

Finishers Suffer When EPA Region IX Takes Different View of RCRA Exemptions

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In 1980, the U.S. Environmental Protection Agency (EPA) recognized that facilities generating and treating wastewaters that had been classified as hazardous waste should be relieved of double regulation under both the Resource Conservation and Recovery Act (RCRA) and the Clean Water Act (CWA). This resulted in EPA's exemption of "wastewater treatment units" from RCRA requirements.¹ In numerous interpretations since that time, EPA's Washington D.C. Headquarters has incrementally broadened the application of this exemption.

EPA's Region IX Office in San Francisco recently took new positions that conflict with EPA Headquarters' positions, and that restrict the use of this exemption by facilities within its jurisdiction.² Region IX has required an Arizona facility to provide a certification that EPA Headquarters has never required, and it subsequently issued regional guidance that directly conflicts with EPA Headquarters' interpretations of the exemption. If other EPA Regions or state programs follow suit, or if EPA Headquarters modifies its interpretation accordingly, metal finishers and other facilities located elsewhere in the country could lose the benefits provided by this exemption.

While Region IX has understandable reasons for taking these positions, they may have the unintended consequence of discouraging facilities from pursuing the environmentally beneficial goals of eliminating wastewater discharges and reducing the amount of hazardous waste shipped off site.

Part I—Abrams Airborne Issues & Resolution

Abrams Airborne Manufacturing, Inc., located in Tucson, AZ, is a supplier of high quality fabricated metal products to high profile firms in electronics, medical technology, and national defense.³ Many of Abrams' components have been part of NASA missions, including the Mars Rover Spirit.⁴

Region IX inspected the Abrams facility in June 2002 and subsequently issued a Notice of Violation (NOV), alleging that the company was in violation of federal and state law by treating hazardous waste without a RCRA Part B Permit. This allegation specifically involved Abrams' industrial wastewater pretreatment system.

Abrams operates a captive surface finishing operation that includes aluminum anodizing, Alodine^{®5}, and zinc plating.⁶ The facility's pretreatment system has two subsystems. The first subsystem is a continuous flow process that treats rinse waters via metals precipitation, followed by filter polishing and final pH adjustment before discharge to the Pima County municipal wastewater treatment facility, a publicly owned treatment works (POTW).

In the second subsystem, spent process solutions such as soap cleaners and etches are pH neutralized in one of two tanks, then transferred to an evaporator, where water is removed, leaving treatment sludge. This sludge is commingled with sludge from the

rinse water treatment subsystem and shipped off site as hazardous wastewater treatment sludge.

The Region IX NOV asserted that the facility's evaporator was a sludge dryer⁷ that did not qualify for the wastewater treatment unit (WWTU) exemption because: (a) it was not treating "wastewater;" and (b) it was not part of a treatment facility regulated under the CWA. For support, Region IX cited a Federal Register Notice from 1991 that establishes the conditions under which sludge dryers are eligible for the WWTU exemption.⁸ Region IX went on to assert that because the evaporator was not, in the Region IX's opinion, a WWTU, it would be regulated as a "thermal treatment unit."⁹

The Wastewater Treatment Unit Exemption

RCRA regulations allow treatment of hazardous wastewater without a permit in a unit that meets all three criteria of the wastewater treatment unit definition.¹⁰ This article considers the first of these three criteria, which states that a unit must be: "part of a wastewater treatment facility that is subject to regulation under either section 402 [surface water discharge (or "NPDES") requirements] or 307(b) [pretreatment regulations for discharges to POTW's] of the Clean Water Act."¹¹

Determining compliance with this criterion is complicated by the elimination of discharge to surface waters or a POTW, as in the case of the Abrams' evaporator. The conflict that has arisen between Region IX's recent actions and EPA's historic guidance is whether or not these "zero-discharge facilities" or "ZDF's" are part of a CWA-regulated facility and, therefore, whether they qualify for the wastewater treatment unit exemption.

EPA Negotiations

As part of its discussions with Region IX regarding the NOV and in response to Region IX's request, Abrams provided the Region IX with numerous documents detailing its surface finishing and wastewater operations.¹²

Abrams also provided Region IX with a written expert regulatory analysis opposing Region IX's assessment and affirming that:

- Influent to Abrams' evaporator was in fact wastewater,¹³ and
- Given EPA's past interpretation of the WWTU exemption as it applies to zero discharge facilities, Abrams' evaporator was part of a CWA regulated facility.¹⁴ This analysis concluded with the opinion that Abrams' neutralization and evaporation units meet all three criteria of the WWTU definition and, therefore, the facility should not be found in violation of RCRA regulations.

After reviewing the expert opinion, Region IX agreed to meet with Abrams' representatives to discuss relevant issues. At that meeting, Region IX explained it had made certain assumptions

in arriving at its belief that Abrams was attempting to circumvent RCRA requirements:

- Region IX assumed that Abrams purposely treated its hazardous spent solutions separately from rinse waters because of a pretreatment permit prohibition on discharge of hazardous waste;
- Region IX assumed that Abrams evaporated these solutions to reduce hazardous waste transportation and disposal costs. Region IX noted that in prior cases involving evaporation, they had found many small facilities tried to reduce costs and avoid regulation by directly evaporating hazardous waste.
- Region IX assumed that Abrams' spent process solutions were concentrated chemical wastes, rather than wastewater, which would make the units treating the solutions ineligible for the WWTU exemption.

Abrams' representatives responded to each of Region IX's claims in turn. Regarding Region IX's first assumption, Abrams pointed out that:

- The prohibition on discharge of hazardous waste was boilerplate language for all industrial discharge permits, did not prevent discharge of treated hazardous wastewaters, and that segregation of waste streams is how industrial dischargers avoid slug loading and maintain compliance with discharge limits;
- The spent process solutions treated by Abrams were at one time treated along with rinse waters and then discharged under the facility's pretreatment permit. As discharge limits became more restrictive, Abrams segregated those solutions for separate treatment; and
- By definition, the WWTU exemption covers treatment of wastewaters that are hazardous wastes; any discussion of the permit prohibition on hazardous waste discharges was irrelevant to a RCRA compliance analysis.

As to Region IX's second assumption, Abrams explained that any cost savings from reducing the volume of spent solutions was not relevant to the WWTU exemption, and any such savings were offset by the cost of operating the evaporator.

Regarding Region IX's third assumption, Abrams' analysis demonstrated that, based on EPA Headquarters' interpretation of the WWTU exemption and the nature of the spent solutions Abrams was evaporating, those solutions were "wastewaters" for the purpose of the WWTU exemption. Abrams representatives drew on personal knowledge of industrial wastewater treatment to explain metal finishers use many different technologies to manage spent solutions as wastewater.

Resolution

Following further review of Abrams' written expert analysis and meeting with Abrams representatives, Region IX dropped its assertion that the influent to Abrams' evaporator was not a wastewater. However, to ensure clear CWA regulation of the evaporator, Region IX made the unusual request that Abrams provide a certification from the POTW permitting authority to Region IX stating that the evaporator was considered to be part of Abrams' pretreatment facility. Fortunately, Abrams has a longstanding positive relationship with POTW officials and was able to obtain the requested certification quickly.¹⁵ Following receipt of this certification, Region IX issued a letter to Abrams stating that the company was not in violation of the regulations cited in the NOV.

Part II—Broader Region IX Action Conflicts with EPA Headquarters' Interpretations & Impacts Other Facilities

EPA Interpretation of the Exemption

In order to create an equitable regulatory environment, EPA Headquarters held for many years that if a facility became a ZDF "as a direct result of CWA requirements,"¹⁶ it was eligible for the WWTU exemption. The EPA Headquarters' interpretation of the exemption as applied to ZDF's has evolved over time, and by 1993 EPA had broadened the exemption to state that even facilities eliminating discharges voluntarily out of general environmental concerns, rather than specific CWA restrictions were also eligible for the exemption.¹⁷ EPA Headquarters' guidance on exemption eligibility can be summarized as follows:

- It is not necessary for the facility to have a CWA permit specifying zero discharge;
- It is not necessary for the facility to be subject to an effluent guideline or pretreatment standard specifying zero discharge;
- A unit that meets the WWTU definition and eliminates discharge as a direct result of CWA restrictions qualifies for the exemption;
- A unit may also qualify if the cessation of discharge resulted from general environmental concerns.¹⁸

Region IX Deviates From Headquarters' Guidance

Abrams began evaporating spent process solutions as a direct result of increasingly stringent CWA discharge requirements that necessitated segregation of these solutions to maintain CWA compliance. Therefore, because Abrams' evaporator otherwise meets the definition of a WWTU, it qualifies for the exemption. Region IX's requirement that Abrams' provide certification that the evaporator is part of its CWA-permitted pretreatment system established a requirement that is inconsistent with the EPA's guidelines described above.

Following resolution of the Abrams matter, Region IX issued regional guidance that clearly establishes requirements that are more stringent than those required by EPA Headquarters. Region IX published an "Info Sheet" stating that a ZDF will qualify for the WWTU exemption only if it has "a NPDES permit that specifies zero discharge."¹⁹ This interpretation of the exemption contradicts EPA's position that it is not necessary to have a CWA permit specifying zero discharge, as described above.

Implications for Region IX Facilities & Others

Region IX's "Info Sheet" establishes requirements for facilities throughout the Region. Facilities in Region IX with ZDF's that they believe qualify for the WWTU exemption may now be subject to enforcement action²⁰ unless they do one of the following:

1. Obtain a zero discharge permit if they don't already have one,
2. Obtain certification from their permitting authority²¹ that specifies—or have an existing permit modified to specify—that existing zero discharge units are part of their permitted system,
3. Operate under another RCRA exemption, such as the "elementary neutralization,"²² "totally enclosed treatment facility,"²³ or "generator treatment"²⁴ exemptions, or
4. Cease use of their zero discharge units for treatment of hazardous wastewaters.

If facilities elect one of the three permitting options described above, their efforts may be confounded by the resource limitations

of permitting authorities that may not assign such permits or certifications high priority for action. It is unclear at this time what action Region IX might take if a facility is awaiting a permit or certification at the time of inspection.

Many systems may not be able to operate under the "elementary neutralization" or "totally enclosed treatment facility" exemptions. The "generator treatment" exemption, while potentially viable, has significant restrictions including:

- Treatment in tanks and tank systems must comply with the requirements in 40 CFR Part 265 Subparts J, AA, BB and CC, among others;²⁵ and
- Thermal treatment is not eligible for the generator treatment exemption.²⁶

If a facility ceases use of a zero discharge unit, previously treated solutions will need to either be treated in a discharging system, increasing loads to the POTW or surface water body, or be shipped off site for treatment and/or disposal. Both of these actions may increase facility operating costs.

If authorized states or other regions follow Region IX's position on the WWTU exemption, facilities across the country may lose the benefits of the exemption and be forced to incur the costs of obtaining additional permits and certifications, or of modifying their facilities to meet these new requirements.

Part III—Constructive Approaches to Dilemma Posed by Interpretations

EPA originally created the WWTU exemption to eliminate dual regulation of wastewater treatment systems by both the CWA and RCRA. Because units used to treat wastewater were already regulated under the CWA, and the hazardous waste sludge generated by that treatment is regulated under RCRA, EPA decided that additional RCRA regulation of the treatment unit was unnecessary. However, EPA's guidance on application of the WWTU exemption to zero discharge facilities could allow a scenario where a ZDF that is not regulated under the CWA is still eligible for the exemption, meaning its operation would not be regulated under either the CWA or RCRA.

In light of such a scenario, it is understandable that Region IX would pursue a policy goal of ensuring that all zero discharge units are regulated in some manner, whether it is under the CWA or RCRA. However, the approach taken by Region IX directly conflicts with longstanding guidance by EPA. While EPA Headquarters' guidance currently allows certain treatment units to avoid regulation, Region IX's action will create an uneven economic playing field for metal finishers and other facilities within its jurisdiction, because the cost of operation will become a function of the regional location of those facilities. While such variation is understandable among states, the regulated community does not expect a national regulatory agency to apply differing standards to different geographic locations. As a part of a national regulatory agency, Region IX should not establish requirements that conflict with EPA's guidance.

Region IX has a valid concern about the potential for unregulated zero-discharge units. However, such issues are best resolved through dialogue between industry, EPA Headquarters and the states, rather than through unilateral action by individual EPA regional offices.

Bibliography

1. See 45 FR 76074 (November 17, 1980); see also 40 CFR §§ 264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v).
2. Region IX includes Arizona, California, Nevada, Hawaii and other Pacific islands. California's more stringent regulation of wastewater treatment units result in few California metal fin-

ishers, if any, that could be impacted by this new Region IX requirement.

3. This article is not intended to represent the views of Abrams, its executive management, or shareholders, nor is it intended to represent the views of LECG, LLC.
4. For more information about Abrams, please visit <http://www.abrams.com>.
5. Alodine® is a registered trademark of Henkel Surface Technologies.
6. See Abrams' website.
7. See 40 CFR §260.10 for the definition of a sludge dryer.
8. See 56 FR 7134 (February 21, 1991).
9. Thermal treatment of hazardous waste is regulated under 40 CFR Parts 264/265, Subpart P. Thermal treatment of hazardous waste pursuant to the generator treatment exemption is prohibited. See U.S. EPA, RCRA, Superfund & EPCRA Call Center Monthly Report, January 2003, RCRA Online No. 14662. However, EPA has stated that sludge dryers, evaporators and other units that use heat to treat wastewaters are eligible for the WWTU exemption if they meet all three criteria of the WWTU definition. See 56 FR 7134, 7201 (February 21, 1991).
10. See 40 CFR §§ 260.10, 264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v).
11. See 40 CFR § 260.10 for the complete definition of a WWTU.
12. Documents requested by EPA provided complete detail of Abrams' processes, including MSDS's, RCRA waste determination, and bath life information for each tank in Abrams' surface finishing operation, as well as details of sludge generation and removal.
13. There is no definition of "wastewater" in the RCRA regulations that applies to the WWTU exemption. The only guidance is found in Headquarters' interpretive letters and memoranda. Abrams' regulatory opinion letter compared those interpretations with the company's spent process solutions and demonstrated that by Headquarters' standards, those solutions are wastewaters.
14. This same analysis also applies to the neutralization tanks used by Abrams preceding the evaporator. These tanks were also alleged by Region IX to not be eligible for the WWTU exemption.
15. When Abrams contacted the permitting authority, the company discovered that many facilities in the area were also issued NOV's from Region IX for evaporation of wastewater. However, the authors cannot speak to the experiences of those facilities.
16. See, e.g., 53 FR 34079 (September 2, 1988).
17. See, e.g., Letter from Sylvia Lowrance to William Fisher, June 2, 1993, RCRA Online No. 11749. EPA said that this ZDF situation was "similar enough" to cases where discharge was eliminated as a direct result of CWA requirements "to warrant equal consideration under the wastewater treatment unit exemption." While EPA stated that this interpretation also considered the "the relatively small amounts of wastewater involved," the interpretation applied expressly to an entire industry: dry cleaning facilities. In a subsequent letter to a concerned citizen, EPA indicated that its June 1993 interpretation only applies to "specific types of units used in the dry-cleaning industry." Letter from Bruce Weddle to Katy Wolf, October 22, 1993, RCRA Online No. 11788. However, EPA later applied the June 1993 interpretation to other types of units, and there is no articulated basis to limit the policy concepts expressed in the June 2, 1993 letter only to the dry cleaning industry.
18. As described in footnote 16, Headquarters has potentially limited the application of this principle.
19. Presumably, EPA intended to say "NPDES or pretreatment permit," which would be consistent with the RCRA definition of a WWTU. There are other aspects of the "Info sheet" that are not

consistent with RCRA regulations and Headquarters' interpretation of them, but those issues are beyond the scope of this article. The "Info Sheet" was published jointly between Region IX and the Arizona Department of Environmental Quality (ADEQ). While EPA allows authorized states, such as Arizona, to have regulations and interpretations that are more stringent than EPA's, Arizona law limits ADEQ's ability to have more stringent hazardous waste regulations than EPA's, a subject beyond the scope of this article.

20. In RCRA-authorized states, EPA enforces the authorized state hazardous waste regulations, within certain restrictions.
21. Region IX's new guidance does not expressly provide this option. However, given that this option would achieve the policy goal of Region IX's position and the fact Region IX allowed Abrams to take this approach, it is reasonable to think EPA would allow other facilities to obtain similar certification in lieu of a permit.
22. See 40 CFR §§ 264.1(g)(6), 265.1(c)(10), and 270.1(c)(2)(v).
23. See 40 CFR §§ 264.1(g)(5), 265.1(c)(9), and 270.1(c)(2)(iv).
24. See 40 CFR §§ 262.34, 264.1(g)(3), 265.1(c)(7), and 270.1(c)(2)(i).
25. See 40 CFR §§ 262.34(a)(1). Generator treatment in containers must comply with the requirements in 40 CFR Part 265 Subparts I, AA, BB, CC, among others. See *Id.*
26. See U.S. EPA, RCRA, Superfund & EPCRA Call Center Monthly Report, January 2003, RCRA Online No. 14662.

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