completed the RI report, the Treatability Study report and the FS report in 1992. The results of the RI indicated that soil was contaminated with organic compounds including bis(2-ethylhexyl)phthalate, gentian violet, aniline, and N,N-dimethylaniline. PCBs and pesticides (DDT, DDD, and DDE) were also detected in the soil at two locations. Gentian violet (a dye and at one time used as a topical antiseptic), often referred to as crystal violet, was detected at concentrations as high as 188 milligrams per kilogram (mg/Kg). Other contaminants detected in soil included pentachlorophenol and polynuclear aromatic hydrocarbons including chrysene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene and benzo(a)anthracene.

Groundwater sampling indicated that two contaminated groundwater plumes were emanating from the Duell & Gardner Site. One plume contained chloroform and carbon tetrachloride. The other plume contained aniline and N,N-dimethylaniline. The chloroform and carbon tetrachloride were only detected in the shallow portion of the aquifer (ten to twenty feet below ground surface) while aniline and N,N-dimethylaniline were found in deeper portions of the aquifer, up to 100 feet below ground surface. Gentian violet and tetrachloroethylene were also detected in the groundwater. The 21 private wells sampled downgradient of the landfill were not contaminated.

MDNR collected surface water and sediment samples from the tributary to Bear Creek located east of the Duell & Gardner Site and sediment samples from the drainage ditch located south of the property. Neither of these drainage systems was contaminated.

The FS evaluated five cleanup alternatives for soil and four cleanup alternatives for groundwater. The cleanup alternatives evaluated for soil included: no action; excavation and on-site capping; excavation, on-site vitrification and capping; excavation, on-site thermal treatment and capping; and excavation, off-site incineration and capping. The cleanup alternatives

evaluated for groundwater included: no action; land use restrictions and monitoring; groundwater extraction with ultraviolet oxidation treatment; and groundwater extraction with carbon adsorption treatment.

Selected Remedy

The remedial action objectives (RAOs) for the Duell & Gardner Site are to: (1) Prevent direct human exposure to soil having concentrations of chemicals of concern resulting in a cumulative excess cancer risk of greater than 1×10^{-4} ; (2) Prevent future residents from using groundwater containing carbon tetrachloride and N,N-dimethylaniline contaminants above drinking water standards as a domestic water supply; and (3) Restore groundwater and all soil areas outside of the landfill to their beneficial use (residential).

EPA and MNDR selected a cleanup remedy for the Duell & Gardner Site in a September 7, 1993 Record of Decision (ROD). The selected cleanup remedy included the following main components: (1) Excavation of contaminated soil with on-site low-temperature thermal treatment; (2) Contaminated groundwater extraction with on-site carbon adsorption treatment; (3) Construction of a clay cap over the landfill area meeting the requirements of Michigan Act 641 (a solid waste cap); (4) Institutional controls such as deed

restrictions to prevent the installation of drinking water wells in the affected area of the site during remediation; (5) Groundwater monitoring to assess the remediation and assure containment of the contaminant plumes; (6) A pre-design investigation to further define the limits of the contamination.

The MDEQ (formerly the MDNR and now known as the MDEGLE) conducted the pre-design investigation in 1996 and follow-up groundwater sampling in 1998. The investigations showed that the extent of soil and groundwater contamination was less than previously identified and that the size and mass of the groundwater plumes appeared to have stabilized or decreased since the RI. In addition, the State of Michigan revised its cleanup levels, which resulted in a reduction in the volume of soil requiring remediation.

EPA issued a Proposed Plan requesting public comment on amending the soil and groundwater cleanups in 1999. Following public comment, MDEQ conducted a study to better understand the groundwater contamination at the Duell & Gardner Site. MDEQ's study cast doubt on the stability of the groundwater plumes and whether the groundwater contaminants would naturally degrade before they migrated beyond the Duell & Gardner Site boundary. Due to these

concerns and concerns about the ability to reliably restrict the use of contaminated groundwater downgradient of the landfill, EPA and MDEQ decided that the groundwater components of the 1993 ROD should remain unchanged.

EPA issued the ROD Amendment on June 29, 2001. The amended ROD retained the construction of a landfill cap; the groundwater extraction and treatment system; and the placement of use restrictions or institutional controls (ICs) on parts of the Duell & Gardner Site property to prevent the installation of drinking water wells until the groundwater cleanup standards (residential) are met. In addition, the ROD Amendment required permanent restrictions for the capped area to prevent excavation or other unauthorized activities. With respect to the soil, the amended ROD eliminated low-temperature thermal desorption from the remedy and required excavation and the appropriate disposal of contaminated soils. The ROD Amendment also updated the cleanup standards for soil and groundwater to current Michigan Part 201 criteria (see Tables 2A and 2B in the Docket).

Response Actions

The U.S. Army Corps of Engineers (USACE) conducted the remedial design (RD) and remedial action (RA) at the Duell & Gardner Site through an interagency agreement with EPA.

USACE completed the RD in 2000. USACE and its contractor, IT Corporation, mobilized to the Duell & Gardner Site to start the RA construction in October 2000. USACE and IT Corporation completed the landfill cap construction in April 2001.

During the RA, USACE conducted additional soil characterization activities and consolidated the eight-acre landfill waste area into a four-acre rectangular landfill area. While performing the Landfill Boundary Verification activities, USACE discovered approximately 2,000 cubic yards of gentian violet-impacted soils within the four-acre landfill area. USACE excavated the waste and sampled the material. After discussions with EPA and MDEQ, USACE consolidated the excavated material into a special waste cell constructed within the landfill cap. USACE collected confirmation soil samples from the excavated areas. The confirmation samples did not show any regulatory exceedances for gentian violet.

Confirmation soil samples collected from soil excavations in the southwestern portion of the eight-acre waste area showed 4-chloro-methylphenoxy acetic acid (MCPA), a systemic phenoxy herbicide used to control annual and perennial weeds, at concentrations above Michigan Part 201 Soil Criteria for the Protection of Residential

Drinking Water at one location. USACE did not remove additional soil from the excavations, however, since the bottoms of the excavations were at the water table and additional excavation would not reduce the source of MCPA contamination in groundwater. As a result, the confirmation samples from two grids within this area remain above Michigan's residential drinking water protection criteria of 390 micrograms per liter ($\mu\text{g/L}$).

During hot spot excavation, i.e., the impacted soil in the area of soil sample locations SL-A8, SL-SB-11, and SS-31, USACE sampled the material and found that it did not meet the definition of hazardous waste. Based on the sample results and discussions between EPA, MDEQ and USACE, the material was consolidated under the landfill cap. The 2001 ROD Amendment accounted for this change.

USACE's and IT Corporation's soil excavation and landfill completion activities are documented in the 2001 Landfill Construction Report prepared by Shaw, which subsequently acquired IT Corporation.

USACE completed the construction and start-up of the groundwater extraction and treatment system on June 29, 2001. The system consisted of four recovery wells, an infiltration gallery, a treatment building containing two granular activated carbon units, various pumps, a 3000-

gallon retention tank, conveyance piping, appurtenant devices, and automatic shut-down capabilities.

EPA and MDEQ inspected the construction activities at the Duell & Gardner Site on July 11, 2001. EPA and MDEQ inspected the capped landfill and the operating groundwater treatment system. EPA determined that the landfill cap and the groundwater treatment system met the objectives of the interagency agreement. Three deficiency items were noted including painting the groundwater treatment building, installing a garage door, and installing a lock on the observation well by the infiltration gallery. USACE completed those items on August 3, 2001. EPA determined that the groundwater treatment system was operational and functional on August 10, 2002.

USACE reconfigured the groundwater treatment system in 2003 to provide a higher operating efficiency. The modifications included: new granular activated carbon units incorporated into the recovery well system; additional bag filters; the chemical treatment of wells to reduce well fouling; and replacing the original re-pressurization pump to more efficiently convey backwash water into the infiltration gallery. In 2005, USACE installed a new higher capacity recovery well to capture

the groundwater plume more effectively. The 2003 and 2005 modifications were consistent with the 2001 ROD Amendment.

EPA installed and sampled three new groundwater monitoring wells in 2009 in the southeastern corner of the Duell & Gardner Site. EPA installed the wells to determine whether the contaminant plume was migrating off-site. The laboratory results indicated that the groundwater constituents in the new monitoring wells did not exceed Michigan Part 201 cleanup standards.

USACE operated the groundwater extraction and treatment system and conducted quarterly groundwater monitoring at the Duell & Gardner Site until 2010. In 2010, the groundwater monitoring data indicated that chemical concentrations in groundwater had decreased to below the cleanup standards for two consecutive quarters.

EPA and MDEQ approved that the system be shut down. USACE shut the system down and continued quarterly groundwater monitoring until 2012. In 2012, the groundwater data confirmed that the groundwater extraction and treatment system could be permanently decommissioned. USACE decommissioned the groundwater extraction and treatment system, including the majority of monitoring wells and recovery wells, all transmission piping, wiring and the infiltration basin in 2012 in accordance with the

Groundwater Monitoring Plan. The groundwater data and completion of the RA activities at the Duell & Gardner Site is documented in USACE's 2012 Final Remedial Action Report.

EPA, MDEQ and USACE conducted a Pre-Final Site Walk and a Post-Decommissioning Site Walk on July 25, 2012. EPA completed a Final Close Out Report documenting the completion of all response actions at the Duell & Gardner Site in accordance with EPA's *Close Out Procedures for National Priorities List Sites* (OLEM Directive 9320.2-22, May 2011) on November 8, 2012.

Cleanup Levels

The cleanup levels for soil outside the capped area and groundwater in the 1993 ROD were based on Michigan Act 307 Type B Residential Cleanup Standards. Michigan later replaced Act 307 with Act 451. Michigan Act 451 Part 201 included revised cleanup criteria for soil and groundwater. The 2001 ROD Amendment for the Duell & Gardner Site updated the cleanup criteria for soil and groundwater to Michigan's then-current Part 201 Residential Cleanup criteria. Tables 2A and 2B in the Docket are from the 2001 ROD Amendment and show the updated Michigan Part 201 Residential Cleanup Criteria for the Duell & Gardner Site, compared to the previous Michigan Act 307 Criteria selected in the 1993 ROD.

USACE confirmed that soil outside the capped area met MDEQ Part 201 Residential Criteria through additional soil characterization, soil confirmation sampling and Landfill Boundary Verification during the soil RA. USACE conducted the soil verification sampling in accordance with the USACE's Chemistry Scope of Work. Except as noted above for the two soil samples at the water table that contained MCPA above MDEQ soil criteria for residential groundwater protection, no other regulatory criteria were exceeded. The specific details of the verification sampling are detailed in the 2001 Landfill Construction Report.

USACE conducted quarterly groundwater monitoring to monitor the effectiveness of the groundwater extraction system and chemical concentrations in groundwater over time. USACE conducted the monitoring in accordance with the EPA and MDEQ-approved Groundwater Monitoring Plan. In 2010, after nine years of operation, EPA and MDEQ agreed that the groundwater extraction and treatment system could be shut down because contaminant concentrations in groundwater were below Part 201 Residential Drinking Water Criteria for two consecutive quarters. In accordance with the Groundwater Monitoring Plan, USACE continued to sample the groundwater on a quarterly basis to verify that contaminant levels remained below the cleanup standards.

USACE conducted six additional quarterly groundwater monitoring events. In 2012, USACE compared the March 2012 groundwater monitoring results to MDEQ Part 201 Residential Drinking Water Criteria and MDEQ Part 22 Groundwater Quality Standards. The laboratory results did not exceed any of the Part 201 or Part 22 criteria. Based on the data, EPA and MDEQ agreed that the groundwater extraction and treatment system could be permanently decommissioned. The groundwater monitoring data and the completion of the cleanup activities at the Duell & Gardner Site are documented in the 2012 Final Remedial Action Report. The remaining chemicals of concern in the on-site groundwater are below Part 201 Groundwater Cleanup Criteria and will be allowed to naturally attenuate.

Operation and Maintenance

The Duell & Gardner Site officially transferred from the 10-year EPA-led long-term remedial action phase of the project to MDEQ-lead (now MDEGLE-lead) Operation and Maintenance (O&M) in 2012. The transfer included the following requirements: (1) Abide by the prescribed ICs and Land Use Controls for Long-Term Stewardship; (2) Implement outstanding ICs as required by the ROD, i.e. the installation of permanent markers; (3) Maintain site security; (4) Ensure vegetation is routinely maintained to

prevent damage to the integrity of the landfill cap; and
(5) Conduct Annual Monitoring Events for the remaining on-site monitoring wells.

MDEGLE conducts the O&M in accordance with the November 5, 2012 Operations, Maintenance & Monitoring Plan. The existing groundwater monitoring well network is comprised of 23 monitoring wells and four piezometers. MDEGLE collects groundwater samples annually from the wells. The laboratory data is compared to Part 201 groundwater protection standards. The monitoring well protective casings are to remain closed and locked at all times.

The property owners of the Duell & Gardner Site recorded a restrictive covenant at the Muskegon County Register of Deeds on October 30, 2007, Instrument 5260434, Liber 3759, Page 813. The covenant prohibits the use of groundwater contaminated with VOCs above drinking water standards, prevents disturbance to the landfill cap and any other activities that may interfere with the remedy, O&M and other measures necessary to ensure the effectiveness and the integrity of the remedial action.

The groundwater restrictions apply to Parcels A (20.96 acres) and B (the 4.28 acre landfill parcel) shown on the Duell and Gardner Site Survey (see Survey and Figure 2 in

the Docket). The landfill cap restrictions apply to Parcel B shown in the survey. The restrictions prohibiting the groundwater monitoring wells from being disturbed apply to the 23 monitoring wells remaining on the Duell & Gardner Site property.

Five Year Review

EPA conducted statutory five year reviews (FYRs) of the Duell & Gardner Site in 2005, 2010 and 2015. The purpose of the FYRs is to determine whether the remedy at a site remains protective of human health and the environment. The Duell & Gardner Site requires statutory FYRs because hazardous substances remain at the Duell & Gardner Site above levels that allow for unrestricted use and unlimited exposure. The review methods, findings, and conclusions are documented in the FYR reports. In addition, the FYR reports identify issues found during the review, if any, and recommendations to address them.

EPA's most recent FYR of the Duell & Gardner Site, in March 2015, determined that the remedy at the Duell & Gardner Site is protective of human health and the environment. Impacted soils have been removed; wastes have been consolidated into a four-acre landfill and covered with an impermeable cover; groundwater is currently meeting Michigan Part 201 and Part 22 water standards and no longer

needs treatment; and ICs to restrict current and future use of the contaminated areas and to ensure long-term stewardship have been implemented. ICs in the form of an environmental covenant are in place for the Duell & Gardner Site. The IC Plan also ensures Long-Term Stewardship because it establishes a process to ensure that ICs are in place, maintained, and effective.

The FYR did not identify any issues or recommendations that would affect the current or future protectiveness of the remedy at the Duell & Gardner Site. The next FYR will be completed on or before March 2, 2020.

Community Involvement

EPA and the State satisfied public participation activities as required in CERCLA Sections 113(k) and 117, 42 U.S.C. 9613(k) and 9617. MDEQ (formerly the MDNR and currently known as the MDEGLE) prepared a Community Relations Plan at the start of the RI/FS and established information repositories for site-related reports and documents at MDEQ's offices and at Dalton Township's offices. MDEQ also held three public meetings concerning the Duell & Gardner Site and issued a series of eight progress reports to the public.

MDEQ and EPA published announcements about their proposed action plan and proposed remedy amendment for the

Duell & Gardner Site, 30-day public comment periods, and the availability of public meetings, in the Muskegon Chronical in 1993 and 1999. The agencies responded to significant comments received on the proposed plan and proposed ROD Amendment in Responsiveness Summaries attached to the 1993 ROD and the 2001 ROD Amendment.

MDEQ and EPA published notifications in the Muskegon Chronical announcing the start of each of the three FYRs conducted in 2005, 2010 and 2015 inviting the public to comment and express their concerns about the Duell & Gardner Site. The agencies did not receive any public comments.

EPA arranged to publish an advertisement announcing the publication of this rule and the 30-day public comment period in the Muskegon Chronical prior to its publication in the **Federal Register**. Documents in the deletion docket which EPA relied on to support the deletion of the Duell & Gardner Site from the NPL are available to the public in the Duell & Gardner Site information repositories and at <http://www.regulations.gov>.

**Determination That the Site Meets the Criteria for Deletion
In the NCP**

The November 8, 2012, Final Close Out Report documents that EPA and MDEGLE have successfully implemented all

appropriate response actions at the Duell & Gardner Site in accordance with the 1993 ROD, the 2001 ROD Amendment and *Close Out Procedures for National Priorities List Sites* (OLEM Directive 9320.2-22, May 2011).

The cleanup actions specified in 1993 ROD and the 2001 ROD Amendment for the Duell & Gardner Site have been implemented and the Duell & Gardner Site meets acceptable risk levels for all media and exposure pathways. The ongoing IC and long-term stewardship actions required at the Duell & Gardner Site are consistent with EPA policy and guidance.

Contaminated drums and other materials were removed from the Duell & Gardner Site under a CERCLA removal action, and residual materials were excavated and consolidated with materials under a low-permeability landfill cap. Groundwater sampling results confirm that the Duell & Gardner Site does not pose any threat to human health or the environment. Therefore, the EPA has determined that no further Superfund response is necessary at the Duell & Gardner Site to protect human health and the environment.

The NCP (40 CFR 300.425(e)) states that a site may be deleted from the NPL when no further response action is appropriate. EPA, in consultation with the State of

Michigan, has determined that all required response actions have been implemented at the Duell & Gardner Site and that no further response action is appropriate.

V. Deletion Action

EPA, with concurrence of the State of Michigan through the MDEGLE, has determined that all appropriate response actions under CERCLA, other than operation and maintenance, monitoring and five-year reviews have been completed. Therefore, EPA is deleting the Duell & Gardner Site from the NPL.

Because EPA considers this action to be noncontroversial and routine, EPA is taking it without prior publication. This action will be effective [insert date 60 days after date of publication in the *Federal Register*] unless EPA receives adverse comments by [insert date 30 days after date of publication in the *Federal Register*]. If adverse comments are received within the 30-day public comment period, EPA will publish a timely withdrawal of this direct final Notice of Deletion before its effective date and the deletion will not take effect. EPA will prepare a response to comments and continue with the deletion process on the basis of the Notice of Intent to Delete and the comments already received. There will be no additional opportunity to comment.

List of Subjects in 40 CFR Part 300

Environmental protection, Air pollution control, Chemicals, Hazardous waste, Hazardous substances, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Superfund, Water pollution control, Water supply.

Dated: July 17, 2019.

Cathy Stepp,
Regional Administrator,
Region 5.

For the reasons set out in this document, 40 CFR part 300 is amended as follows:

PART 300—NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

1. The authority citation for part 300 continues to read as follows:

Authority: 33 U.S.C. 1321(d); 42 U.S.C. 9601-9675; E.O. 13626, 77 FR 56749, 3 CFR, 2013 Comp., p. 306; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p. 351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p. 193.

Appendix B to Part 300 - [Amended]

2. Table 1 of Appendix B to part 300 is amended by removing the entry "MI", "Duell & Gardner Landfill", "Dalton Township".

[FR Doc. 2019-16199 Filed: 7/30/2019 8:45 am; Publication Date: 7/31/2019]