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Dow Chemical Co. v. United States: Aerial Surveillance and The Fourth Amendment

I. Introduction

In *Dow Chemical Co. v. United States*,¹ the Supreme Court, in an opinion written by Chief Justice Burger, held that the Environmental Protection Agency's (EPA) aerial surveillance of a Dow Chemical Company manufacturing facility located in Midland, Michigan, was not a search within the meaning of the fourth amendment,² and therefore, was not subject to the warrant requirement of the fourth amendment. This decision affirmed the Sixth Circuit Court of Appeals holding³ which overturned the district court's⁴ finding that EPA had engaged in an illegal search because the agency had obtained neither permission from Dow nor a warrant to search prior to its fly-over, as required by the Clean Air Act (CAA)⁵ and the fourth amendment. The issues raised in this note are whether the Supreme Court correctly ruled that EPA's aerial surveillance and photography of Dow's plant did not violate Dow's fourth amendment right to privacy,⁶ and whether or not aerial photography can be used as an inspection technique under section 114 of CAA.⁷ This note examines fourth amend-

1. *Dow Chemical v. United States*, 106 S. Ct. 1819 (1986).

2. The fourth amendment to the United States Constitution provides that people have the right "to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures" and that "no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." U.S. Const. amend. IV.

3. *Dow Chemical Co. v. United States*, 749 F.2d 307 (6th Cir. 1984), *aff'd*, 106 S. Ct. 1819 (1986).

4. *Dow Chemical Co. v. United States*, 536 F. Supp. 1355 (E.D. Mich. 1982), *rev'd*, 749 F.2d 307 (6th Cir. 1984), *aff'd*, 106 S. Ct. 1819 (1986).

5. Clean Air Act, 42 U.S.C. §§ 7401-7642 (1982).

6. *Dow*, 106 S. Ct. at 1827.

7. *Id.* at 1824.

ment law as it applies to searches in commercial settings, and its relationship to the statute authorizing a regulatory agency to investigate CAA violations. It concludes that although it is vital for EPA to investigate violations in its implementation of CAA, contrary to the decision of the Supreme Court but in accordance with the dissent to that opinion,⁸ the fourth amendment places limitations on the manner in which EPA officials may investigate. In this case, EPA went beyond those limitations by its aerial surveillance of the Dow facility.

II. Background

A. *Dow Chemical v. United States*

Dow maintains a manufacturing plant in Midland, Michigan. EPA, in its efforts to enforce federal pollution laws, began testing emissions from Dow's powerhouses for possible violations. In 1977, EPA inspected Dow's powerhouses and "requested and received, schematic drawings of the power houses from Dow."⁹ Later that year, EPA asked to conduct a second inspection, informing Dow that they intended to take photographs of the plant layout and its facilities. When Dow denied EPA's request for re-entry into the plant, EPA suggested that they would return with a search warrant, but never did so.¹⁰ Instead, in 1978, EPA conducted aerial surveillance of the Dow facility "without further communication to Dow".¹¹

Approximately six flights over the plant were made at al-

8. *Id.* at 1827 (Powell, J., dissenting).

9. *Dow Chemical Co. v. United States*, 536 F. Supp. 1355, 1357 (E.D. Mich. 1982).

10. EPA never offered a reason why it was necessary for the agency to reinspect the Midland facility. One can surmise that they had reasons to suspect violations of the Clean Air Act, but did not have sufficient probable cause to obtain an administrative warrant. Brief for Petitioner at 11, *Dow Chemical Co. v. United States*, 105 S. Ct. 2700 (1985) [hereinafter cited as Brief for Petitioner].

11. Brief for Petitioner at 5. EPA contracted with a private company to photograph the Midlands facility "to create visual documentation of smoke stack emissions and to obtain perspectives on the layout of the plant and its relationship to the surrounding geographic area." *Dow Chemical Co. v. United States*, 749 F.2d 307, 310 (6th Cir. 1984).

titudes ranging from one thousand two hundred feet to twelve thousand feet.¹² The Wild RC-10, a sophisticated aerial mapping camera,¹³ enabled EPA to obtain photographs that could "be enlarged to a scale of one inch equals twenty feet or greater, without significant loss of detail or resolution."¹⁴ When the resulting photographs were enlarged and magnified, the images revealed "equipment, pipes and power lines as small as 1/2 inch diameter."¹⁵

When Dow learned of the flights from "sources other than EPA," the company immediately filed suit in the United States District Court for the Eastern District of Michigan for a declaratory judgment and injunctive relief.¹⁶ Specifically, Dow requested that future warrantless aerial surveillance be prohibited, that the surveillance which did occur be declared an illegal search, and that the court determine if EPA exceeded its statutory authority in conducting aerial surveillance.¹⁷ Dow argued that the photographs did not illustrate emissions from the powerhouses which was EPA's stated rationale for ordering the aerial reconnaissance photographs of Dow's facility.¹⁸

The district court found that EPA had conducted an unreasonable warrantless search of the Dow facility which violated the fourth amendment.¹⁹ In addition, the court found that EPA's method of inspection was impermissible under section 114 of the CAA.²⁰ EPA was permanently enjoined from engaging in fly-over surveillance at Dow's plant.²¹

EPA appealed to the United States Court of Appeals for the Sixth Circuit, which reversed the entire district court opinion.²² The Sixth Circuit determined that "the photo-

12. *Dow*, 749 F.2d at 310.

13. *Id.*

14. *Id.*

15. *Id.*

16. *Dow*, 536 F. Supp. at 1357.

17. *Id.*

18. Brief for Petitioner at 11.

19. *Dow*, 536 F. Supp. at 1357.

20. *Id.*

21. *Id.*

22. *Dow*, 749 F.2d 307; Brief for Petitioner at 5.

graphic fly-over did not constitute a fourth amendment search and was not outside EPA's statutory authority"²³ even though EPA had admitted in its brief and at oral argument that they had conducted what constitutes a search within the meaning of the fourth amendment.²⁴ The court of appeals returned to the basic question of whether there had been a search "triggering the warrant clause of the Fourth Amendment."²⁵ The court determined that even if Dow had an expectation of privacy from aerial surveys, the plant's "size and location militate against regarding an expectation of privacy free from aerial observation as reasonable."²⁶ The court further reasoned that the CAA and language of section 114 did not preclude "enhanced aerial observation."²⁷

The Supreme Court upheld the Sixth Circuit's findings. Chief Justice Burger determined that the photographs taken of Dow's facility were similar to those often used in map-making²⁸ and were taken in order to regulate Dow's activities, not to appropriate trade secret information from Dow. The Court further reasoned that section 114(a) does not limit EPA's investigatory powers, but rather expands its authority.²⁹ "The EPA, as a regulatory and enforcement agency, does not need explicit statutory authority to employ methods of observation commonly available to the public at large."³⁰ Thus, the Supreme Court sanctioned the use of aerial surveillance and photography as proper investigatory methods under the CAA.³¹ Next, the Court addressed the fourth amendment issues and determined that Dow's fourth amendment rights were not violated because the Midland facility was more like an open field than curtilage observable by persons in public airspace, and that photographs taken from this vantage point

23. *Dow*, 749 F.2d at 309.

24. *Dow*, 536 F. Supp. at 1358.

25. *Dow*, 749 F.2d at 311.

26. *Id.* at 313.

27. *Id.* at 315.

28. *Dow Chemical Co. v. United States*, 106 S. Ct. 1819, 1823 (1986).

29. *Id.* at 1824.

30. *Id.*

31. *Id.* The dissent in *Dow* also agreed that aerial searches are permissible under CAA. *Dow*, 106 S. Ct. at 1827.

did not constitute "a search prohibited by the Fourth Amendment."³²

B. Warrantless Searches and the Fourth Amendment

The fourth amendment right to be free of unreasonable searches and seizures has been extended to the commercial setting.³³ In *See v. City of Seattle*,³⁴ the Supreme Court determined that a businessman in his work place, similar to an individual in his residence, has a constitutional right to go about his business free from unreasonable official entries upon his private commercial property.³⁵ The businessman loses this right if an inspector can arbitrarily enter and investigate without the safeguards provided by his having to obtain a warrant.³⁶

Warrantless searches, for both administrative and criminal investigatory purposes, generally are not upheld by the Court unless the search fits into a recognized exception to the warrant preference rule of the fourth amendment.³⁷ The general rule which emerged from the Supreme Court's holding in *Marshall v. Barlow's Inc.*³⁸ provides that once governmental action constitutes a search within the meaning of the fourth amendment, the administrative agency must procure a warrant in order for the search to be lawful.³⁹ However, warrantless searches are neither per se unreasonable nor per se prohibited by the fourth amendment.⁴⁰ While exceptions to the

32. *Dow*, 106 S. Ct. at 1827.

33. *See*, 1 LaFave, *Search and Seizure: A Treatise on the Fourth Amendment*, § 2.4(b) at 338 (1978).

34. *See v. City of Seattle*, 387 U.S. 541 (1967).

35. *Id.* at 543.

36. Two safeguards, provided by the requirement to obtain a warrant are a demonstration of probable cause and review by a neutral magistrate. *Id.*

37. *Marshall v. Barlow's, Inc.*, 436 U.S. 307 (1978); *Michigan v. Tyler*, 436 U.S. 499 (1978).

38. 436 U.S. 307 (1978).

39. *Id.*

40. For example, warrantless searches are not unreasonable when police fear that evidence is about to be destroyed or to disappear. *See*, *Schmerber v. California*, 384 U.S. 757 (1966) (seizure of blood sample indicating high liquor content in suspects blood can be taken without a warrant); *Cupp v. Murphy*, 412 U.S. 291 (1973) (seizure of subject's fingernail scrapings without a warrant is constitutionally permissible be-

warrant requirement are "specifically established and well delineated,"⁴¹ the courts have also held that warrantless searches may be constitutional if deemed part of a regulatory scheme and if the commercial property owner recognizes that periodic inspections are necessary to fulfill that regulatory scheme.⁴² The threshold question to be examined is whether the governmental action in this case (namely aerial surveillance) was "sufficiently intrusive to constitute a 'search' triggering the warrant clause of the Fourth Amendment."⁴³

III. Discussion

A. *Does Aerial Surveillance Constitute a Search?*

The majority of courts have held that warrantless aerial surveillance requires no fourth amendment protection since there is not a search.⁴⁴ However, some courts have ruled that the majority view may apply only to the surveillance of agricultural fields.⁴⁵ The difference between these two views stems from the application of the *Katz* doctrine,⁴⁶ the test to deter-

cause of the ready destructibility of the evidence).

41. *Dow*, 536 F. Supp. at 1359.

42. There are exceptions to the general rule which provide for warrantless searches such as the one for the mining industry established in *Donovan v. Dewey*, 452 U.S. 594 (1981). *Dewey* listed the specific industries in which the pervasiveness and regularity of federal regulatory schemes were sufficient to allow a warrantless inspection program which did not violate the fourth amendment. *Dow*, 536 F. Supp. at 1360-61. Besides mining, the industries include firearms (*United States v. Biswell*, 406 U.S. 311 (1972)) and alcoholic beverages (*Colonade Catering Corp. v. United States*, 397 U.S. 72 (1970)).

43. See, Recent Developments, *Warrantless Aerial Surveillance: A Constitutional Analysis*, 35 Vand. L. Rev. 409 (1982) [hereinafter cited as Recent Developments]. This note will discuss aerial surveillance only with regards to administrative investigations.

44. *Id.* at 410 n.7, 411. *United States v. Allen* 675 F.2d 1373 (9th Cir. 1980), cert. denied, 454 U.S. 833 (1981); *United States v. DeBacker*, 493 F. Supp. 1078 (W.D. Mich. 1980).

45. Recent Developments, *supra* note 43, at 421. California Court of Appeals, in particular, indicated in *People v. Joubert*, 118 Cal.App.3d 637, 173 Cal.Rptr. 428 (1981), that warrantless aerial surveillance may apply only to agricultural fields. See also, Recent Developments, *supra* note 43, at 421. "[F]actory sites, outdoor swimming pools, or sunbathing areas may be subject to Fourth Amendment protection because they are 'areas expectedly private according to the common habits of mankind.'" *Id.*

46. *Katz v. United States*, 389 U.S. 347 (1967).

mine whether the situation in question is subject to fourth amendment scrutiny.

In the landmark case, *Katz v. United States*, the Supreme Court abandoned the trespass doctrine as the basis for determining fourth amendment violations.⁴⁷ Instead, the Court developed a two-part test to determine whether a privacy right had been violated which would implicate the fourth amendment.⁴⁸ Both parts of the test must be met before the fourth amendment right to privacy arises. First, there must be an actual, subjective expectation of privacy on the part of the individual; second, it must be an expectation that society is prepared to recognize as reasonable.⁴⁹

Thus, *Katz* allows a court, on a case by case basis, to determine whether the fourth amendment was implicated. Invocation of the fourth amendment depends on "[w]hat a person knowingly exposes to the public, even in his own home or office . . . But what he seeks to preserve as private, even in an area accessible to the public, may be constitutionally protected."⁵⁰ Because the application of *Katz* is dependent upon a factual evaluation of each case, and the particular court's interpretation of *Katz*, the outcome of cases involving similar circumstances may differ from court to court. The courts will presumably reflect society's changing definition of reasonable expectation of privacy, which is ultimately a value judgment. In the context of environmental proceedings, this involves weighing the value of an individual's privacy rights against the value of the most basic natural resources - clean air, water and soil.

The district court in *Dow* took a liberal view of what would be a reasonable expectation of privacy, espousing the minority view that aerial surveillance may be subject to fourth

47. The trespass doctrine was the test for standing in fourth amendment law prior to the adoption of the *Katz* test for standing. The doctrine required that the person asserting a fourth amendment violation have a "substantial possessory interest in the premises searched." *Jones v. United States*, 362 U.S. 257, 261 (1960).

48. The *Katz* test was delineated in the concurring opinion by Justice Harlan. *Katz*, 389 U.S. at 361.

49. *Id.*

50. *Id.* at 351-52.

amendment protection because it is a search. Applying the first part of the *Katz* test, the district court found that Dow exhibited a subjective expectation of privacy as to the interior portions of its plant.⁵¹ The photographs taken by EPA "depict[ed] *internal* regions of the plant in such vivid detail, capable of further enlargement and magnification as to defy simply being described as views of the *exterior* of the facility."⁵² The court continued by stating that the fourth amendment does not require that Dow build a dome over its facility in order to manifest an expectation of privacy.⁵³ Rather, the fourth amendment protects what one "takes reasonable precautions to safeguard."⁵⁴

The district court followed the reasoning of the Fifth Circuit in *E.I. duPont de Nemours v. Christopher*,⁵⁵ for the second prong of its *Katz* analysis, stating that "commercial privacy may be expected and exhibited, and may be deemed reasonable and legitimate by society."⁵⁶ Dow had a legitimate right to protect the design and construction of its processing plant and should not be required to take extraordinary precautions to preserve its fourth amendment right of privacy. Businessmen should not be put in the position of having to choose between "taking extraordinary methods of sealing off those premises or else submitting to unrestrained . . . surveillance."⁵⁷

In concluding that society sanctioned Dow's expectation of privacy, the court evaluated EPA's argument that the public's interest in effective pollution control outweighed Dow's right of privacy.⁵⁸ However, they found that

[v]ery little pollution control utility [exists] in the investi-

51. *Dow Chemical Co. v. United States*, 536 F. Supp. 1355, 1369 (E.D. Mich. 1982).

52. *Id.* at 1365.

53. *Id.*

54. *Id.*

55. 431 F.2d 1012 (5th Cir. 1970), *cert. denied*, 400 U.S. 1024, *reh'g denied*, 401 U.S. 967 (1971).

56. *Dow*, 536 F. Supp. at 1367.

57. *LaFave*, *supra* note 33, § 2.4(b), at 341.

58. *Dow*, 536 F. Supp. at 1369.

gatory method used by EPA in this case. . . . Furthermore, it is difficult to place credence in EPA's assertion that a goal of the aerial photography was to confirm excess emissions. EPA had little or no control over when the photographs would be taken by Abrams, and no knowledge of whether there would be any emissions at the moment they were taken.⁵⁹

In addition, the court found that the requirement to obtain a search warrant was readily incorporated with the other aspects of planning surprise inspections.⁶⁰ Based on the above reasons the court concluded that the *Katz* analysis indicated "that the EPA's aerial photography of Dow's plant constituted an unreasonable search in violation of the fourth amendment."⁶¹

However, the court of appeals adopted a more restricted view of what constituted a reasonable expectation of privacy and followed the majority view that aerial surveillance is not a search. The court of appeals reviewed the lower court's decision by questioning the intrusiveness of EPA's aerial fly-overs and photographs. While the court agreed that it was not necessary for Dow to build a dome over its plant to insure its privacy, it concluded that the size and layout of the plant precluded "an expectation of privacy free from aerial observation as reasonable."⁶² The court viewed the Dow plant layout as an open field, an area not protected under the fourth amendment.⁶³ This rationale leads to the *per se* rule that:

[if] property is visible from the air . . . it . . . can never satisfy the second prong of the *Katz* test. . . . Since most open areas are visible from the air, the result of this *per se* open view analysis is that open areas cannot receive fourth amendment protection. Thus, . . . jurisdictions applying this analysis may conduct aerial surveillance un-

59. *Id.*

60. *Id.*

61. *Id.*

62. *Dow Chemical Co. V. United States*, 749 F.2d 307, 313 (6th Cir. 1984).

63. *Id.*

checked by the warrant requirement.⁶⁴

Adopting the per se rule in this case creates peculiar results. Dow maintained extensive security measures to protect its Midland plant from unwanted and uninvited intruders.⁶⁵ Yet, despite use of these security techniques from ground level and from above, the Sixth Circuit concluded that Dow was not an open field from ground level, but was an open field from the air.⁶⁶ In its argument on appeal to the Supreme Court, Dow pointed out that "having Fourth Amendment rights at ground level is meaningless if a more intrusive . . . search method such as aerial photography is available without restriction upon government agents."⁶⁷ The reasoning by the court of appeals places the emphasis of "open fields" evaluation on the type of intrusion rather than the character of the premises. Whether a search is conducted from the air or on the ground should not alter the court's determination of an expectation of privacy.

The Supreme Court, by a slim five to four majority, adopted the per se analysis accepting the premise that one can manifest a recognizable expectation of privacy on the ground that will not be recognized in the air provided the observer is in navigable airspace, even if using sophisticated surveillance instruments.⁶⁸ The Court discussed the expectation of privacy concept in terms of the "curtilage doctrine" and the "open fields" doctrine.

1. *Curtilage Doctrine and Open Fields Doctrine*

Curtilage is a clearly defined area surrounding a home to which fourth amendment protection is afforded.⁶⁹ Tradition-

64. Recent Development, *supra* note 43, at 422.

65. Included in these measures were procedures for reporting unidentified crafts engaged in "multiple passes over the plant." Dow's security personnel were instructed to report such planes and then to work with Michigan State Police for further investigation. Brief for Petitioner at 6-9.

66. *Id.* at 16-17.

67. *Id.* at 21.

68. *Dow Chemical Co. v. United States*, 106 S. Ct. 1819, 1827 (1986).

69. *Id.* at 1826 n.3.

ally, the area need not be enclosed, but usually includes the buildings or areas used for family purposes and domestic employment.⁷⁰ This area is given fourth amendment protection because it is "an area intimately linked to the home, both physically and psychologically, where privacy expectations are most heightened."⁷¹

Beyond the curtilage lay what is termed open fields. Open fields traditionally have been defined as wooded areas, deserts, vacant lots, open beaches, reservoirs, and open waters.⁷² The concept was never limited to "its literal or technical definition of a place suitable for pasture or tillage."⁷³ In *Oliver v. United States*,⁷⁴ the Supreme Court reaffirmed the "open fields" doctrine which had been questioned by some as being overruled by *Katz*.⁷⁵ *Oliver* provided that "an individual may not legitimately demand privacy for activities conducted out of doors in fields, except in the area immediately surrounding the home," the curtilage.⁷⁶ The purpose of this rule is to insure that

open fields do not provide the setting for those intimate activities that the [fourth] Amendment is intended to shelter from government interference or surveillance. There is no societal interest in protecting the privacy of those activities, such as the cultivation of crops, that occur in open fields. Moreover as a practical matter these lands usually are accessible to the public and the police in

70. *State v. Hanson*, 113 N.H. 689, 690, 313 A.2d 730, 732 (1973).

71. *California v. Ciraolo*, 106 S. Ct. 1809, 1812 (1986). *Ciraolo*, a criminal case, was decided the same day as *Dow*. The court held that aerial surveillance of an individual's backyard to obtain evidence needed to secure a warrant was proper.

72. *LaFave*, *supra* note 33, § 2.4(a), at 332.

73. *Id.*

74. 466 U.S. 170 (1984).

75. The open fields doctrine, announced by the Supreme Court in *Hester v. United States*, 265 U.S. 57 (1924), precluded the application of fourth amendment protection to areas considered to be open fields. The doctrine, believed by some to have been overruled by *Katz* was reaffirmed by the Court in *Oliver v. United States*, 466 U.S. 170 (1984). "[T]he term 'open fields' may include any unoccupied or undeveloped area outside of the curtilage. An open field need be neither 'open' nor a 'field' as those terms are used in common speech." *Oliver*, 466 U.S. at 179 n.11.

76. *Oliver*, 466 U.S. at 180.

ways that a home, an office or commercial structure would not be.⁷⁷

In *Air Pollution Variance Board v. Western Alfalfa*,⁷⁸ the Court applied the open fields doctrine in a commercial setting and held that a state health inspector was able to conduct a warrantless entry onto the company's grounds in order to make emissions tests. The company's grounds were considered to be an open field because the smoke emitted from the factory's smokestacks was visible by one not in the immediate vicinity of the plant. While *Western Alfalfa* established a precedent for the legitimate entry of a government official onto a commercial plant site to conduct tests,⁷⁹ the facts in this case can be clearly distinguished from those in *Dow*. In *Dow*, the entry was from the air and involved the use of sophisticated photographic equipment that revealed information about the plant that was not visible to the casual observer. In *Western Alfalfa*, the warrantless entry occurred on the ground and the emissions tested were those visible to individuals some distance from the plant. "The fundamental question is whether this surveillance permitted the police [or agents] to see that which the occupant justifiably believed was private."⁸⁰

The Sixth Circuit also found that even if EPA surveillance of Dow was a search, a legitimate exception to the warrant requirement existed. The court looked to the "inherent"

77. *Id.* at 179.

78. *Air Pollution Variance Bd. v. Western Alfalfa Corp.*, 416 U.S. 861 (1974).

79.

An inspector of a division of the Colorado Department of Health entered the outdoor premises of respondent without its knowledge or consent. It was daylight and the inspector entered the yard to make a Ringelmann test. . . . At the time of the instant inspection the state law required no warrant and none was sought. Indeed, the inspector entered no part of the respondent's plant to make the inspection. . . . The field inspector did not enter the plant or offices. He was not inspecting stacks, boilers, scrubbers, flue, grates or furnaces; nor was his inspection related to respondent's files or papers. He had sighted what anyone in the city who was near the plant could see in the sky plumes of smoke.

Western Alfalfa, 416 U.S. at 862-65.

80. LaFave, *supra* note 33, § 2.3(g), at 329.

test found in *Donovan v. Dewey*.⁸¹ The *Donovan* test balances "the strength of the federal regulatory interest . . . with the reasonable expectation of privacy of the commercial entity. . . ." ⁸² EPA maintained such an exception should apply to CAA because of its regulatory nature. However, neither the legislature nor the courts have ever determined that the regulation of the chemical manufacturing industry is pervasive enough to create an exception to the warrant requirement.⁸³

Thus, according to the Sixth Circuit, aerial surveillance and photography was not a search. The district court concluded to the contrary. What becomes evident from the analysis of these two cases is that the inconsistencies in aerial surveillance cases were very apparent and that the resolution of this issue depended upon a ruling from the nation's highest court.

The Supreme Court met this challenge by granting certiorari to hear the *Dow* case.⁸⁴ It resolved these inconsistent views, issuing clear direction in aerial surveillance cases. The Court found that aerial surveillance of "outdoor areas or spaces between structures and buildings of a manufacturing plant"⁸⁵ known as "industrial curtilage"⁸⁶ are not subject to fourth amendment protection.⁸⁷ However, this conclusion strays from the firmly established precedents of *See v. City of Seattle*, *Katz v. United States*, and *Donovan v. Dewey*.⁸⁸ In *See*,⁸⁹ as previously stated, the court afforded the same fourth amendment protection to a businessman in his workplace as to an individual in his home. The court in *Dow*, nevertheless, broke with this precedent by distinguishing the nature and size of industrial curtilage from curtilage surrounding a dwell-

81. *Dow*, 749 F.2d at 311 n.1.

82. *Id.*

83. *Dow*, 536 F. Supp. at 1361.

84. *Dow Chemical Co. v. United States*, 105 S. Ct. 2700 (1985).

85. *Dow*, 106 S. Ct. at 1825.

86. *Id.*

87. *Id.* at 1827.

88. See generally dissent discussion in *Dow*, 106 S. Ct. at 1830.

89. See *v. City of Seattle*, 387 U.S. 541 (1967).

ing place.⁹⁰ If the business setting were to be treated the same as the domestic setting for fourth amendment purposes, an area surrounding the plant which was "intimately linked" to the business would receive fourth amendment protection under *See* rationale. Whether curtilage existed, then, would be determined on a case by case basis. The Supreme Court, however, eliminates the application of *See* by eliminating industrial curtilage from fourth amendment protection.

The Court also determined that a search, which might otherwise be prohibited from the ground due to a fence, may be proper if conducted from the air. Thus, the Court distinguished fourth amendment protection based on the manner in which the search was conducted. This is contrary to the holding in *Katz*⁹¹ "which identifies a constitutionally protected privacy right by focusing on the interests of the individual and of a free society."⁹² Also contrary to *Katz*, the Court looked for a physical entry to determine if there had been a search.⁹³ Yet, the Court in *Katz* overruled the necessity of physical trespass for there to have been a search by concluding that the fourth amendment protected people, not places.⁹⁴

The Court brushed aside the *Donovan* "inherent" test and noted that anything which could be observed by the public required no warrant.⁹⁵ The Court never ruled chemical manufacturing to be an industry so dangerous or pervasively regulated that warrants were not needed. Nor did it conclude that "a system of warrantless inspections is necessary to enforce its regulatory purpose."⁹⁶

What emerges from the Supreme Court's opinion in *Dow* is that future fourth amendment protection against warrantless searches has been severely restricted. To reach this con-

90. *Dow*, 106 S. Ct. at 1826.

91. *Katz v. United States*, 389 U.S. 347 (1967).

92. *Ciraolo*, 106 S. Ct. at 1817.

93. *Dow*, 106 S. Ct. at 1826.

94. *Katz*, 389 U.S. at 351.

95. *Dow*, 106 S. Ct. at 1826.

96. *Id.* at 1830.

clusion, the Court strays from the precedents and purpose of the fourth amendment.⁹⁷

B. *Does Changing Technology Require an Expanded Application of the Fourth Amendment?*

Prior to *Katz*, an observer using equipment to enhance his view was not considered to be conducting a search invoking fourth amendment protection. This rule was based on the proposition that the observer had a legitimate right to be in the place from which he was observing.⁹⁸ Therefore, "binocular observation while in open fields or unprotected area did not constitute a search within the meaning of the Fourth Amendment."⁹⁹

However, after *Katz* the expectation of the individual became the significant factor in evaluating enhanced viewing. It could no longer be said that "an observation is not a search merely because it was made from a vantage point where the officer was authorized to be."¹⁰⁰ Factors to be considered included the sophistication of the equipment and what could be seen in the normal line of sight "from contiguous areas where passersby or others might be."¹⁰¹ Yet, the majority rule has remained that "devices such as high-powered binoculars, telescopic cameras, and infra-red telescopes only enhance what could be seen with the naked eye and, therefore, their use does not constitute a fourth amendment search."¹⁰² Still, an ever increasing number of courts have concluded that "warrantless, technologically aided observations of areas within the privacy zone [are violations of the fourth amendment] when those areas could not be viewed with the naked eye."¹⁰³

97. *Id.* at 1834.

98. LaFave, *supra* note 33, § 2.2(c), at 361.

99. *Id.* at 257. See, *United States v. Lee*, 274 U.S. 559 (1927); *Fullbright v. United States*, 392 F.2d 432 (10th Cir. 1968); *Hudges v. United States*, 242 F.2d 281 (5th Cir. 1957); *People v. Spinelli*, 35 N.Y.2d 77, 358 N.Y.S.2d 743 (1974).

100. LaFave, *supra* note 33, § 2.2(e), at 257.

101. *Id.* at 259.

102. Recent Development, *supra* note 43, at 426. See *United States v. Allen*, 633 F.2d 1282 (9th Cir. 1980); *United State v. Moore*, 562 F.2d 106 (1st Cir. 1977).

103. Recent Developments, *supra* note 43, at 426. See generally *United States v.*

The federal courts of appeals have split in their opinions on enhanced viewing using advanced technology. For example, in *United States v. Allen*,¹⁰⁴ the Ninth Circuit held that warrantless helicopter surveillance "aided by sense-enhancing devices" of an individual's ranch was not a fourth amendment search.¹⁰⁵ The court found that the defendant had no expectation of privacy since "coast guard helicopters routinely transversed the nearby airspace for several reasons including law enforcement. . . . Any reasonable person . . . could expect that government officials conducting such flights would be aided by sense-enhancing devices."¹⁰⁶ The court determined that the controlling issue was the defendant's reasonable expectation of privacy.

Conversely, in *United States v. Tabor*,¹⁰⁷ the Second Circuit employed the *Katz* reasonable expectation of privacy analysis and concluded that warrantless observation conducted with a high-powered telescope was subject to fourth amendment protection. The court adopted a more widespread application of the fourth amendment than did the Ninth Circuit, ruling that "any enhanced viewing of the interior of a home does impair a legitimate expectation of privacy and encounters the Fourth Amendment's warrant requirement, unless circumstances create a traditional exception to that requirement."¹⁰⁸ *Tabor's* use of the word "home" does not preclude applying this court's reasoning in a commercial setting. The Supreme Court has held that fourth amendment rights available to the individual in his home also apply to the businessman at his place of work.¹⁰⁹ In *United States v. Kim*,¹¹⁰ the district court reasoned that if illegal activity is suspected, a warrant can be obtained rather than "peer[ing]

Tabor, 635 F.2d 131 (2d Cir. 1980); *United States v. Kim*, 415 F. Supp. 1252 (D. Haw. 1976).

104. 675 F.2d 1373 (9th Cir. 1980).

105. *Id.* at 1381.

106. *Id.*

107. 635 F.2d 131 (2d Cir. 1980).

108. *Id.* at 139.

109. *See supra* notes 2-3.

110. 415 F. Supp. 1252 (D. Haw. 1976).

into people's windows with special equipment not generally in use."¹¹¹ This is especially true for administrative searches, since the demonstration of probable cause necessary to procure an administrative warrant is less stringent than the requirement in a criminal case.¹¹² For EPA's purposes in *Dow*, if EPA suspected that the company was violating emissions standards, a warrant could have been obtained rather than engaging in warrantless aerial surveillance of the plant.

It is clear that with advancing technological developments, the law regarding searches and seizures must mirror those developments.¹¹³ As the court stated in *Dean*,¹¹⁴ "judicial implementations of the fourth amendment need constant accommodation to the ever-intensifying technology of surveillance."¹¹⁵ Application of the fourth amendment must grow and change and the courts must be prepared to deal with the fourth amendment in new ways.

The courts cannot rely on antiquated interpretations of the law and make them work in an unworkable situation. This is what happened when the Supreme Court applied traditional fourth amendment constructs to the facts in *Dow*. The Court refused to recognize that increased capabilities in surveillance techniques allow searching in ways that cost, convenience, and manufacturing techniques prohibit effective protection.

IV. Is Aerial Surveillance Permissible Under the Clean Air Act?

Ultimately, the legality of the EPA's actions under CAA hinges on the resolution of the question whether aerial surveillance is a search. Using a case by case approach, the court must balance an enterprise's fourth amendment right to pri-

111. *Id.* at 1256.

112. *Camara v. Municipal Court*, 387 U.S. 523 (1967); *Public Serv. Co. of Indiana, Inc. v. United States*, 509 F. Supp. 720 (S.D. Ind. 1981).

113. *Kim*, 415 F. Supp. at 1257. *Dean v. Superior Court*, 35 Cal. 3d 112, 110 Cal. Rptr. 585 (1973).

114. 35 Cal. 3d at 116, 110 Cal. Rptr. at 588.

115. *Id.*

vacancy against the need for government regulation in a particular industry.¹¹⁶ If the privacy interest is deemed more important, then a warrant must be issued by an impartial magistrate. If the government's regulatory interest is greater, then an exception is created to the warrant requirement. *Dow* is one of the first cases to question the legitimacy of a warrantless search by EPA and to subject the EPA's inspection authority to judicial review.¹¹⁷

CAA section 114(a)(2) provides that

[T]he Administrator or his authorized representative, upon presentation of his credentials - (A) shall have a right of entry to, upon or through any premises of such person or in which any records required to be maintained under paragraph (1) of this section are located, and (B) may at reasonable times have access to and copy any records, inspect any monitoring equipment or method required under paragraph (1), and sample any emissions which such person is required to sample under paragraph (1).¹¹⁸

If entry is denied by the company, however, CAA does not authorize EPA agents to forcefully gain access to the property.¹¹⁹ The Act stipulates that the Administrator must institute a civil action to gain entry after being refused access.¹²⁰ That forceable entry is not contemplated by the statutes authorizing EPA activity is significant. This means that EPA administered statutes "compel EPA to go to court once entry is refused."¹²¹ However, the resulting entry must be accompanied by a warrant based on probable cause less stringent than that required in a criminal case.¹²²

116. *Dow Chemical Co. v. United States*, 749 F.2d 307, 311 n.1 (6th Cir. 1984).

117. Martin, *EPA and Administrative Inspections*, 7 Fla. St. U.L. Rev. 123, 124 & 129 n.27 (citing Comment, *OSHA v. Fourth Amendment: Should Search Warrants be Required for "Spot Check" Inspections?*, 29 Baylor L. Rev. 283 (1977)).

118. Clean Air Act, 42 U.S.C. § 7414 (1982).

119. Martin, *supra* note 117, at 136.

120. 42 U.S.C. § 7414.

121. Martin, *supra* note 117, at 135.

122. *Camara v. Municipality of San Francisco*, 387 U.S. 523, 538-39 (1967); *Public Serv. Co. of*

Barlow's becomes important if aerial surveillance is determined to be a search. If it is a search, then EPA has engaged in a forced entry without a warrant. This violates the general rule established in *Barlow's*¹²³ that a warrant must be obtained for nonconsensual searches.¹²⁴ If the aerial surveillance is not a search, then no fourth amendment violation has occurred and EPA is free to observe and photograph from the air. Thus, the analysis under the Act is tied to the results of the *Katz* test.

As noted above, the Supreme Court ruled in *Dow* that aerial surveillance is not a search. Therefore, the warrant requirement is not applicable even though one may dispute the Court's application of the *Katz* test. However, the court also ruled that section 114(a) permitted aerial investigatory conduct. The Supreme Court construed section 114(a) very broadly. It determined that "EPA, as a regulatory and enforcement agency, needs no explicit statutory provision to employ methods of observation commonly available to the public at large."¹²⁵ Thus, the Court's holdings broke new ground not only by determining that aerial surveillance is not a search, but also by determining that CAA permits warrantless aerial surveillance as a routine investigatory method.

V. Conclusion

The Supreme Court, for the first time, has made clear its position on aerial surveillance in an industrial setting — it does not constitute a search receiving protection of the fourth amendment. To reach its conclusion, the Court strayed from precedent case law and interpreted a previously uninterpreted section of the Clean Air Act. The Court acknowledged that developing technology will alter and expand the methods of permissible warrantless searches, but the Court is nonetheless reluctant to address the need to alter and expand the protection of fourth amendment law to balance the capabilities of

Indiana, Inc. v. United States, 509 F. Supp. 720, 725 (S.D. Ind. 1981).

123. *Marshall v. Barlow's, Inc.*, 436 U.S. 307 (1978).

124. *Martin*, *supra* note 117, at 136.

125. *Dow Chemical Co. v. United States*, 106 S. Ct. 1819, 1824 (1986).

this technologically sophisticated equipment. The effect, therefore, is to limit fourth amendment rights altogether.

Regulatory agencies such as EPA certainly need to control offenders whose violations contribute to our increasingly polluted environment. The Court does not, however, limit its decision to aerial searches only involving the environment. The Court's ruling has gone too far; it demands that we as a society forego rights that are too precious to relinquish.

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